Management Processes

An Information Perspective on Managerial Work

Pär Mårtensson

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Management Processes



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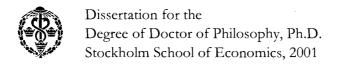
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Preface

This report is the result of a research project carried out at the Department of Information Management at the Economic Research Institute (EFI) at the Stockholm School of Economics and at the Institute for Business Process Development (Institute V).

This volume is submitted as a doctoral dissertation at the Stockholm School of Economics. As usual at the Economic Research Institute, the author has been entirely free to conduct and present his research in his own ways as an expression of his own ideas.

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Stockholm in September 2001

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The Economic Research Institute
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Professor
Head of the Department of
Information Management and the
Institute for Business Process
Development

Acknowledgements

One argument used in this book is that viewing things in their broader contexts contributes to a richer understanding of them. Here, I want to describe an important part of the context of my research process, some of the people to whom I am grateful.

First of all I want to thank Professor Mats Lundeberg at the Stockholm School of Economics, who has served as my principal supervisor. Throughout the process Mats has been supportive in uncountable ways. With great patience and an encouraging attitude Mats has let me find my own paths. He has helped me to see new perspectives, often by guiding me through questions and challenges rather than through definite answers. In the final stages of the process, his prompt and detailed comments on my drafts have been invaluable.

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Over the years I have had many discussions at the Department of Information Management and at the Institute for Business Process Development (Institute V). Magnus Mähring has been an unfailing discussion partner and has often helped me to find new points of view. Anders Mårtensson has read and commented upon an uncountable number of drafts with a reliable precision, frankness and breadth of ideas. Furthermore, I am grateful for valuable comments from Professor Anders G. Nilsson and Professor Bo Sundgren, as well as from Björn, Carina, Christofer, Frank, Gösta, Magnus B, Martin, Pablo, Ragnvald, Susanne and Tina. I am also grateful to several former colleagues, in particular Alf and Ann-Sofie.

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I have appreciated working together with the people in the case organization, here called Omega for reasons of anonymity. Above all, I want to thank MD,

who served as managing director of Omega throughout the entire period of the case study. His positive cooperation has been invaluable for the study.

I am grateful to a number of people who in various ways contributed significantly to the research process at early stages. Senior Lecturer Frank Wharton at the University of Hull introduced me to the idea of conducting research in the first place. Professor Ingolf Ståhl at the Stockholm School of Economics opened the door to SSE. Professor Emeritus William J. Bruns Jr. at the Harvard Business School and Senior Lecturer John F. Rockart at the MIT Sloan School of Management both generously took their time for several discussions that proved to be highly inspiring for a new PhD-student. Tom Davenport encouraged me to pursue research on management processes.

In a prior research project Magnus Mähring and I worked together with a reference group of people from Swedish industry. We have continued working with such a group, the Change Management Group, and I appreciate the stimulating discussions with Ulf Appelgren, Peter Härnwall, Klas Schöldström and Clas Strååt.

A research process, however, is not only about inspiring discussions and valuable comments. It is also about hard work where support of various kinds is important. This project has received financial support primarily from the Swedish Transportation and Communications Research Board and Telia AB. (None of the funding sources has any affiliation with Omega.) I am grateful to Dr h.c. Rune Castenäs, who taught me how to search for sources for financial support and how to write applications. His instructive advice has proved to be valuable, quite literally. Practical support is also important, and I appreciate the assistance of Azad, Janne, Kristian and others.

Concluding this project has demanded support and understanding at home, and at times vital interruptions. I am therefore grateful to Katarina for immense support and understanding and to our son Hjalmar for nice interruptions, such as this little contribution to my typing: n "gvvb ggg re xctttt annn3 lm jjv r dccc vjjjnhnoov.

Acknowledging all the contributions made by the people mentioned above, and many others, I am of course responsible for any deficiencies that may remain in the text.

Stockholm in September 2001

Pär Mårtensson

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"Marcus Wallenberg [1899-1982] has played a great role in building today's Sweden. His knowledge was not restricted to Sweden. He seemed to have an unlimited capacity to take in information about anything of importance which concerned industries from the four corners of the earth. In addition he had the ability to organize the material in a way that enabled him to build a strong line of action to work from."

Former Swedish Prime Minister Tage Erlander¹

1.1 What Is All This About?

"[C] apacity to take in information" and "ability to organize the material" in order to "build a strong line of action to work from" can be seen as fundamental aspects of a general manager's work. An underlying assumption is that a goal of managerial work is to achieve some form of action and to accomplish some form of results. Conditions for managerial activities vary both regarding personal skills and experiences, as they do, for example, regarding informational conditions in terms of reporting routines and contents. The study at hand investigates managerial work in form of management processes.

The amount of information available for managerial work is for all practical purposes infinite. A great deal of a general manager's work can be described in terms of handling information. To support the work, managers use different types of supporting processes and structures, such as information platforms with different types of reports, routines for meetings, etc. The managerial work then consists of allocating time, which often is perceived as a scarce resource given the workload, to deal with different issues on an explicit or implicit agenda for the work.

An information perspective is a starting-point for the study. Information processing is an important part of managerial work (e.g. Mintzberg, 1994) and managers are sometimes described in terms of *information workers*, like craftspersons whose raw material is information (McCall and Kaplan, 1990, p. 16). Managers' use of information includes many types of information and different information sources, which are used in combinations to supplement each other

¹ From the back-cover of Segerstedt et al (1982) and in my own English translation.

(McKinnon and Bruns, 1992). The situation can be described in terms of an *information mosaic* (ibid), illustrating how pieces of information of different kinds and from various sources together form a picture.

In this study, development of managerial information platforms to support managerial work is seen as an example of how conditions for managerial work are improved. Managerial information platforms support managerial activities and consist for example of different types of reports on a regular basis. Given close links between information and managerial work, it is both a difficult and a complex task to determine a manager's information requirements (e.g. Davenport, 1997). It is necessary to understand managerial behavior in order to understand information needs (ibid, p. 120). In order to take these close links between information and general management into consideration, information is here seen in its managerial context.

Managerial work has been investigated in a large number of studies over many years (e.g. Barnard, 1938; Stewart, 1967/1988; Mintzberg, 1973; Kotter, 1982), including a Swedish tradition (e.g. Carlson, 1951; Tyrstrup, 1993; Jönsson, 1996; Sjöstrand, 1997). Several previous studies of managerial work have focused on what managers do and how they spend their time (e.g. Mintzberg, 1973). One stream of research describes managerial work in terms of activities to execute a number of issues on an explicit or implicit agenda (e.g. Kotter, 1982). The explicit or implicit managerial agenda influences or guides managerial activities in order to achieve suitable action and results.

One perspective on managerial work is to view the activities through a process lens and view managerial activities in terms of management processes (e.g. Davenport, 1993; Garvin, 1998). This process perspective on managerial work offers a view which emphasizes the linkage between different activities to produce desired results (Garvin, 1998). Managerial work can be seen as a limited number of key management processes (e.g. Kotter, 1982) and the management process concept will be elaborated in section 4.2.3 below.

I will conclude this little "overture" by suggesting one possible answer to the question asked in the headline, i.e. what all this is about. This study is about an information perspective on managerial work seen as management processes, where information is put in its context.

1.2 Why This Topic?

Challenges facing managers regarding their information is an old phenomenon. Daniel (1961) talked about "management information crisis" and problems facing organizations in the beginning of the 1960s. The problem described was not a lack of data, but their relevancy (ibid, p. 111). Daniel quoted Stanley F. Teele, Dean of the Harvard Business School at the time, speaking about the process of change in years ahead: "I think the capacity to manage knowledge will be still more important to the manager. [...] The manager will need to increase his skill in deciding what knowledge he needs" (ibid, p. 119). A decade later, in the beginning of the 1970s, Dewhirst (1971) talked in terms of an "information explosion", and yet another decade later Wildavsky (1983) discussed problems linked to the production of more data but too little ordered information. Interesting to note is that these examples of comments on difficulties related to information for managerial purposes were all made in the beginning of the 1960s, 1970s, and 1980s, long before present IT solutions and the Internet.

A general manager is continually seeking, receiving, processing, and sending information (McKinnon and Bruns, 1992, p. 105). Basically a general manager searches for and receives information in order to make sense of it (cf. Weick, 1979, 1995), and then based on this, forms a line of action and accomplishes something through own actions, through people and through information (Mintzberg, 1994). "The job of managing is fundamentally one of processing information" (ibid, p. 17). Information is collected from different sources, through various media, including communication with, for example, board-members, subordinates, customers, suppliers, and other external contacts, as well as with external peers (e.g. through the manager's own board assignments). Given this, it may be hard for a general manager to describe when and where information is collected as it is an integrated part of the managerial work.

Nevertheless, there have been different types of attempts at determining information requirements for so called Executive Information Systems (e.g. Watson and Frolick, 1993), attempts to understand the informational context of the systems. The idea of using information technology to build a computer-based information infrastructure for managers is an old idea by now. There have been several different concepts over the past decades: from Management Information Systems (MIS) in the 1960s (e.g. Ackoff, 1967), to Decision Support Systems (DSS) (e.g. Keen and Scott Morton, 1978), and to Executive Information Systems (EIS) (e.g. Rockart and De Long, 1988). New concepts have emerged over time as previous ones have not been as successful as intended in their attempts to support general managers in their work.

One reason for the limited success in using information technology to support general managers could be the difficulties in determining general managers' information requirements, given the amount of information available (e.g. Rockart, 1979; Kotter, 1982, p. 76; Davenport, 1997, pp. 136-140). The task of understanding the informational context of the systems is not an easy one, given the nature of managerial work. In some respect it may be quite obvious that formal executive information systems have not turned out to provide applicable information for most managers, given the complexity of their work (Davenport, 1997, p. 120). One key to success is understanding how executives work (Watson and Frolick, 1993, p. 267) — that is, to understand the wider context of the information and the systems (cf. Roberts and Scapens, 1985, for a discussion on the importance of organizational contexts of accounting information systems).

Given the difficulty supporting managerial work with information systems and information described in previous research, the idea here is to focus on the wider context of information in managerial work expressed in terms of management processes. The wider contexts can be seen in two steps: first to put information systems in a context and to understand information needs; second to put information in a context and to understand managerial work. Previous work on supporting general managers with information systems has often tried to put the systems in an informational context. Given close links between information and managerial work described above, there is a need to put the information in its context too, and to focus on managerial work.

Information can have several different purposes in managerial work (e.g. Mårtensson and Mähring, 1992, pp. 116-119) and there are many approaches to the different roles of information in managerial work: what information managers actually use (McKinnon and Bruns, 1992), what information managers truly need (Drucker, 1995), political aspects of information (Davenport et al, 1992), reasons for using accounting information (Johansson and Östman, 1995), information as gossip (March and Sevón, 1984), information for symbolic purposes (Feldman and March, 1981), etc.

In order to help put information in its wider managerial context, one important theoretical foundation for the study is the concept of logical types (e.g. Bateson, 1972) and following from this, the multilevel approach to information and communication (e.g. Watzlawick et al, 1967; Lundeberg, 1993, 1996). Another theoretical foundation that will be used in the study is the concept of single-loop and double-loop learning (Argyris and Schön, 1974), which bear a resemblance to the multilevel approach in information and communication processes

(more about this in section 4.1.3). By applying theoretical foundations from the field of information management, the intention is to allow for new explanations of old problems concerning managerial work.

1.3 Underlying Views and Perspectives

This study has one starting-point in the area of information management. Another starting-point is my own view of science. I will elaborate on this issue in detail in section 3.2, including the fundament that I view *reality as socially constructed* (cf. Berger and Luckmann, 1966). Based on these points of departure there are two views underlying the study.

First there is an underlying *process view*, which implies a focus on *how* work is done, in contrast to an emphasis on *what* is done (Davenport, 1993, p. 5). In terms of this study it means, for example, a stronger focus on how information supports managerial activities, as opposed to what specific information is included. The main implication from this process view is that managerial work will be seen through a process lens in terms of management processes, as will be elaborated in more detail later.

Second there is an underlying cognitive view in the study. As described above there is a view of managers as information workers processing information, which is in line with previous research on managerial cognition (cf. Walsh, 1995). There is a growing interest for cognitive views in research shown for example in organizational research on "the thought-full enterprise", how people in organizations think and their cognitive frameworks (Hellgren and Löwstedt, 1997, 2001). The cognitive view in the study refers to an organizational context and specifically managerial work, and not to cognitive psychology in general, which would go beyond the scope of this study. I will not focus on cognitive aspects per se, but rather have a cognitive view on the topic at hand.

Given these underlying views, there are four specific theoretical perspectives applied when findings are discussed in the study:

The first theoretical perspective applied is a specific *information perspective*. A fundamental approach in this study is the focus on information and aspects related to information.²

The second theoretical perspective applied in the study is an *agenda perspective*. In practice this means that I to a large extent will describe and discuss managerial work in terms of issues on different agendas (cf. Kotter, 1982).

The third theoretical perspective is a *communication perspective*. This perspective will be applied when focusing on information use in managerial work to achieve action. I will view information use as part of communication processes and theories on communication will be used when trying to explain the phenomena (e.g. Watzlawick et al, 1967)

The fourth theoretical perspective is a *development perspective*. The implications of this perspective include special attention to development of management processes, as well as use of theories on development processes (e.g. Lundeberg, 1993).

1.4 Research Question and Specific Purposes

As previous research has shown, general managers can be described as information workers where information processing plays a significant role. A starting-point in information management opens the possibility of building on theoretical foundations from an information tradition and applying these foundations in the area of managerial work. The combination of the theoretical areas of information management and managerial work offers a potential to enhance the understanding of managerial work – both in terms of how managerial work can be described and how the work is carried out.

The overall research question (RQ) for this study is:

RQ How can an information perspective contribute to the understanding of managerial work?

As discussed above there is a process view underlying the study and managerial work is accordingly seen in terms of management processes.

² I here refer to a theoretical information perspective in a more specific meaning than in the subtitle of the book. There the expression rather refers to an overall view from the area of information management on the topic at hand.

In order to address the research question, the study has three specific purposes:

P1. To describe a general manager's work seen from a process and cognitive view, by applying four theoretical perspectives (information, agenda, communication and development) to management processes.

The first purpose (P1) has an empirical and descriptive emphasis and aims at giving a rich picture of a general manager's work in terms of management processes. In addressing P1 the four theoretical perspectives described in the previous section will specifically be taken into account (i.e. information, communication, agenda and development). Linked to P1 is a discussion on different types of management processes.

P2. To discuss and explore patterns in a general manager's work (based on the description from P1).

The second purpose (P2) has an explorative emphasis and aims at exploring the description from P1. Alternative interpretations of the descriptions will be elaborated in discussions of patterns.

P3. To discuss and propose conceptual frameworks for understanding a general manager's work (rooted in findings from P1 and P2).

The third purpose (P3) aims at the construction of general conceptual frameworks. Here theoretical foundations from the area of information management will be applied for investigating ways of describing and discussing managerial work.

1.5 Some Definitions and Delimitations

The following paragraphs briefly describe a number of expressions used in the study.

General managers is the expression used for persons conducting managerial work and refers to "individuals who hold positions with some multifunctional responsibility for a business (or businesses)" (Kotter, 1982, p. 2). The general manager in focus in this study is the managing director, or the "CEO", of the organization. Accordingly, the person referred to as the financial director in this study is, the "CFO" of the organization. I have chosen to not use the expressions CEO and CFO as these often refer to a group management level.

Information is a concept that will be discussed in detail in section 4.1.1. In short, I base my usage on an information management tradition (cf. Langefors, 1973; Lundeberg et al, 1995) where information is the result of an interpretation process by an individual. Traditionally a clearer distinction was made between the two concepts data and information, but today the word information is used in a more general way. I adjust my use of the word to common use of language, which I will elaborate below. When I talk about "information used in managerial work" this means use of information in a wide sense. That is, information is seen for example as part of communication processes with different purposes in managerial work, e.g. to send different signals (cf. Feldman and March, 1981, p. 179; Winograd and Flores, 1986, pp. 58-60).

Information platform is an expression that refers to structures and processes that aim to provide information support to activities. Structures can consist of reports with varying content and regularity, and processes can be different reporting routines. The underlying purpose of information platforms is to improve conditions for managerial work, for example by reducing uncertainties perceived by a manager.

Managerial agenda is an expression used to describe a set of issues attracting the general manager's attention. Agenda formation (or agenda setting) is based on the description of "the process through which strategic issues gain decision makers' attention and are legitimated in the organization" (Dutton, 1986, p. 3).

Management processes will be discussed later, first based on previous work and then also based on empirical findings. The expression will be used for viewing managerial work through a process lens, which will be elaborated further below (see section 4.2.3).

The following paragraphs will briefly summarize some foundations and limitations of the study.

The *empirical basis* for the study consists of empirical findings from Scandinavia in the 1990s. The *organizational setting* for the empirical work is an organization which is part of, and owned by, a large service group operating worldwide. The organization consists of about 600 employees and its main activities are located in Scandinavia even if there are also activities in a few other countries. Their business activities could be described as retail trading, which differs from the activities of most other parts of the service group. The organization has its

own board of directors, i.e. the managing director³ reports to the board. The organizational setting for the empirical parts is described in section 3.6.2.

The *longitudinal approach* in the study implies an aim to study processes and development over time. The empirical basis for the study covers a period of five years. Implications of the longitudinal approach are discussed below in section 3.5.

The main *unit of analysis* is a general manager's work seen in terms of management processes. A number of different types of management processes can be distinguished, as will be discussed in section 4.2.3 below. In the case study a number of specific processes will be included, such as building information platforms, recruiting management-team members, and tendering for contracts. My intention is to use these (and other) examples as illustrations of managerial activities. The specific processes could be interesting to study per se, but my aim with this study is to use specific examples as illustrations. That is, my focus is on a general level of managerial work as management processes. The point of this approach is to identify general patterns which can then be applied to other specific examples not included here. Even if the main focus is on the managing director, work of the entire management team is included in the study, as well as perspectives of board members. In the still larger context, the entire organization is included to a limited extent, even though the focus is on the managing director and his management team.

Managerial work takes place in many different *arenas*. In this study the focus is on arenas in a business context, i.e. managerial activities taking place in different types of business meetings, at offices, etc, rather than managerial activities taking place during informal dinners, in queues at airports, or at birthday receptions, etc. The study does not explicitly address roles of emotions, intuition, and aesthetics in managerial work. The reason for this is to limit the scope of the study and it should not be interpreted as a statement about the importance of these aspects in managerial work. Furthermore, the *power perspective* related to information is not explicitly included in the study. As mentioned above there are political aspects related to information use. Political motives behind using and sharing information in a managerial context to exercise power are interesting aspects but beyond the scope of this study.

³ The general manager in focus in the case study has the title managing director. He will therefore be referred to as managing director which can be seen as one type of general manager.

At this point I have tried to reveal some of the intentions and perspectives underlying the study. Implicitly these also reveal some of my own background and interests, but I will say a few words explicitly about myself.

1.6 About Myself

One underlying assumption in this study is that people matter, and when studying management processes, it is important to take into consideration the people involved. In accordance with this assumption (which will be elaborated in the discussion on my view of science, see section 3.2), and to give the reader a picture of the person behind this dissertation, I will give a brief presentation of myself and the nature of my interest in this topic.

One important part of the background to this study is a project reported in my licentiate thesis (Mårtensson and Mähring, 1992). In that project, which took place between 1989 and 1992, we focused on information from staff to executives, with an emphasis on written reports. We interviewed executives in seven different organizations and a number of controllers working as their information providers. We also formed a reference group with controllers from 15 large Swedish organizations.⁴

I learnt a lot from this project – both about the topic information support from staff to executives and about approaches to research. The meetings with the reference group were interesting and instructive. I decided that I wanted to have close links to practice in my doctoral project, which resulted in a clinical research approach. I also decided that I now wanted to take a starting-point in managerial work, rather than in information providers' work. This resulted in the focus on a managing director's work in the study I began in 1993.

The combination of research and practice is important to me. I believe that academic research can gain from this combination, and I also believe that persons working in "practice" can gain from collaborations with people conducting academic research. In my view a key success factor is mutual respect and openness for different perspectives. In my work I have tried to accomplish this link between research and practice through the clinical research approach as well as a reflective dialogue, which I will explain later.

⁴ It should be noted that the organization included in the study at hand did not participate in this previous project.

The "wider context" is important for me. I often try to put things in their wider context with the purpose that this may help understanding the phenomena of interest. When I first came across the idea of logical levels I found an analytical tool to help put things in their wider contexts. This view has then influenced my work both explicitly and implicitly. The idea of logical levels is described and discussed below.

My view that people matter is shown in the focus for this study. Personally I think the issues at hand in the study are really interesting. (Otherwise, I would not conduct the study in the first place.) I enjoy working with change and development processes, as well as with learning processes. An underlying reason for this is my aim at trying to make things a little bit better, to develop new knowledge, and to help people develop themselves as well as their activities (applied for example in different types of teaching and coaching situations).

1.7 Outline

The book consists of the following parts and chapters:

Part I: Foundations

Chapter 2 gives a brief description of the case study. Here a summary of the case study from the organization called Omega is presented⁵. A longer chronological version of the case study is found in Appendix H. Empirical findings will be further described and discussed in chapters 5-7. The aim with this chapter is to give the reader a flavour of the empirical material before reading about methodological and theoretical aspects.

In *chapter 3*, I will present and discuss my *methodological approach*. I will elaborate on my own view of science and then present arguments for my longitudinal case study approach. I will also present and discuss strengths and weaknesses with the clinical approach. One part of the collection of empirical material has been through a reflective dialogue with the managing director in the organization where the case study is conducted. I will discuss this type of empirical source, as well as the entire research process.

⁵ The name of the organization as well as the people in the case study are kept anonymous for reasons discussed in the chapter on the methodological approach.

Chapter 4 is on theoretical foundations and previous research. Here I first present theoretical foundations for the study and give an account of previous research relevant for my purposes.

Part II: Empirical Discussions

In chapters 5-7 empirical findings are described and discussed according to different types of management processes: processes focused on preparing, performing, and evaluating efforts respectively. The descriptions in these chapters include quotations (with cross references to the chronological version of the case study in Appendix H) in order to give the reader a better flavour of the atmosphere in the situations.

Part III: Concluding Discussions

In *chapter 8* there is a *discussion in light of previous work* where I will discuss my empirical findings in light of previous research. This chapter can be seen as the counterpart to chapter 4. This chapter concludes with a summary of the main findings from the study (see section 8.7 on page 301).

Following from that, in *chapter 9*, the *methodology is revisited*, which can be seen as the counterpart to chapter 3. This means that I discuss the methodological approach in retrospect and comment on evaluation of quality.

Finally, in *chapter 10* there are *concluding remarks* where I reflect on how I have addressed my research question and purposes. This chapter can be regarded as a counterpart to the first chapter and I try to put the study in its broader context. I discuss implications for practice, and finally I conclude with a presentation of some ideas for further research.

Figure 1 gives an overview of the chapters of the book and their different foci.

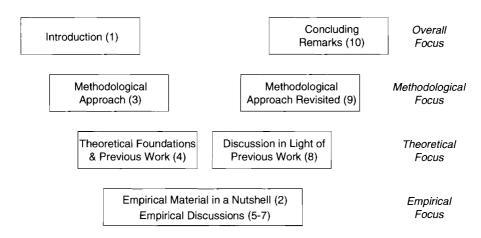


Figure 1 An Overview of the Chapters of the Book

Part I: Foundations

This first part consists of three chapters. In chapter 2 there is an overview of the empirical material and a brief summary of the case study to give the reader a flavour of the empirical setting. Then there are methodological discussions in chapter 3. Following from this, there are discussions on theoretical foundations and previous work in chapter 4.

One aim of Part I is to build a firm basis for the discussions to come in remaining parts. Another aim is to put the study in its larger methodological and theoretical context.

2 Empirical Material in a Nutshell

The aim of this chapter is to give an overview of the organization of the empirical material, and to present a brief chronological summary of the case study. An extensive chronological case-study description is found in Appendix H. The empirical material will be described and discussed in more detail in chapters 5-7.

2.1 Organization of Empirical Material

The empirical basis for this study is a longitudinal case study with a clinical approach, including a reflective dialogue with the managing director. The methodological approach will be described and discussed later. Facts and figures about the empirical material are found in Appendix B.

I have organized the material as follows. In this chapter (section 2.3) there will be a brief summary of the case study to give a chronological overview. Then after discussions of methodology and theoretical foundations, I will describe and discuss empirical findings in more detail (including a number of quotations) in chapters 5-7.

The reader interested in an extensive chronological case-study description will find this in Appendix H. This appendix is included in order to offer possibilities for putting the empirical discussions in chapters 5-7 into their larger chronological contexts.

The summary in this chapter aims at giving the reader an overview of the case study before reading about methodology and theoretical foundations.

2.2 Aspects on Empirical Focus

In accordance with the research question described in the previous chapter, the study investigates managerial work seen from an information-management point of view. In order to investigate various aspects of management processes, those processes need to be linked to specific events in a general manager's work. Therefore, there will be descriptions of events like building an information platform, recruiting new management-team members, and tendering for contracts (as illustrated in Figure 2 below). When the empirical material will be described and discussed in more detail in chapters 5-7 these types of

examples will be used as specific examples of general phenomena such as communication in a general manager's work.

It should be noted that the focus for the study is on managerial work seen as management processes on a general level, and the specific examples are used as illustrations of activities. That is, the study is *not* about how to specifically handle tendering processes, etc. Figure 2 illustrates the general level and specific examples.

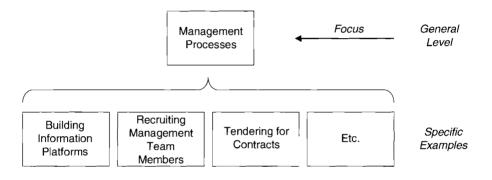


Figure 2 General Level and Specific Examples

As shown in Figure 2 the main focus is on management processes on a general level, rather than on the specific examples per se. Different perspectives on management processes will be described and discussed, as presented in section 1.3.

In the following section (2.3) I will give a brief overview of the case study seen in terms of specific examples, with the purpose of giving the reader a picture of the context. That is, when different perspectives of management processes are discussed later, the specific context is the one briefly described below.

2.3 A Brief Summary of the Case Study "Omega"

The case-study description starts in January 1993 and ends in January 1998. It is divided into a number of phases that to a large extent are aligned to a time line. As pointed out above, an extensive chronological case-study description is found in Appendix H.

2.3.1 The Entry of A New Managing Director – "Setting the Stage"

In January 1993 a new managing director, MD⁶, takes office in the Scandinavian organization here called Omega, which consists of about 600 people and is in the retail trading business. The organization is own by the large (more than 10,000 employees) worldwide service group here called the Alpha Group.

Omega has its own board of directors and is one of the more profitable units within the entire Alpha Group, and is therefore considered as more important than its relative size in numbers of employees implies. This is illustrated by the fact that the CEO for the Alpha Group is the chairman of the Omega board.

The Omega organization consists of four geographical regions and a number of support departments (Purchasing and Logistics, Finance and IS, Business Development and Personnel). The business activities are mainly located in Scandinavia, but there are activities in a few other European countries too.

The organization of Omega (as of 1993) is described in Figure 3.

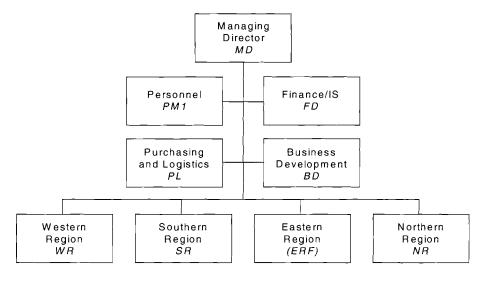


Figure 3 The Omega Organization 1993

⁶ The people are named by abbreviations in the description. In Appendix E there is a list of the people mentioned in the text in alphabetical order, where the reader can find the person's position, in case this is not evident from the text.

The people mentioned in the organization chart above, plus the personal assistant of the managing director, form the management team of Omega.⁷

Omega is doing financially well, but previous years have seen a number of unsuccessful investments. The organization has invested in new projects to broaden its businesses, but several of these efforts have failed. The board has now decided that it is time to withdraw from these unsuccessful investments.

When the new managing director enters the organization there are huge expectations on him. The board members have tasked him to, among other things, wind up prior unsuccessful investments.

2.3.2 Investigating the Present Situation – "What's Up?"

The last couple of years in Omega have been a time for expansion. The former managing director could be said to has focused more on new projects than on cost control. This means that the organization is in a situation where new ideas for business opportunities have been more appreciated than control in detail.

When MD starts investigating the situation in Omega, he finds an organization where the business activities are quite decentralized. The different regions are in a number of respects rather independent. MD finds this decentralized situation combined with a system of control, which in his opinion is insufficient.

Furthermore, MD finds that a number of persons have left Omega. Some of them had aimed at the position as new managing director and resigned when it was announced that MD was appointed. One of the persons who has left Omega is the former manager of the Eastern Region

Strategically MD discovers that he cannot see a clear strategy for Omega's business expansion. The former managing director had invested in new projects in various areas, but from MD's point of view, the strategy behind the investments has not been clear. Related to this issue, MD enters a situation where the work with the board members is a bit tense because of the prior unsuccessful investments in new business opportunities.

This means that the management team in Omega consists of MD, FD, BD, PM1, PL, WR, SR, NR, and MD's personal assistant PA. ERF is first acting head of the Eastern Region and then replaced in the management team by the new regional manager ER. The management team is later expanded with a business controller BC. When PM1 later leaves Omega he is replaced with PM2.

MD wants to change a lot in Omega, for example the control structure and information flows, and he wants to introduce more work in projects. He also needs to recruit some key persons, including a new manager for the Eastern Region.

There are many complaints about the management information that the management team and the board of directors receive. MD is not happy with the present situation regarding the reports to the management team either. He therefore initiates a project to change the situation regarding the management information at an early stage when he has been in office for a couple of months.

MD perceives an urgent need to get a grasp of the situation and does not feel he receives sufficient support from the present information platform. Furthermore, MD wants to send the signal to the organization that there is a change in the organization now. One first step of the process to improve the information supporting the managerial work is to investigate different persons' perceptions on information needs.

FD, as the financial director, is responsible for the study which takes place between June and October 1993. The investigation reveals great disappointment regarding the information to the management team and the board. The present information situation is described in negative terms. For example, the information does not allow for comparisons, it is largely descriptions of historical data with no links to actions and it is difficult (or even impossible) to get a picture of causes and consequences etc.

The reporting processes are also objects for severe criticism. The processes are described as time-consuming, supported by old information systems and an insufficient dialogue between reporting units and central staff.

There are strong driving forces among the members of the management team and the board members to change the present situation. The investigation of the present situation also reveals great expectations concerning change efforts in the organization with MD as the new managing director. Some members of the organization are awaiting a new order with the new managing director. Other members on the other hand are afraid that the new era in Omega will be more boring with less expansion.

2.3.3 Building an Information Platform – "Getting the Grip"

In the next phase the managing director, together with several other people in the organization, starts building a new information platform for managerial work. The monthly report to the management team and to the board is redesigned regarding both contents and form. The new report incorporates such changes as: new key ratios are introduced, there are more graphic presentations in the report, the written comments by the different reporting units are better calibrated between different units, and comparisons between different regions are made easier, both through graphic presentations and by written comments.

The process to change the report is rather unproblematic and takes place in an atmosphere with a positive climate for change. Regarding the perceived information needs there is a broad consensus about what to include in the report. There are discussions on different key ratios, but there is overall agreement on the information needs among different parties.

In October 1993 the first version of the new management report is introduced. A general impression is that things have become better from an information point of view, but the managing director wants to get a better congruence between the written reports and the management meetings held in conjunction with the reports. He perceives that the effects of the new reports are not enough. In December 1993 MD therefore initiates a task force (with himself in charge) for changing the agendas for the monthly management meetings. The underlying purpose of this work is to establish new structures for meetings that are more in harmony with the information in the monthly reports.

The managing director involves himself more in this change process than he did when the report was changed. The tempo in the process is increased and within a few weeks the content of the fixed agendas become fairly clear. They are now more in harmony with the new report, including a heading "topic of the month" to build in some flexibility in the meetings (as well as the reports).

In January 1994 the new fixed agendas are introduced and there is an improved focus in meetings. But still MD has the feeling that this is not enough. During the work in the task force for the fixed agendas there are problems revealed concerning the communication between people at the Finance and IS department and people at the reporting units. A problem concerning a perceived

imbalance between accounting control and business control⁸ is revealed. At present MD thinks there is a focus on accounting control, while he perceives a need for further analysis of the figures presented in reports. The imbalance is, according to MD, a central problem for the improvement of the information and thus for the support to managerial activities.

With the new report and the new agendas introduced, MD looks back at a first year with activities like winding up old investments, efforts spent on improving the information platform to support the managerial work and on improving the cost control in the organization, and a number of problems that have been revealed in the change processes during the year. Among other things he now perceives a need to strengthen the management team.

2.3.4 Strengthening the Management Team – "Teaming Up"

The managing director identifies a need to supplement the information platform with the recruitment of some new key persons. In the beginning of 1994 MD declares that he wants to focus on business control and that he intends to establish a new function for business control. The work during his first year at Omega has pointed to the importance of strengthening the organization and one part of this is to recruit a business controller to the management team.

MD involves himself heavily in the recruiting process of a new business controller. This process proves to be sensitive. The establishment of a new business-control unit is perceived as a threat to the financial director, and MD spends a considerable amount of time trying to settle the perceived problems.

It is not only the recruitment of a business controller that attracts attention from the managing director. When the person, BC, has been recruited, MD spends much time introducing him to the organization and on finding a form of co-operation between the business controller and the financial director.

In addition to the business controller, a new regional manager is recruited to the management team. Here MD chooses a person to add structure and stringency to the work in the management team.

Furthermore, an IT-controller is recruited. As the number of IT-related issues dealt with at meetings in the management team has started to increase, there is a perceived need to recruit a person for IT-control. This recruitment has the

⁸ Accounting control was seen as focused on production of figures with an emphasis on history and present state, while business control was regarded as analysis of figures with a focus on present state and the future, including action planning. The terminology is the one used by MD.

purpose of strengthening the organization regarding the handling of IT-related issues, and the IT-controller is located at the Finance and IS department and is not a member of the management team.

2.3.5 Dealing with Issues on the Managerial Agenda – "Everyday Life"

When the managing director has been in office for about eighteen months, fall of 1994, a number of processes that have been running since his start in the organization are concluded. His work enters a new phase. The old unsuccessful investments, which he inherited, are now wound up and the information platform in the form of reports and reporting procedures are in place. There have been some recruitments to strengthen the organization and a business-control unit is established. To make a long story short, he perceives that he now has built a solid base for future managerial work.

The managerial agenda includes a number of different issues, including formalizing goals for different units, winning an important contract in one of the regions, and communicating strategies to the entire organization. The managing director spends much of his time in different meetings and time for work on his own is very limited. Besides his duties in Omega he is also a member of some external boards outside the Alpha Group.

Regarding all the activities MD is involved in, he is focusing on a few major issues at the time and keeps other issues in the background. Overall he enjoys his work and thinks that he has found a working style that works quite well, even though he sometimes perceives a loneliness in his work. Omega produces very good financial results, which of course is positive in some respects. The willingness to change in the organization is however sometimes limited as people do not see the need to change, given the profitability.

2.3.6 Tendering for a Contract – "A Big Game"

One of the main things on the managing director's agenda during the fall of 1994 is a tendering process for a very important contract. Now MD faces a major challenge and several members of the management team spend much time working with this tendering process during the fall of 1994.

MD, as well as the business controller and the financial director, involve themselves in the work from the very beginning. People from different regions are also involved, as well as different external expertise. The work in the group includes long hours for many people in the organization during the process. At a board meeting in early November, MD presents the status of the tendering process. He informs the board that things work fine and that the tender will be submitted in late November. The board members express their view that the contract is extremely important for the organization.

The work is divided between different subgroups focusing of different parts of the tender. There are, for example, financial issues in the tender, there are issues linked to purchasing and logistics, to personnel, etc. Complex simulation models are built with the purpose of clarifying how different factors are related. At the final stage these models play a significant role when the bottom-line level is decided, i.e. the final decision on what level they should place their tender. But the tender is not only the bottom-level, they also have to show the trustworthiness in their tender. Therefore, they carefully formulate and document how they will handle the situation if they win the contract.

The participants in the work are grateful for the careful planning they did in the beginning. The different pieces of the complex tender fit nicely together when they are combined at the end of the process. In spite of the planning of the process, the group working with the tender literally works night and day during the final period in order to complete their work. MD is involved all the time.

The tender is handed in one of the last days of November. The outcome of the evaluation of the different tenders is to be announced before Christmas. MD and the other members of the management are all very happy with the tender, and confident that they will win.

Four days before Christmas 1994 MD is informed about a press-release saying that the ABC Corporation won the contract. Omega lost.

2.3.7 Evaluation After a Loss – "What Now?"

The lost contract turns out to be both a major problem and at the same time an important wake-up call for people in Omega in general and for the management team and MD in particular. After the loss of the important contract, MD initiates an investigation in order to get a better picture of different people's views of the present situation in Omega. Spring of 1995 is a time for evaluating the effects of the loss and starting to look forward. Many new activities are launched to compensate for the loss.

There is an anxiety in the organization, and at the same time there are people who think there is more of a focus now. The organization is facing a major challenge, and people realize that there is a need for changes, even if the

financial results for 1994 turn out to be very good. The situation after the lost contract leads to a tense situation in the organization. There are different arguments between departments etc.

Regarding the information, the managing director is pleased with the situation, but perceives a need to get a better overview of all new activities. In the organization questions are raised about needs for better information on the state in the organization and activities to compensate for the loss. There are voices describing a gap between the management team and the rest of the organization.

Now when MD has been in office for two years and the organization is facing major challenges after the lost contract, people in the organization start making comparisons between MD and his predecessor. There are different types of complaints both from members of the management team and other members of the organization. The decision-processes in the organization are perceived to be slow, and different types of frustration are described.

MD is facing challenges in his work as the managing director.

2.3.8 A Crowded Managerial Agenda – "Lots of Items"

After the contract is lost, many activities are started. From MD's perspective it is important to get the organization going after the loss and to involve many people in different activities. There are numerous projects running in the organization, including a large TQM-project (Total Quality Management) and several IT-related projects. The managerial agenda is getting crowded and it is becoming challenging to handle all the issues in the fall of 1995.

The managerial agenda includes issues such as: to develop and explore new business opportunities to compensate for the lost contract, to increase the competence in the organization, to develop a strategic plan for the next few years, and to develop the business activities. MD stresses the importance of building a common base for the future.

As part of this work he wants to place higher demands on persons in the organization and at the same time he wants to step back a little bit to let other people in the organization take greater responsibilities. This turns out to be a challenging process.

2.3.9 Working with all the Issues – "Busy As a Beaver"

During 1996 a large number of activities are running following from initiatives to compensate for the lost contract. The number of projects is increasing. MD perceives difficulties in getting an overview of all activities and the business controller is assigned to put together a catalogue of all projects in order for the management team to get a better overview. As MD wants to keep better track of the progress in different projects, he becomes more demanding with the different project leaders. This turns out to be easier said than done.

The number of issues on MD's agenda is increasing. He often sees his role to monitor things and make sure that they progress according to plan. The number of IT-related issues on his agenda has increased and there are several projects focusing on the use IT for developing the businesses. The framing of IT-related issues has changed as they now are more offensive, as compared to earlier when IT-issues more often were about projects that either were behind schedules and/or over budget.

Given the number of activities running in the organization there is a weariness with projects. Late spring 1996 both the members of the management team and other people involved in projects are really tired. There is hard work with all issues on the agenda yet at the same time Omega is still doing financially well. The good thing with the firm financial base is that all different change efforts and projects can be carried on without any financial problems.

By now the information platform developed earlier is well established. The monthly report works well, but there are still some discussion of key ratios now and then. The tension between the Finance and IS department and the Business Control and Support unit has more or less disappeared.

MD finds it difficult to reach the entire organization with messages. In his opinion everyone makes their own interpretations and what is obvious for the person sending the message is not at all obvious for the receivers. In MD's attempts to let people take greater responsibilities, he wants to change the way people in the management think and act, but he finds this difficult. He describes it in terms of working like a beaver to get them to work differently.

2.3.10 Tendering for a New Contract – "Do or Die?"

It is now time for a new very important tendering process, and this contract is even more important than the previous (lost) one. This time the organization cannot afford to lose the contract, but the situation is complex and the competition is tough. As in the previous tendering process, the managing director and

several other members of the management team spend much time and effort in this process, which mainly takes place during 1997, even if preparation starts in 1996.

One factor discussed at great length at this time is whether Omega should tender for the contract on their own, or work together with a business partner. Cooperation would increase the chances of winning the contract as the tender could be stronger and the number of competitors would be reduced by one. On the other hand tendering alone would increase the profitability for Omega and the possibility of strengthening Omega's position.

After a careful evaluation the management team decides, not without hesitation, to take the chance and tender for the contract on their own. They know that with this decision they increase the risk, but on the other hand they open the door to better profits from the contract. They are well aware that they cannot afford to lose this contract.

When they work with their tender, they discover several questions about the conditions for the tendering process, which in turn make the process even more difficult. Some of the questions can be solved and some of them they have to tolerate. They know from previous experiences that the complexity of this type of contracts means that there are often discussions about possible interpretations of conditions etc, after a contract is won.

In December 1997 the final tender is submitted on the final day. MD and the other people who have been involved in the tendering process celebrate the end of their hard work with the tender. They celebrate moderately though, as they have learnt from earlier experiences not to gloat too soon. The results of this tendering process are expected in January 1998. Now, they just have to wait and see – do or die?

2.3.11 An Epilogue – "A Happy (?) Ending and New Challenges"

In January 1998 Omega receives the good news that they won the contract. That is, the answer to the question about "do or die?" turns out to be "do". Given this outcome of the tendering process, MD and the other members of the management team are very happy that they chose the path to tender for the contract on their own. Now they are much more independent than they would have been otherwise. There will later turn out to be some problems with the contract, and the tendering process proves to be far from finished when the contract is awarded. As usual there are discussions of details and different

possible interpretations. This time the problems are rather difficult, but things are finally settled.

One result of the TQM-project is a major reorganization of Omega. There is an increased focus on processes and many responsibilities are transferred to the headquarters. The regions now become much less independent and the entire organization becomes more centralized. Several of the members of the management team either change positions or leave the organization.

MD leaves Omega in August 1999 after about six and a half years.

3 Methodological Approach

In this chapter I discuss the study from a methodological point of view. First, there is a brief overview of the research approach and a general discussion on my view of science in order to put this research into its larger context and reveal some of my own positions regarding research. I then discuss the research approach in more detail. Following from this, there is a description about how I have conducted the longitudinal case study. The research process is then described before the chapter ends with a summary of the methodological approach (see page 71).

3.1 Overall Research Approach

One way to start discussing a piece of research is by looking at what kinds of questions are being asked. The questions can be categorized in terms of "how", "why", "what", "where", "how many", or "how much" etc. Following from this, one can then start thinking in terms of different research strategies for different types of research questions (cf. Yin, 1994, figure 1.1, p. 6). The research questions in themselves determine to a large extent the research method (Strauss and Corbin, 1990, p. 36).

In addition to distinguishing types of questions that are being asked, another division is between quantitative and qualitative research approaches⁹. This dichotomy between quantitative and qualitative is rough, but can still be useful. By qualitative research I mean "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification" (Strauss and Corbin, 1990, p. 17). This is a very broad definition, and instead of trying to find the exact and narrow definition of qualitative research, a more fruitful approach is to find characterizations of this type of research. Miles and Huberman (1994) suggest the recurring features of qualitative research described in Table 1 below. The reason for including these different features is that, in my opinion, these characterizations are very much in line with my overall research approach, which will be described and discussed in this chapter.

⁹ I talk about approaches rather than methods, as qualitative research is more of an approach than a particular set of techniques (Morgan and Smircich, 1980, p. 499).

- Qualitative research is conducted through an intense and/or prolonged contact with a 'field' or life situation. These situations are typically 'banal' or normal ones, reflective of the everyday life of individuals, groups, societies, and organizations.
- The researcher's role is to gain a 'holistic' (systematic, encompassing, integrated) overview of the context under study: its logic, its arrangements, its explicit and implicit rules.
- c. The researcher attempts to capture data on the perceptions of local actors 'from the inside', through a process of deep attentiveness, of empathetic understanding (Verstehen), and of suspending of 'bracketing' preconceptions about the topics under discussion.
- d. Reading through these materials, the researcher may isolate certain themes and expressions that can be reviewed with informants, but that should be maintained in their original forms throughout the study.
- A main task is to explicate the ways people in particular settings come to understand, account for, take action, and otherwise manage their day-today situations.
- Many interpretations of this material are possible, but some are more compelling for theoretical reasons or on grounds of internal consistency.
- g. Relatively little standardized instrumentation is used at the outset. The researcher is essentially the main 'measurement device' in the study.
- h. Most analysis is done with words. The words can be assembled, subclustered, broken into semiotic segments. They can be organized to permit the researcher to contrast, compare, analyse and bestow patterns upon them.

Table 1 Features of Qualitative Research (Miles and Huberman, 1994, pp. 6-7)

My overall methodological approach is a qualitative one, but what is the reason for choosing such an approach? Just as the *research topic* reflects one's personality (Rubin and Rubin, 1995, p. 50), I think also that the *methodological approach* reflects one's personality. Before discussing alternatives let me be more specific about what approach I have actually chosen.

Regarding the content of the objectives there are no doubts that the topic and the research approach are highly influenced by my own personality. The topic has its background in my own interests in these issues, and the methodological approach is in line with a way of working that I perceive as suitable.

The aim of the research approach is to produce knowledge of a certain quality which could be useful in different contexts (questions of generalization will be discussed in chapter 9). When generating new knowledge I regard the follow-

ing three components as very important: to interpret, to act, and to reflect. Alvesson and Sköldberg (1994) stress the importance of reflection in qualitative research approaches, and that reflection is to interpret one's own interpretations. That is, the authors stress the importance of interpretation and reflection in the research process.

I want to add the third component, to act, which is in line with my view of the importance of a closeness between the researcher and the area studied (see section 3.2.1 below), and can also be linked to learning processes (e.g. Kolb, 1984). In Figure 4 I illustrate the three components to interpret, to reflect and to act.

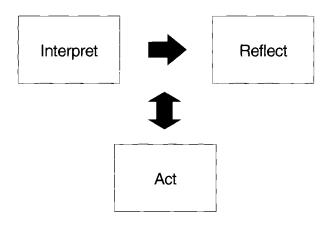


Figure 4 To Interpret, to Act, and to Reflect

The figure is presented in a form used by Lundeberg in his descriptions of process phases (1993, pp. 120-129). There is a direction in the figure, as illustrated by the arrow from left to right, in the sense that interpretation must precede reflection, where reflection means to interpret one's own interpretations as discussed above. In the process there are iterations with several actions which influence the process of interpretation and reflection, as illustrated by the vertical arrow.

To summarize my overall research approach, it could be described as a qualitative approach where I base my empirical work on a longitudinal case study with a clinical and interpretive research approach. In the remainder of this chapter I will elaborate this approach and in different terms describe its implications for my actual research.

3.2 View of Science

Research is in my opinion something personal and I believe that a piece of research is highly influenced by the person conducting it. Therefore, I think it is important to present my view of science to the reader (cf. Miles and Huberman, 1994, p. 4). In this section I will give a brief account of my view of science and I will start by describing my view of my own role as researcher. Then I will continue with a discussion of rigor and relevance. Following from that, I will say a few words on different sets of assumptions concerning the subjective – objective dimension and how I relate my view of science to these sets of assumptions.

3.2.1 Role of the Researcher – "My Role"

Personal values, preferences and skills influence the choice of research area and methods. I see the researcher as part of the researching system and therefore influencing the results. One can of course argue that this depends on the method chosen. But I argue that the influence from the researcher is always present, even though the way and perhaps the extent to which the researcher influences the research situation may differ between different methodological approaches.

Stake (1995) expresses the close links between the researcher and the research in relation to qualitative case studies, which is applicable in my case:

"Qualitative case study is highly personal research. Persons studied are studied in depth. Researchers are encouraged to include their own personal perspectives in the interpretation. The way the case and the researcher interact is presumed unique and not necessarily reproducible for other cases and researchers. The quality and utility of the research is not based on its reproducibility but on whether or not the meanings generated, by the researcher or the reader, are valued. Thus a personal valuing of the work is expected." (Stake, 1995, p. 135)

The case study I conduct will be unique, as it is not possible for someone else to reproduce it. First, the situation cannot be repeated. Second, even if that would be possible, another person would conduct the case study differently. I make my interpretations and I include my perspective in the case study. Given this, it is important to try to be as explicit as possible regarding different possible interpretations.

In interpretative research approaches the researcher cannot assume a valueneutral stance, but is implicated in the phenomena studied as prior assumptions, beliefs, values and interests intervene to shape the investigations (Orlikowski and Baroudi, 1991, p. 15). One question is to what extent prior beliefs and values influence the investigation and the results. Weick argues that:

"What people 'see' when they use various methods is largely a function of their prior beliefs or what they expect to find." (Weick, 1984, p. 129)

I agree that my own beliefs and values influence what I choose to study, how I study these phenomena, and also to some extent what I "see". One could argue about to what extent findings from my research are "largely a function" of my prior beliefs or what I expect to find. It may be more interesting to review consequences of the point made by Weick above. For me one major consequence is the importance of being as clear as possible with what I see and try offer alternative interpretations to my findings.

To give an example of what my beliefs and values include, I will declare that I view a closeness between research and practice as important. The main reason for this is that closeness, in my opinion, contributes to an understanding of the phenomena studied. But the closeness in itself is not enough. The closeness needs to be combined with distance (Repstad, 1993). I regard the alternations between working close to the phenomena of interest and observing and reflecting with distance as important. To summarize my view on this matter: I am looking for a further understanding, and in my opinion increasing the closeness and combining it with distance is a way to achieve this understanding.

In order to achieve the closeness between research and practice, I have applied a clinical research approach, which will be described and discussed below (see section 3.4). Over time I have been involved in different ways in the research. In some phases I have conducted many interviews and spent much time in the organization (cf. closeness), while I merely have been an outside observer in other phases (cf. distance). The researcher can take different roles. Wärneryd (1985) describes four types of researchers in terms of different degrees of dependence, see Table 2, and expresses his sympathies for the semi-detached and the detached researchers.

Type of Researcher	Description
The attached researcher	Operates solely for the interest of a certain group of decision makers.
The semi-detached researcher	Accepts the idea of carrying out research for specific purposes, but has some degree of independence toward the interests the research serves.
The detached researcher	Is inclined to do research that is in the long run practice oriented, but does not accept attempts toward influencing the research strategies.
The aloof researcher	Is the strict scientist in the classical sense of the word and searches for "truth" and is not interested in if the results can be used.

Table 2 Four Types of Researchers (Wärneryd, 1985, pp. 15-16)

When trying to position my own role, I am inclined to say that my role could be seen as a combination of a semi-detached researcher and a detached researcher. I work from time to time with a close relationship to practice but I am at the same time independent of the organization. That is, I choose my research direction myself and do not accept any attempts from the organization to influence my research strategies or procedures of research.

Besides describing different types of researchers in terms of dependence between research and practice, researchers can also be seen in terms of their different roles in the research work. Stake (1995) describes different roles for researchers conducting case studies. The roles include teacher, advocate, evaluator, biographer, theorist, and interpreter. He presents seven role choices that every researcher conducting case studies, deliberately or intuitively, has to make, see Table 3.

a.	How much to participate personally in the activity of the case?
b.	How much to pose as expert, how much comprehension to reveal?
c.	Whether to be neutral observer or evaluative, critical analyst?
d.	How much to try to serve the needs of anticipated readers?
e.	How much to provide interpretations about the case?
f.	How much to advocate a position?
g.	Whether or not to tell it as a story?

Table 3 Role Choices for Case Researchers (Stake, 1995, p. 103)

In my own case I have chosen to participate personally in the activities in the organization (a). I have done so in a role where I have helped the people in the organization with interpretations from various perspectives (c) rather than being in an expert role (b). The two choices presented as (b) and (c) in the list above seem to be closely interrelated. Given that my case study is part of this doctoral dissertation, I try to serve the anticipated readers by a use of language and length that could be suitable in this context (d) and to separate the case description from my own interpretations of it (e). Regarding to what extent I try to advocate a position (f) I would say that I rather try to describe processes in an organization with the purpose to increase the understanding. Finally, I have chosen to describe the case study in the form of telling a story and discuss it in different sections (g).

When writing the case study, I am a combination of a teacher (teaching the contents of the case) and a biographer (describing especially the managing director in the organization). In the analysis phase I am more of a combination of an evaluator (giving attention to merits and shortcomings) and an interpreter (offering alternative interpretations of courses of events in the case). Finally, at the end one could say that I have a theorist role when trying to conclude the discussion and aiming at producing new knowledge in the light of previous theories. That is, I think that a researcher, and here I focus on a case researcher, moves through different roles during the research process rather than adopting a static role.

3.2.2 Rigor and Relevance

Two concepts sometimes used when discussing research are *rigor* and *relevance*, (e.g. Keen, 1991; Robey and Markus, 1998). The relevance can be described in terms like interesting, applicable, current and accessible (Benbasat and Zmud, 1999). In the debate on rigor and relevance there are arguments saying that the relevance aspects need to be valued by researchers in the field whether they conduct relevant research themselves or not (Davenport and Markus, 1999). There is no conflict between rigor and relevance, but instead it is possible and desirable to fulfil both directives and produce *consumable academic research*, i.e. rigorous academic research that is consumable for practitioners (Robey and Markus, 1998, p. 9). It is worth noting is that the balance between rigor and relevance varies among different professions (cf. Schön, 1983, p. 42). Keen argues that:

"Relevance must drive rigor. Until relevance is established, rigor is irrelevant. When relevance is clear, rigor enhances it." Keen (1991, p. 47)

In my work I try to increase the relevance of the research by achieving a closeness to an organization and its people through a clinical research approach I apply (see section 3.4). In order to work together with the persons in the organization, my topic and work have to be perceived as relevant to them. Regarding the rigor of my research, this is achieved by the academic handicraft in the research process. This chapter on the methodological issues is one attempt to be explicit about dimensions in the research process influencing rigor.

Robey and Markus (1998) suggest four different strategies for combining rigor and relevance in research, see Table 4.

- a. To pursue practitioner sponsorship
- b. To adopt new models of research
- c. To produce consumable research reports
- d. To support non-traditional publication outlets

Table 4 Strategies for Conducting Research that is Both Rigorous and Relevant (Robey and Markus, 1998)

The first strategy (a) is not applicable in my case, in accordance with the discussion on attached and semi-detached researchers (see Table 2 above). That is, I want to conduct the research from a position that is financially independent of practitioners. The second strategy (b) is more in line with my approach as I combine a clinical research approach with a reflective dialogue (see sections 3.4 and 3.6.5 below), which is a combination I have not seen applied earlier. The final two strategies (c and d) are more concerned with the publication of the research results which in my case to a certain extent is defined by the format of a doctoral dissertation, but can be supplemented with other forms of publications. The writing style, though, is defined by the author.

3.2.3 The Subjective – Objective Dimension

Having stated that my aim is to produce academically rigorous research which is relevant for practitioners, I will turn to my assumptions about the nature of social science. When doing so, I will use a framework with four different aspects of the subjective — objective dimension (Burrell and Morgan, 1979). The four aspects discussed in the dimension between the subjectivist approach and the objectivist approach to social science are: ontology, epistemology, human nature, and methodology (see Figure 5).

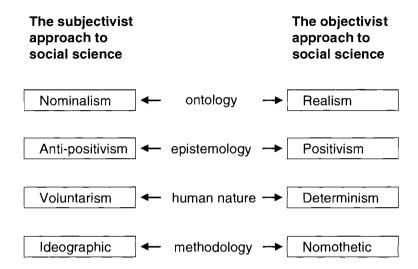


Figure 5 The Subjective – Objective Dimension: A Scheme for Analysing Assumptions About the Nature of Social Science (Burrell and Morgan, 1979, p. 3)

Burrell and Morgan argue that all researchers in social sciences "approach their subject via explicit or implicit assumptions about the nature of the social world and the way in which it may be investigated" (ibid, p. 1). In the following few paragraphs I will try to be explicit about some of my assumptions in terms of the four different parameters.

The first set of assumptions concerns ontology, or assumptions about the essence of the phenomena studied, or in other words, assumptions about reality. Here I recognize the possibility to discuss my view of reality at length, but given the purpose of this section I will simply declare that I regard reality as a social construction (cf. Berger and Luckmann, 1966). This means that along the subjective – objective dimension I can be found rather close to the subjectivist approach to social science (Morgan and Smircich, 1980, p. 492). Expressed differently, I believe that the empirical world is subjective and exists through actions of humans (cf. Orlikowski and Baroudi, 1991, p. 7) and that the social world is not given, but subject to different interpretations.

The second set of assumptions concerns epistemology, or assumptions about the grounds of knowledge, in other words assumptions about how knowledge can be developed and evaluated. The area of epistemology has a rich historical tradition (see e.g. Hirschheim, 1985, for a historical perspective) and assump-

tions about epistemology are sometimes expressed in terms of hermeneutical vs positivistic research (e.g. Wärneryd, 1985) or interpretivism vs positivism (e.g. Walsham, 1993). The spectrum concerning the epistemological assumptions is sometimes perceived to be the same as between qualitative and quantitative research approaches, which is a misunderstanding as both approaches can be used for both ends of the epistemological spectrum (Wärneryd, 1985, p. 8). Differences between the scientific goals of positivistic and hermeneutical research can be described in the following terms:

"The primary goal of science in a positivistic sense is to create order among facts. [...] To hermeneuticists the aim of science is to increase understanding with the implication that understanding refers to holistic, not to particularized relations." (Wärneryd, 1985, pp. 5-6)

In positivistic research there are first "facts" that can be observed, and then these facts can be arranged in order to find patterns. In hermeneutic, or interpretative, research there is the aim to understand a holistic picture, an understanding that then can be used for different purposes. In my work, I stress the importance of different interpretations and one aim is to increase the understanding of the phenomena, or socially constructed reality, that I study. This means that on the epistemological spectrum I am close to the anti-positivism, or subjectivist, end (Morgan and Smircich, 1980, p. 492).¹⁰

The third set of assumptions concerns human nature. At one extreme, voluntarism, the view is that human beings are completely autonomous and free-willed. At the other extreme, determinism, the view is that human beings and their actions are completely determined by the situation or the environment; they are like responding mechanisms (Morgan and Smircich, 1980, p. 495). My own view of human nature is much closer to the former than the latter. That is, I believe that human beings interpret their environment, are influenced by it and create their realities in accordance with the social construction of reality.

The fourth set of assumptions concerns methodology and is highly influenced by the previous three sets of assumptions. That is, the assumptions one makes concerning ontology, epistemology and human nature have implications for the methodological assumptions. One approach is the ideographic research approach where the view is that the social world can only be understood by obtaining firsthand knowledge of the subject, and it stresses the importance of

¹⁰ One can also argue that the positivist and interpretive approaches could be integrated. Lee (1991) integrates the two approaches into a single framework and focuses on different levels of understanding: subjective, interpretive and positivist understanding.

'getting inside' situations (Burrell and Morgan, 1979, p. 6). The nomothetic research approach on the other hand has a focus on the process of testing hypotheses in accordance with scientific rigor and often includes use of quantitative techniques for analysis of data (ibid, pp. 6-7), although the techniques used can be applied in various contexts as described above (Wärneryd, 1985). Given my view that closeness to the phenomena under investigation is important (as described in section 3.2.1 above), my methodological assumptions are very much in line with an ideographic research approach.

3.3 The Interpretive Research Approach

An ultimate aim of this piece of research is to produce new knowledge and in this section I will elaborate on my epistemological assumptions. One can argue that interpretation is a major part of every piece of research (Stake, 1995, p. 9). As I have described above my view of science is more in line with the subjectivist approach as opposed to the objectivist approach, or in epistemological terms I am closer to interpretivism than to positivism.

In practice this means that in my case study I will try to understand the phenomena studied through accessing the meanings that participants assign to them, as opposed to a more descriptive piece of work where the researcher rather presents objective and factual accounts of events (Orlikowski and Baroudi, 1991, p. 5). In other words, I will try to understand the phenomena and different interpretations of them, as all different persons have their own social constructions of reality, in line with the discussion on ontology above. Understand these subjective experiences of individuals is a central aspect of the interpretive approach (Burrell and Morgan, 1979, p. 253).

In order to understand the different interpretations of the phenomena, my role as an interpreter and gatherer of interpretations is central (Stake, 1995, p. 99, also see the discussion on different roles on page 34 above). I will search for different people's interpretations of situations and then try to offer different own interpretations of these interpretations. My way of doing this in practice is to conduct an in-depth case study, which is often the vehicle for interpretive investigations (Walsham, 1995a, p. 74). This approach means frequent visits to the field site over an extended period of time, as will be described later (see section 3.5) but first I will describe and discuss the clinical research approach.

3.4 The Clinical Research Approach

I apply a clinical research approach in my work. In this section I will describe this approach and present some reasons why I have chosen a clinical approach. There will also be a brief discussion of some possible alternatives.

With a clinical research approach the researcher adopts a helping role in the organization and during parts of the process focuses is on helping the client (Schein, 1987, 1991, 1992). By doing so, the researcher can collect empirical material during the process, without focus on the collection all the time. As the researcher is perceived as someone who is there to help people in the organization, the incentives to answer questions, share experiences, describe situations increase, although there may be different personal motives involved. The idea behind this approach is to gain a good understanding of the complex system studied through the helping role. One could say that a clinical research approach helps researchers generate relevant empirical material and obtain insights into what is really going on while at the same time also helping managers (Schein, 1991, p. 28).

In order to establish situations where the clinical approach is suitable, it is essential to identify a client, in my case a general manager, who perceives a need for help concerning the area of interest in the study. This means that the selection criteria to some extent will be governed by access to a general manager who perceives suitable needs (see section 3.6.2).

In the background of the clinical research approach one finds Kurt Lewin's view that one cannot understand a human system without trying to change it (Lewin, 1947; Schein, 1991). That is, the clinical approach involves both the researcher and the client in the research process (cf. Argyris and Schön, 1974). Roots to the clinical research approach can also be linked to Roethlisberger and his work at the Harvard Business School (cf. Roethlisberger, 1977). There is also a Swedish clinical research tradition (Berg, 1974; Björkegren, 1986).

Schein (1992) describes types of research approaches in terms of the involvement of different parties, see Figure 6.

	Level of Researcher Involvement		
Level of Subject Involvement	Low to Medium Quantitative	High <i>Qualitative</i>	
Minimal	Demographics; measurement of "distal" variables	Ethnography; participant observation; content analysis of stories, myths, rituals, symbols, other artifacts	
Partial	Experimentation; questionnaires, ratings, objective tests, scales	Projective tests; assessment centers, interviews	
Maximal	Total quality tools such as statistical quality control; action research	Clinical research; action research; organization development	

Figure 6 Research Approaches and Levels of Involvement (Schein, 1992, p. 29)

As shown in Figure 6 the clinical research approach means a high degree of involvement both for me as a researcher and for the "subject", which is the managing director and other people in the organization. The quantitative and qualitative aspects included by Schein in Figure 6 can be questioned, as methodological approaches are not necessarily linked to researcher involvement.

As described above, I value closeness to the phenomena studied in order to deepen understanding. I find the helping aspect of the clinical approach attractive. In my view, the fact that I am in an organization not only for my own research interest but also to help the persons in the organization, improves the quality of my empirical material in terms of understanding processes in the organization. The concept of quality can of course be discussed, but given the concept of rigor and relevance (see section 3.2.2) this approach seems suitable. Quality aspects will be elaborated in chapter 9.

I have chosen the clinical research approach for several distinct reasons:

- I wanted to work closely with a general manager in order to get a good understanding of managerial work.
- I wanted to create a situation where the people I met in an organization would gain something from it themselves, as I thought this would improve their willingness to share their views with me.

• I was curious about a methodological approach that stresses relevance aspects.

Furthermore, the combination of action and concrete work in the organization with reflection and partly more abstract work in the research process can be seen in the light of my own learning process.

When discussing some possible alternatives to the clinical research approach, I will focus on two alternatives: action research and ethnographic research. I start with a brief discussion on the differences between clinical research and action research.

The term *action research* was coined by Kurt Lewin in the 1940s when he described a particular kind of research that combined the experimental approach of social science with programs of social action to address social problems (Schwandt, 1997, p. 1; Lewin, 1946). Even if the concept was coined quite some time ago there is still no tight definition that is agreed on (Checkland, 1991, p. 398). In action research the researcher gets involved in the process of action and the process of change itself becomes the subject of research (Checkland, 1981, pp. 151-154). From a positivist view, action research may seem inappropriate, but with a more interpretative approach action research can be seen as more fruitful (Jönsson, 1991, p. 393).

Both clinical research and action research are approaches where the researcher is highly involved in the process. There are also helping aspects in both approaches. In short, there are close links between clinical research and action research, but there are also differences. Action research often concerns running a project or similar activities in an organization. The project per se may also be part of the phenomena studied. That is, the work with the helping role is at the same time part of the phenomena studied. In a clinical approach the helping role is a means of increasing an understanding of the phenomena, whereas the actual work in itself may not necessarily play the same role in the research.

Another difference concerns the starting-point for the research. In clinical research a client perceives a need (Schein, 1991), while action research often starts with a research design which is then carried out in the context of an organization. In other words the helping role can be seen to be pushed a bit further in a clinical approach compared to an action research approach. This also means that the driving force for the study is more focused to the researcher in an action research approach than in a clinical approach, where there is a need for a substantial driving force from the client.

The second alternative to clinical research that I will say a few words about is *ethnographic research*. To some extent the clinical research approach can be related to an ethnographic role. One important difference between the alternatives is the degree of involvement, see Figure 6 above. In ethnographic research the people in the organization are not involved but only studied.

Another difference between clinical research (and action research for that matter) and ethnographical research is the view of a helping role vs understanding. In ethnographic research the understanding is in focus, while the helping role is in focus in clinical research (Schein, 1987, p. 35). In contrast to this view, I see different phases of helping and understanding. I see the helping role as a vehicle for increasing understanding. In some parts of the process the focus is on the helping role, as this at a later stage will help increasing the understanding. I believe that this combination of a helping role and an understanding leads to a higher degree of understanding than would be the case if the focus would be on the understanding at all points in time during the process.

In order to carry out this combination of the helping role and the understanding of the process, there is a need for a rich description of the events in the field (cf. Schultze, 2000). Here, methodological traditions from ethnographic research can be useful, where the writing part is crucial to the process (Van Maanen, 1988).

In practice, the clinical approach has meant that from time to time I have been involved in processes to help the organization, and not only to collect my empirical material. In other words, I have done work for them which at the same time has helped me with my collection of empirical material.

One example of this occurred in the very first phase of the case study in 1993 when I surveyed opinions of information needs among members of the management team and members of the board. The purpose of this survey was to investigate different perspectives on the present management reports and different opinions on what information was needed by the members of the management team and the board members respectively. The newly appointed managing director initiated this survey as he wanted a better picture of the present state of information support for the management team and the board members.

This purpose of the survey can be seen from two perspectives. First, it can be seen from the perspective of the organization. Here, the purpose was to help the managing director to improve his understanding of different opinions of

the present information and of information needs. Second, the survey can be seen from my own perspective as a researcher, where the purpose was to get a picture of different perspectives on information and information needs, and to collect material for my study.

The persons I interviewed in this first survey were all aware that I did this to help them to improve the information support for their managerial work, i.e. an area where they perceived problems. In my opinion, this gave me as a researcher good opportunities to collect empirical material and to get a good understanding of the phenomena studied. The people I interviewed were concerned to give me as much and relevant information as possible, as they saw this as an opportunity to improve their own informational situation¹¹. They were not just "being nice to a researcher that wanted to ask some questions"

Another example of the clinical approach in practice is the reflective dialogue with the managing director (see section 3.6.5). During this dialogue there have been discussions with the managing director where he has seen the opportunity to use these discussions as a part of his own learning. He has regarded this dialogue as part of his personal development, an opportunity to learn from his own work and experience, and therefore he has been willing to spend time on reflection and discussion.

3.5 The Longitudinal Case Study

My aim is to answer the following three questions in the discussion below:

- Why a case study?
- Why one case study?
- Why one *longitudinal* case study?

I base my use of the term "case study" on a definition by Benbasat et al (1987) who in turn draw their definition from several different sources discussing use of case studies in different disciplines including marketing, management accounting, and organizational behavior. Their definition of case study is:

¹¹ I once received one comment from one of the people I interviewed that she thought it was a weakness that I was there to help them – that they were not capable of handling the issues by themselves.

"A case study examines a phenomenon in its natural setting, employing multiple methods of data collection to gather information from one or a few entities (people, groups, or organizations). The boundaries of the phenomenon are not clearly evident at the outset of the research and no experimental control or manipulation is used." (Benbasat et al, 1987, p. 370)

Regarding my first question on why I have chosen a case study approach, Yin argues that a case study is suitable when "a 'how' or 'why' question is being asked about a contemporary set of events over which the investigator has little or no control" (Yin, 1994, p. 9). Given my research question (see section 1.4) the case study approach seems to be suitable on an overall level.

This does not really answer the question about why I have chosen a case-study approach. I did not formulate my research question, to see that it was a "how" or "why" question and therefore choose the case-study approach. Instead I would refer an explanation to the previous discussion on my view of science in section 3.2. Given my view that closeness between research and practice is important, my aim to combine rigor and relevance and my subjectivist approach, I found a case-study approach suitable. This approach is also very much in line with my interpretive and clinical research approaches. As I stated above, I believe that every piece of research is highly influenced by the researcher and in my case my own personal preference for a case-study approach was part of the decision. There was no objective evaluation of all possible methods. Instead I considered different combinations of methods all of which I found to be in line with my view of science (see section 9.1.6 for later reflections on alternatives).

In order to elaborate a bit on the appropriateness of the case study approach I will relate my view of the approach to key characteristics of case studies that Benbasat et al (1987) list based on a literature survey (see Table 5). The list shows eleven items described as key characteristics in case study research.

- 1 Phenomenon is examined in a natural setting.
- 2 Data are collected by multiple means.
- 3 One or few entities (person, group, or organization) are examined.
- 4 The complexity of the unit is studied intensively.
- Case studies are more suitable for the exploration, classification and hypothesis development stages of the knowledge building process; the investigator should have a receptive attitude towards exploration.
- 6 No experimental controls or manipulation are involved.
- 7 The investigator may not specify the set of independent and dependent variables in advance.
- 8 The results derived depend heavily on the integrative powers of the investigator.
- 9 Changes in site selection and data collection methods could take place as the investigator develops new hypotheses.
- 10 Case research is useful in the study of "why" and "how" questions because these deal with operational links to be traced over time rather than with frequency or incidence.
- 11 The focus is on contemporary events.

Table 5 Key Characteristics of Case Studies (Benbasat et al, 1987, p. 371)

For me it was natural to examine the phenomena studied in the natural setting (1) given my view on the subjective – objective dimension (see Figure 5). In order to get a rich view of different perspectives I also found it natural to collect empirical material (2) from different sources (see section 3.6.3). I chose to focus on a managing director and his management team (3) and wanted to study this complexity intensively (4) in accordance with my interpretive approach, which is in line with the explorative character of the research (5). Regarding experimental controls and manipulation (6) my view with a clinical approach requires involvement in the process to a certain extent. Here I find my role as more involved than the item on the list indicates. As for (7) I have not specified a set of variables in advance. My results depend heavily on my integrative powers (8) and changes in methods for collection of empirical material (9) have been a natural part of the combination of different sources

(2). The last two items (10) and (11) seem to come from Yin as discussed above. 12,13

Now to the second question asked in this section:

• Why one case study?

This was a tougher question than the first one about why I have used a case study approach. The trade-off between the deep understanding of a particular social setting and the benefits of comparative insights is critical (Dyer and Wilkins, 1991). In an ideal world one would like to have both the deep understanding and the benefits of comparative insights, but in this sense the world is not ideal as there are practical limitations within the scope of a doctoral dissertation. My choice was to stress the deep understanding over the possibility to make comparisons. I think this choice can be traced back to my view of science (see section 3.2) where closeness and understanding are stressed.

I do not think it is possible to say that a single-case study approach simply is better (or worse) than a multiple-case study approach, even if one can find arguments in these terms (e.g. Dyer and Wilkins, 1991). Instead of arguing for the best solution I think it is more fruitful to realize that there are advantages (and disadvantages) with both approaches. Lee (1989) points to four methodological problems with single case studies: how to make controlled observations, how to make controlled deductions, how to allow for replicability, and how to allow for generalizability. Given my approach to the case study I do not perceive these problems as severe. The need for controlled observations and replicability are for example more important in a positivistic tradition. Generalizability is still of importance, and it will be discussed in chapter 9.

Yin (1994, pp. 38-41) points to three rationales for a single-case study: (a) a critical case for testing a well-formulated theory, (b) an extreme or unique case, and (c) a revelatory case. In my situation I see the third rationale, a revelatory

¹² Benbasat et al from 1987 do not, for obvious reasons, refer to Yin from 1994, but instead to the first edition of Yin's book published in 1984.

¹³ In Table 5 the sixth and seventh items can be seen as based on a more positivistic approach. This is an indication of a complexity underlying every discussion on research methodology. A discussion of specific methods and their applicability often takes epistemological assumptions for granted. That is, one has to be careful when basing a methodological discussion on other research with different fundamental assumptions. Yin (1994) for example, which I make use of above, has a positivistic view. This means that when I base my arguments on this research I have to consider whether the differences in underlying assumptions affect the applicability of the arguments.

case, as most appropriate. When I began my case study and found a way of working together with a general manager over time I saw opportunities to come "under the surface" in a revelatory sense, and I then decided to focus on one case study.

As I have chosen to conduct one case study with a longitudinal approach this means that there is a description of several settings at different points in time. This means that the borderline between single and multiple-case studies is not as simple as it may appear. Eisenhardt (1991) points to the fact that a single setting (an organization for example) does not necessarily mean that there is a single-case study. There may be different possible ways to make comparisons and replications. I see several ways of making comparisons within a single-case study, such as described in Table 6.

Type of Comparison	Description
Over time	To make comparisons between different points in time
Between sub-divisions	To make comparisons between different sub- divisions, where there may be more sub-divisions
Different perspectives	To make comparisons by viewing the case-study from different perspectives

Table 6 Different Types of Comparisons in a Single-Case Study

In my case I apply at least two of the types of comparisons. I make comparisons over time in accordance with my longitudinal approach and I make comparisons between different perspectives.¹⁴

Now it is time for the third question to be addressed in this section:

• Why one longitudinal case study?

I base my definition of a longitudinal case study on a definition of longitudinal organizational research by Kimberly (1976):

"Longitudinal organizational research consists of those techniques, methodologies and activities which permit the observation, description and/or classification of organizational phenomena in such way that processes can be identified and empirically documented." (Kimberly, 1976, p. 329)

¹⁴ A classical example of the latter type of comparison is Allison's (1971) case study on the Cuban missile crisis seen from different perspectives.

Given this definition, one could still ask: "how long is longitudinal?" This is a tricky question and I see it as the same type of question as: "how long is a piece of string?" The question has in some sense the answer: "it depends", which is hardly an answer. It depends on what process one is studying. Another way of addressing the question is to look at the number of points in time for collection of empirical material and the intervals between these points in time (Kimberly, 1976, pp. 334-338). Instead of trying to define a specific number of occasions for collections of empirical material and a specific interval between the occasion (i.e. to specify the means), it might be more fruitful to view the question in the perspective of the understanding of a process (i.e. to specify the goal). In Figure 7 the time frame and the purpose are described in a framework by Franz and Robey (1987).

	Time frame	
Purpose	Single period	Multiple period
Discovery	Observe current state (generate ideas for factor theories)	Observe on-going processes (generate ideas for process theories)
Testing	Test static associations (correlational analyses)	Test dynamic changes (cause and effect)

Figure 7 A Typology for Research Strategies (Franz and Robey, 1987, p. 210)

My purpose is to discover rather than to test, and my focus is rather on processes than on a current state. Given the goal to understand a process, I found a longitudinal approach suitable, even though I did not define the number of occasions for collection of empirical material in advance. In the context of my study, managerial work, there are arguments for longitudinal field-based studies (e.g. Kotter, 1982, p. 150) and examples of this kind of research approach (e.g. Tyrstrup, 1993). I also saw the potential of possible contributions coming from this research approach as interesting (cf. Kimberly, 1976, pp. 344-345) and found this approach well in tune with the interpretive approach (Walsham, 1993, p. 14). Furthermore, I chose to conduct a longitudinal case study as I saw this approach as suitable for mapping information about individual differences over time (Agnew and Pyke, 1982, p. 139), which is in line with my process focus.

3.6 Unfolding the Research Process

In this section I will try to unfold the research process in order to give the reader a picture of the journey from collection of empirical material to the written case study, including the analysis of it.

3.6.1 Unit of Analysis and Context

The starting-point for the research process is in some sense the overall purpose with the study (see section 1.4), which gives the context for the study. The research questions help to focus the unit of analysis (Yin, 1994, p. 21). In my case this can be explained in terms of management processes in managerial work, with a special focus on information and communication factors. It is important to take the context of the study into consideration, and it can be expressed in terms of different levels (cf. Strauss and Corbin, 1990, pp. 161-164).

The primary unit of analysis is the managing director and his work. In order to view the managing director and his work in a wider context, the management team is the next level of analysis. To extend the context yet another step, the next level of analysis is the entire organization. One could go on and extend to wider contexts in form of different levels of the environment, but I have not included these. Briefly the primary unit of analysis is the managing director and his work seen as management processes (with a special focus on information and communication), and the next levels of analysis are the members of the management team and their work.

3.6.2 The Case-Selection Process

My aim here is to answer the question:

Why one longitudinal case study in this particular organization?

I will start answering this question by presenting some of the criteria used in the case selection process (see Table 7)

Type of Criteria	Description	
Size	I wanted an organization which I thought I could grasp, but which at the same time retained some complexity. I settled for 500-1,000 persons.	
Autonomous unit	I wanted an autonomous unit and if it was part of a larger organization, it should have its own board of directors.	
Type of manager	I wanted an organization with a general manager, with total responsibility for the organization, i.e. not only a function.	
Previous link	I wanted to conduct the case study in an organization which I had no previous links to through earlier research projects or the like in order to start with no prior assumptions.	

Table 7 Criteria Used in the Case Selection Process

Along with the criteria presented in Table 7, I also took my general impression of the first contacts into consideration. This very soft criterion could be expressed in terms of my general impression of the possibilities to learn from the case study. In a study like this one, the aim to maximize what one can learn is an important criterion (Stake, 1995, p. 4). I also considered to what extent the general manager of the organizations seemed to find the topic of the research interesting, and last but not least I perceived a genuine need in the area, in accordance with the clinical research approach (see section 3.4).

Based on the criteria given above I identified eleven organizations that I contacted. Some of the organizations had been involved in projects at the research institute earlier, but I had no previous links to any of the organizations. I sent a letter to the managing director in each of the organizations. (The letter is found in Appendix A). The initial contacts by letters resulted in meetings in six of the eleven cases (see Figure 8).

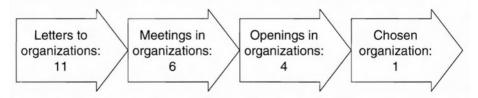


Figure 8 The Process to Contact the Company for the Case Study

From these six meetings with the managing directors it turned out that there were some interest and possible openings for me in four of the organizations. All these four cases met the criteria described in Table 7. There were mainly two reasons for choosing Omega. First, the timing was more or less perfect in this organization as the managing director felt an immediate need to work with the issues of interest and I could start my work together with them at once. Second, my general impression after the first contact was that this was a case which I could learn a lot from (cf. Stake, 1995, p. 4) and my gut feeling said that the contact with the managing director could work well.

I chose an organization with about 600 people, which is part of a larger organization but has its own board of directors and its own financial responsibility. I had no previous links to the organization (but to the larger group which it belongs to) and the managing director seemed to be interested in the matters at hand. In short I found an organization and a managing director that seemed to be suitable for the case study.

3.6.3 Sources of Empirical Material

An overview of the empirical material is found in Appendix B and I will base this presentation and discussion on six sources of evidence listed by Yin: documentation, archival records, interviews, direct observation, participant-observation, and physical artifacts (1994, p. 80).¹⁵

(1) Documentation. I have used different forms of documentation in the case study: written reports (both regular reports and reports for special events), minutes from all meetings in the management team and from all board meetings during the time period, internal memos etc. There are also internal magazines and annual reports that have been useful for the case study. The documentation has been used both to provide different facts, and to help validate information from other sources (triangulation, see Yin, 1994, pp. 90-93, and section 3.6.7 below). In order to overcome some of the weaknesses I have included all minutes from the meetings in the management team and the board (cf. selectivity) and thanks to the clinical approach I have had total access to all documentation (cf. access) and even help from people in the organization to find suitable documentation (cf. retrievability). My own unknown bias I cannot say anything about (cf. reporting bias)!

¹⁵ Even though my epistemological assumptions are not exactly the same as those of Yin's, I still regard the classification of different sources of empirical material as useful.

- (2) Archival records. I have not used this type of source to the same extent as documentation (1). Some archival records that I have used to a limited extent is organizational charts, phone lists and internal survey data.
- (3) Interviews. This source has been the most important source of empirical material in the study. I have held 105 interviews and booked meetings with the managing director, with the other members of the management team and with a number of other people in the organization. The interviews have been of different types: both focused interviews and more open-ended interviews. I have also used a special type of interviews which has been in the form of a reflective dialogue with the managing director (which will be described in section 3.6.5).
- (4) Direct observations. This is another important source of empirical material in the case study. In my case I have used direct observation linked to my own participation at those meetings where I have been a passive participant and observer. I have also made field notes when I have spent time in the organization. I have made my direct observations with no use of any formal protocols. One weakness with direct observations is said to be that it is time-consuming (Yin, 1994, p. 80). In my case I have spent a considerable amount of time in the organization and therefore also have had the opportunity to make observations of different events. I hope to compensate for the weakness regarding selectivity with the long period of time I have spent time in the organization and therefore hopefully reaching a broad coverage.
- (5) Participant-observation. This has been a more frequently-used source of empirical material than direct observations. I have been a participant in meetings and discussions, and on some occasions I have presented findings from interviews in the organization. Yin (1994, pp. 87-89) points to three problems linked to bias in participation-observation: first, that the investigator has less ability to work as an external observer; second, that the participant-observer may become a supporter of the organization; and third, that it may require too much attention which might reduce the quality of notes, etc. I have tried to tackle these problems in the following way: First, I have been participantobserver at certain time periods in order to change between an internal and an external perspective of the organization; second, I have been aware of the risk of becoming a supporter and at all times tried to find both positive and negative angles on matters; third, I have carefully taken notes from all formal and informal meetings and discussions. Immediately after every occasion I have rewritten my notes and supplemented them with details from my memory, with the distinction between what is from my notes and from my memory.

(6) *Physical artifacts*. This source includes for example technological devices or tools and has not been a significant source of empirical material in my study. The only applicable source of information in this context which I can see is that I have seen some information systems in use in the organization for my case study.

As described above I have used several sources as a basis for the case-study description. In short, the empirical description will be based on the following, including references to the sources referring to Yin (1994):

- Documentation from 105 *meetings or interviews* with the managing director and other people in the organization (mainly from the management team). The meetings have been focused semi-structured interviews or more openended unstructured discussions. In total the documentation from these meetings and interviews consists of about 700 pages (cf. Yin (3) *interviews*).
- Field notes and reflections from *time spent in the organization* beyond the meetings described above. This documentation consists of about 100 pages (cf. Yin (4) *direct observations* and (5) *participant-observation*).
- Minutes from all meetings in the management team (monthly 1-2 days-meetings) during the time period. This means minutes from about 60 meetings and about 1100 pages in total, plus my own written summaries based on the minutes of all meetings (cf. Yin (1) documentation).
- *Minutes from all board meetings* (quarterly) during the time period. This means minutes from about 15 board meetings and about 200 pages in total, plus my own written summaries based on the minutes of all meetings (cf. Yin (1) *documentation*).
- Other types of internal documents which consist of about 500 pages (cf. Yin (1) documentation and (2) archival records).
- A considerable amount of more public documents, such as *internal magazines, annual reports* etc. (cf. Yin (1) *documentation*).

Regarding the meetings and interviews, about half of them have been meetings or interviews with the managing director (alone or together with someone else). The other meetings or interviews have been mainly with other members of the management team. Furthermore, I have attended a number of meetings and have had a large number of informal discussions with people on different levels in the organization.

Further facts and figures about the empirical material are found in Appendix B.

As illustrated in this list of different sources of empirical material, I have used "multiple sources of evidence" (Yin, 1994, p. 90), or expressed differently, I have used a variety of different sources supplementing each other. The most important source, however, has been interviews and these have been supplemented with studies of different types of written documents and records, as well as with observations in different forms.

3.6.4 Interviews as a Central Source

As my interviews form a very important source of empirical material, I will here present my view of interviews in more detail. I find interviews an important source of knowledge in light of my interpretive approach. An interview situation helps to increase the understanding of different people's interpretations of different events of interest for the topic at hand. The interviews can be said to be "reality-constructing, meaning-making occasions" (Holstein and Gubrium, 1995, p. 4).

Interviews can be described in different terms and in accordance with several types of classifications. Perhaps the most common one is between unstructured, semi-structured, and structured interviews, see Table 8.

Type of Interview	Description
Unstructured or Informal Interviews	The interviewer initiates a discussion with a few questions in mind.
Semi-structured or Focused Interviews	The interviewer guides a discussion by asking questions in accordance with a set of questions.
Structured or Formal Interviews	The interviewer has a set of specific questions which can be answered specifically.

Table 8 Three Types of Interviews (partly based on Rubin and Rubin, 1995, pp. 5-6)

According to the classification in Table 8 most interviews in my case study have been semi-structured or focused. I have had a guide for the interviews saying what areas to cover and some specific questions that I want to make sure to include during the interview. In the reflective dialogue (see section 3.6.5) the interviews can be seen more as unstructured or informal.

I have tried to create an open atmosphere during the interviews in order to make the communication as open as possible (cf. Holstein and Gubrium, 1995,

p. 8). Here I feel that my clinical approach has been helpful, as the interviewees have all been aware that I am there to help them, not only to collect material for my own research. My approach to interviews, including my intentions to form a relationship with the interviewees and not trying to be a neutral researcher, can be seen as a type of "qualitative interviewing" (Rubin and Rubin, 1995). This type of interviewing is built up from three types of questions (ibid, pp. 145-158):

- main questions to begin and guide the interview
- probes to complete or clarify an answer or ask for further examples
- follow-up questions to pursue implications of answers to main questions

I have found this type of interviewing fruitful in my case study, in accordance with the described applicability of qualitative interviewing: "to unravel complicated relationships and slowly evolving events" and "whenever depth of understanding is required" (ibid, pp. 51-52). Alternative ways of describing, in my opinion, similar approaches to qualitative interviews are in terms of active listening (cf. Athos and Gabarro, 1978, chapter 9; Björkegren, 1986, p. 20) or active interview (Holstein and Gubrium, 1995).

I see a common ground in these approaches in that the interviewer tries to understand the interviewee's perspective through active listening and by using probes and follow-up questions in order to get a deeper understanding of the situation. For me this is very much in line with the interpretive research approach.

Qualitative interviewing design is described in terms of *flexible*, *iterative*, and *continuous* (Rubin and Rubin, 1995, p. 43) which means that to some extent the design is governed by the situation and the interaction between the interviewer and the interviewee. I have designed interview guides before my interviews (see Appendix C) and used them as guidelines, but I have paid a considerable amount of attention to the process during the interview, where the interviewees are more like conversational partners than objects of research (Rubin and Rubin, 1995, p. 11).

One may ask what the difference is between an interview as described above and a conversation. My answer is that an active interview, or qualitative interview, is like a conversation but with a guiding purpose or plan (Holstein and Gubrium, 1995, p. 76). Atkinson gives the following description in his work on life-story interviews:

"An interview is like a conversation, but it is not a conversation. An interview should be informal and loose, like a conversation, but in an interview, the other

person is the one doing the talking. You are the one doing the listening." (Atkinson, 1998, p. 32)

Before leaving the topic of interviews I will say a few words about the use, or non-use, of tape-recorders. I have not used a tape-recorder during my interviews. The advantage of using a tape-recorder would naturally be that it provides a full description of what is said during the interview, even if this advantage should not be overestimated (Stake, 1995, p. 66). The main disadvantage of using a tape-recorder during interviews is that the respondent may be seriously inhibited by it in case of confidential and sensitive matters (Walsham, 1995a, p. 78), which often has been the case in my interviews¹⁶. Schein (1991) gives an example of this disadvantage:

"My colleague reported a particular instance where the manager whom he was to interview said: Do you want to hear the official story or do you want me to tell you what really happened?" My colleague replied that he of course wanted to know what really happened. The manager then said: In that case you better turn that tape recorder off." (Schein, 1991, p. 2)

I had a similar experience in a previous project when I interviewed a CEO, together with a colleague of mine, and we used a tape-recorder. During the interview we had to change the tape, and there was a small break when we did not use the recorder. During these couple of minutes he told us the most interesting parts during the whole interview. He changed tone and spoke more directly to us and shared his experiences. I am aware that this is just one piece of anecdotal evidence, but nevertheless it has influenced my usage of tape-recorders.

Of course, there is no single right answer to the question of using a tape-recorder during interviews. It depends on the situation and the people involved. It may be more appropriate to record interviews where there are less confidential material, and relatively large amounts of "hard" data, which might be hard to capture in written notes. In my interviews the topic has been more closely related to the people and can be regarded as more sensitive, which have resulted in my decision not to use a tape-recorder during the interviews. But I have used a tape-recorder in my own work though.

¹⁶ As an illustration of the perceived sensitivity of the empirical material the managing director carefully checked that I treated all material and notes in a perfectly safe place. For example, he wanted to make sure that I did not store any files accessible on a computer network, etc.

I have used a tape-recorder immediately after a number of the interviews. Usually, I have rewritten my notes directly after an interview or meeting, and supplemented my notes with details from my memory (carefully distinguished from the notes taken during the interview). Here, I sometimes have used a tape-recorder to go through the notes and add some oral comments. What I have found useful in this approach is that it is easier to make a large number of comments orally than to capture them in written notes, and that it can be useful to go back to the tapes and listen to them at a later stage when reading the notes from the interview.

3.6.5 The Reflective Dialogue

In this section I will first describe what I mean by a reflective dialogue, then how I have used it, and finally why I have found it useful. I will start by trying to answer the question:

• What is a reflective dialogue?

When I had been involved in the organization for slightly more than one year, I had presented some of my first findings to managing director and the management team and knew the managing director in the organization quite well. I then introduced the idea of trying a new form of dialogue as a complement to our contacts through interviews and meetings in the organization. We decided to start meeting on a regular basis for a dialogue, and that this dialogue should be held outside the organization. The idea was to have these meetings for a while and then evaluate them to see if we wanted to continue (which we later decided to do).

One intention behind the idea to start this dialogue was to introduce a series of meetings, or unstructured interviews, with the managing director in order to learn more about managerial work, and especially the development of managerial work over time. I saw this dialogue as an opportunity to add a perspective to the findings from other interviews and meetings in the case study. Given my clinical research approach (see section 3.4), I wanted this dialogue to be valuable for him and not only for my research purposes. The following quotation from an interviewee in Rubin and Rubin (1995) illustrates what I wanted to achieve with the dialogue:

"I'll tell you one thing. It has been a very interesting conversation with you because I think in the course of conversation it's given me the time... to reflect... on what we are doing and how we are doing it... It has given me a good opportunity." (An interviewee in Rubin and Rubin, 1995, p. 1)

This is more or less what the managing director in my case study has expressed more than once regarding our dialogue. Given the important element of reflection during this series of unstructured interviews, I have called our meetings for a *reflective dialogue*.¹⁷

The next question is *how* I have used the reflective dialogue in my study. I have met with the managing director at my office about once every month. We found Friday afternoon a suitable time. To spend 1-2 hours after the workload of the week was finished, turned out to be a valuable time for us to meet for discussion and reflection. The week was almost finished and it was easy to relax, which is important for this type of open interview situation (cf. Atkinson, 1998, p. 31).

Every meeting has been different from the other. We have discussed the situation in the organization linked to managerial work in general, and to different aspects related to information and communication in particular. Over time there have been several foci in the dialogue: general discussions on what is going on in the organization, issues concerning what is on the managerial agenda and what he pays attention to, including how to handle different types of issues, such as communication issues in the organization.

The contents of our reflective dialogue have been on a different level than when we have met in the organization (where it usually has been more focused on specific topics). In the reflective dialogue there has been more reflection on the managerial work in itself, and sometimes on broader issues too (cf. life story interviews, Atkinson, 1998). This means that I have seen the empirical material from the unstructured interviews in the reflective dialogue as valuable supplements to the material from all other interviews and meetings.

Usually I have been entirely involved in the discussions during the meetings and hardly taken any notes. Instead I have spent quite some time immediately after every meeting to take notes about what we have discussed and other types of observations regarding the process. I will give a very short description of what a typical meeting in this dialogue could look like:

It is Friday afternoon. The personal assistant to the managing director called earlier today and said that MD was a bit behind schedule today and asked if we could put off the meeting for an hour and start 4.30 p.m. instead of 3.30 p.m. Now MD just called from the car and said that he would be at my office in about 15 minutes.

¹⁷ The name is inspired by Schön's (1983) discussions on the reflective practitioner.

When he arrives, we get some coffee and sit down in the large conference room. MD takes a breather and says "Phew, what a week. It is really nice that it is Friday". We start the discussion about what is going on in the organization at present and if there have been any specific issues on the agenda during the week. We both describe what we have been up to and what is occupying our minds at present. If there are any specific matters to be discussed, we focus the discussion on these matters and try to first see the problem from different perspectives and then to generate different alternatives for how the situation at hand could be handled.

During the meetings none of us takes any notes. (This only happens when we, for example, have listed a number of items to include in a coming presentation etc.) Instead we usually use the whiteboard actively during our discussions. At this meeting I have some questions about use of different information sources in the managerial work that I am interested in. During the discussion I bring these issues up and link them to specific situations that we discuss. This way there are few questions and answers, but instead much more discussion.

We conclude the meeting just before 6 p.m. with a short discussion on our respective agendas in the near future. When he has left, I immediately sit down and make some notes about the meeting, both about the content, i.e. what we talked about, and about the process.

The reflective dialogue meetings cover significantly different topics, but taken together they form a rich picture for the collection of empirical material, and thus for my understanding. Appendix F is a specific example of a reflective dialogue.

I will conclude this section with a discussion on why I have used a reflective dialogue. The dialogue has given the managing director an opportunity to reflect on his work, and has given me as a researcher an opportunity to learn more about managerial work. For me one purpose of the dialogue has been to meet for discussing and reflecting on matters in a broader perspective. We have not necessarily focused on matters linked to specific topics of the interest for the study, but merely used the dialogue as a means of sharing each other's perspective to aid reflection and learning (see Table 9).

Perceived Value
Opportunities to:
 take time to reflect on the work, something that is often not prioritized if not planned
 discuss and try ideas with a person who is outside the organization and independent
learn from an external perspective
Opportunities to:
 learn more about the practitioner's situation (in this case to learn about managerial work)
 learn from an internal perspective and learn more about how the practitioner thinks
 add an empirical source which runs over a longer period of time and enriches the findings

Table 9 Perceived Values of the Reflective Dialogue from Different Perspectives

In short, the general purpose of this reflective dialogue has been twofold. From the manager's perspective, he has used the dialogue as a source for reflection in his work and as an arena for trying out ideas. From my perspective, I have used the dialogue to collect empirical material and to lear n more about management processes in a general manager's work, often with a special focus on aspects related to information or communication. This means that the reflective dialogue has been a means for increasing the understanding of a general manager's work and how a general manager thinks in his work (cf. Isenberg, 1984). At the same time we have worked with various issues where I have had knowledge about the situation at the company (I knew the people, etc.). Furthermore, I have added an external perspective and helped the manager reflect on his own work as I have been not directly involved in the matters in the organization.

A possible disadvantage with the reflective dialogue is the risk that the relationship between the managing director and myself will inhibit my analysis. In other words that we will be such good friends that I would not be able to carry out an objective analysis of the empirical material as some of the findings could put my "friend" in unfavourable light. Another possible disadvantage is that I have been heavily influenced by the managing director's perspective. I am aware of these risks and try to compensate for them in my analysis by looking at my material and try to find different alternative interpretations. I cannot say that my analysis is "unbiased". But on the other hand I believe that every analysis is influenced by the person conducting it and that every analysis in that sense is "biased". The difference here is that the possible bias is more obvious than in many other possible cases.

Overall, I regard the reflective dialogue as one way of improving my possibilities for interpreting the different events in the organization, in accordance with the interpretive approach (see section 3.3).

3.6.6 Collection and Interpretation of Empirical Material

When describing collection of empirical material different types of more or less appropriate metaphors are often used (e.g. Alvesson and Sköldberg, 1994, pp. 362-366; Coffey and Atkinson, 1996, pp. 83-89). One common metaphor is for example "the field" (Coffey and Atkinson, 1996, p. 84). That is, the researcher goes to the field for a field study, making field notes etc. I use this metaphor when talking about the notes I have taken during my time in the organization, which I refer to as my "field notes". My point here, is to stress the importance to be careful with the usage of metaphors, as they may have implications for the view of the research. For example, if a person interviewed is referred to as an interviewee, a research object, a research subject, an interview victim, or a conversational partner, it will most likely influence and reveal the view of research.

Above I have described how I collected my empirical material and what sources of empirical material I used. Here I will describe how I have dealt with the material. Miles and Huberman (1994) stress the importance of keeping track of the empirical material for qualitative researchers (as well as for quantitative researchers, where the importance of data management may be more natural)¹⁸. In my case I have kept track of my material in the following way.

My empirical material can be seen as three different categories:

- Type A: my own documentation from interviews and meetings (notes from *enquiring*)
- Type B: my own field notes, including descriptions of the process (notes from *experiencing*)

¹⁸ Miles and Huberman talk about qualitative *data*, and data management for qualitative material, but I prefer talking about qualitative *empirical material* instead. This is in accordance with my previous discussion on careful usage of metaphors, as I think "data" as a metaphor for empirical material indicates more of a quantitative approach.

• Type C: documents from the organization, including my own written summaries of them (notes from *examining*)

The links to the three modes *enquiring*, *experiencing* and *examining* follow Wolcott (1994, p. 10). In terms of the categories of different empirical sources discussed above I have photocopies or written summaries of the documentation (1) and archival records (2). From my interviews (3) I have my own documentation (and in some cases tapes from when I have rewritten my notes, see page 56). The direct observation (4) and participant observation (5) are included in my own documentation and my field notes. The empirical material has become rather extensive and I have kept both paper-based copies of the material as well as electronic copies (except for photocopied material).¹⁹

My own documentation from interviews and meetings has been rewritten immediately after interviews and meetings, where I have made my own reflections on the interview or meeting which I have added as a separate section at the end of the documentation of each interview. This means that there is some interpretation in the process of refining the documentation. When the documentation from interviews and meetings has been collected and refined, including my own immediate comments after the occasion, I have combined the different files into master-files according to the chronological order of the interviews and meetings.

The next phase of the interpretation of the material has been to code the empirical material (e.g. Rubin and Rubin, 1995, pp. 238-241; Miles and Huberman, 1994, pp. 55-69; Strauss and Corbin, 1990, Part II). There are several different parameters one can code on (Rubin and Rubin, 1995, p. 238), and my coding scheme is presented in Appendix G. The coding scheme was developed during the process. I started with a scheme with a number of main categories, and then the coding scheme evolved according to the needs I perceived during the process (Rubin and Rubin, 1995, pp. 239-240).

In my process I coded after having collected the empirical material. According to Miles and Huberman (1994, p. 65) the coding procedure ought to be done during the collection of the empirical material. That is, the notes should be coded after each visit at the research site. Instead I have chosen to code the material at the end of the process. Even without coding the material, the interpretation process starts earlier when documentation is rewritten, etc. With

¹⁹ Facts and figures about the empirical material are shown in Appendix B.

a coding procedure at this early stage I see a risk of, intentionally or unintentionally, limiting the focus of the collection of empirical material too narrowly.

Given that I coded my empirical material at a later stage of the process, there was a rather extensive amount of empirical material. Hence I had to be careful not to let the coding process become a mechanical activity (Coffey and Atkinson, 1996, p. 37). In my work I simply split the work into different sections (according to the chronology) and mixed the coding work with other types of work in order to prevent the coding procedure from become something carried out on "autopilot".

I started the collection of empirical material in April 1993 and have collected some empirical material after January 1998, but this material refers to the time period included in the description. During some periods I have spent a considerable amount of time in the organization, and during other periods I have merely kept in touch through the reflective dialogue. When I have collected empirical material through interviews and participation in different meetings and discussions, my notes have included aspects of both the *content* of the meeting and the *process*. That is, I have documented both the issues that have been discussed, as well as how and by whom the issues have been discussed. As a consequence to this, my field notes include data on several levels (meta-data).

Over the years I have come to meet a large number of people from different parts of the organization. There are some individuals that are the key persons for the study and the collection of the empirical material. These include first of all the managing director himself, then the financial director, the business controller, and last but not least the personal assistant to the managing director. ²⁰ In Appendices D and E there are accounts of people I have interviewed in the study.

I will end this passage with a very short description of a typical day at the organization for me as researcher when working with this case study:

I am sitting in my car driving to the headquarters of the organization on the outskirts of Stockholm. In my mind there are a number of thoughts about what is going on in the organization, questions I have from yesterday's work etc. Once I have reached my destination, I first hope to find that I am early enough to get a good parking space, and then I pass the security control. After a slow ride with the elevators I enter the right floor and go straight to "my" room. Actually, it is the small conference room

²⁰ The personal assistant has played a significant role as she is responsible for keeping a number of different internal records in the organization which have been useful for me in the research work.

right outside the managing director's office which he uses for some of his meetings. For all practical purposes it is "my" room when I am there working with, for example, interview documentation, reviewing different types of documents or minutes, etc. I feel fortunate to this opportunity for several reasons. First, I have a great working environment. Second, I am close to the activities concerning the managing director and have an opportunity to see and hear small details that help my understanding of what is going on in the organization. There are usually some discussions over coffee-breaks and lunch involving different people, and if the managing director is in his office he usually pops in for a chat some time during the day. If there is a specific question that comes to mind when going through my records or my writing, I try to see if I can find the person involved to resolve my confusion as soon as possible. Before I leave for the day, I complete my field notes about what I have done during the day, and whether there have been any specific discussions that I want to follow up in some way. In the car back home I am usually filled with impressions from the day and trying to sort out what I have seen — and not seen — during the day.

3.6.7 Triangulation

Even if the techniques for handling the empirical material are important, one main thing in a qualitative research approach is a consciousness of and an ability to deal with different dimensions of interpretation, or in other words: "Good qualitative research is not a technical project, but an intellectual one" (Alvesson and Sköldberg, 1994, p. 369). In this section I will describe how I have treated the concept of triangulation in order to reflect on my findings and not just follow a number of steps in a research procedure.

The concept of triangulation can be traced to the ancient Greeks and the action of making a triangle (Denzin, 1989, p. 234) and is described as derived from celestial navigation (Stake, 1995, p. 109). By comparing different types of information, in the case of navigation maybe lights from different light towers, it is possible to determine one's own position. Worth stressing though is that the aim of the triangulation is to add breadth or depth to the analysis – but not to finding an "objective" truth which of course differs drastically from the classical (geometric) usage (Fielding and Fielding, 1986, p. 33). In the case of a research process one can see triangulation from several different perspectives as described in Table 10.

pe of Triangulation	Description	
Data triangulation:	Searching for several different data sources:	
a. time	investigating a phenomenon over time	
b. space	investigating a phenomenon in different spaces	
c. person	investigating if different persons interact differently	
Investigator triangulation	Different persons looking at the same phenomenon	
Theory triangulation	Applying different theoretical points of view	
Methodological triangulation:	Applying different methodological approaches to the phenomenon:	
(a) "within-method"	Applying multiple strategies within one method to examine empirical material	
(b) "between-method"	Combining different methods to illuminate the same phenomenon	
	Data triangulation: a. time b. space c. person Investigator triangulation Theory triangulation Methodological triangulation: (a) "within-method"	

Table 10 Different Types of Triangulation (based on Denzin, 1989, pp. 236-246)

Given my belief in social construction of reality (see section 3.2.3) it is fairly obvious that I regard triangulation as a means for alternative interpretations rather than a search for a single "true" reality (cf. Stake, 1995, pp. 114-115). In my research process I have applied triangulation in the following way. Concerning data triangulation (1) I have combined a number of different sources as described above (see section 3.6.3). Through my longitudinal approach I have investigated the phenomenon over time (1a) and to some limited extent the interaction between different persons (1c). I have conducted the study alone and thereby have not used any investigator triangulation (2). As I try to apply some different theoretical points of view in my study I make attempts at some theory triangulation (3). Regarding the fourth type of triangulation about methods (4) I use a case study approach and include a reflective dialogue, as described above.

The data triangulation is the most widely used type of triangulation in my research process. Here it is once again important to stress that the triangulation is a means to find alternative interpretations and not to find an "objective" truth. By combining several different data sources over time there are different opinions expressed in different contexts by different people, which help both to see alternative explanations and to evaluate different sources.

3.6.8 The Analysis and Writing Processes

When does the analysis start and when does it end? One could say that the analysis begins while the interviewing is still under way (Rubin and Rubin, 1995, p. 226), or that there is no particular moment when the analysis begins but it is both to give meaning to first impressions as well as to final compilations (Stake, 1995, p. 71). It is hard to say precisely when the analysis begins and when it ends, and I doubt if it even would be fruitful. I view research as a process where there are different stages which are to some extent interlinked. But even if the different stages are interlinked, it may be important not to blur the stages and for example mix the collection of empirical material and the analysis (cf. Feldman, 1995, p. 64). My attempts to separate the different stages are illustrated by my coding after the empirical material had been collected.

Wolcott (1994) distinguishes between three major concepts in work with qualitative data, see Table 11.

Term	Description
Description	addresses the question, "What is going on here?" Data consists of observations made by the researcher and/or reported to the researcher by others.
Analysis	addresses the identification of essential features and the systematic description of interrelationships among them – in short, how things work. In terms of the stated objectives, analysis also may be employed evaluatively to address questions of why a system is not working or how it might be made to work "better".
Interpretation	addresses processual questions of meanings and contexts: "How does it all mean?" [sic] "What is to be made of it all?"

Table 11 Description, Analysis and Interpretation (Wolcott, 1994, p. 12)

I agree with the three main dimensions described in Table 11, but I regard the interpretation as something that is part of both the description and the analysis. In order to prepare a description and address the question "what is going on here?" one has to make a number of different interpretations based on the empirical material and one's own different types of experiences, or "theoretical sensitivity" (Strauss and Corbin, 1990, pp. 41-47). One could say that there are interpretations processes in different stages.

First, there are interpretation processes (IP0) when different empirical sources are interpreted, which results in documented empirical material. Then there is an interpretation process (IP1) based on empirical material which results in an

empirical description. Following from this, there is an interpretation process (IP2) based on the empirical description and theory resulting in an analysis description. The next stage is an interpretation process (IP3) based on empirical description, theory and analysis description which results in conclusions. This discussion is summarized in Table 12 below.

Interpretation	Description
Interpretation (IP0)	Interpretation process based on Empirical Sources.
results in	Empirical Material
Interpretation (IP1)	Interpretation process based on Empirical Material.
results in	Empirical Description
Interpretation (IP2)	Interpretation process based on Empirical Description and Theory.
results in	Analysis Description
Interpretation (IP3)	Interpretation process based on Empirical Description, Theory and Analysis Description.
results in	Conclusions

Table 12 Interpretations in the Research Process

With my interpretive research approach it is natural to think in terms of interpretation processes, as described above. In every interpretation process the frames of reference of the persons making the interpretations influence the outcomes of the processes, as will be elaborated later in theoretical discussions. I have tried to be specific with a number of different types of interpretations as the term may be used in different contexts with slightly different meanings. The same warning applies to the term analysis, which can mean many different things for different people. Wolcott (1994, p. 27) lists some sixty odd different uses of "analysis". The term analysis can be combined with the method used, the context, who is carrying out the analysis etc. When I use the term analysis, I mean my interpretation process based on the empirical description and different theories, that is, IP2 in Table 12 above.

The writing part of the research process is important, not least because of the interpretation processes involved, as described above. In the remaining part of this section I will give a brief description of my writing process.

The writing process is central in qualitative research where the researcher presents tales from the field (Van Maanen, 1988) or tells stories from the field

(Schank, 1990). When producing the tale or the story, the reader has to make several decisions regarding the crafting and developing of a storyline (e.g. Stake, 1995; Golden-Biddle and Locke, 1997). When describing how I have worked I will relate to ten different ways to approach the description of the empirical material suggested by Wolcott (1994), see Table 13. The list is used as one example of different ways of organizing and present a description.

Different Ways to Organize and Present Description		Explanation	
1.	Chronological order	Events related in the order that they occurred, or related in reverse chronological order.	
2.	Researcher or narrator order	The story in the order it is revealed to the researcher.	
3.	Progressive focusing	Slowly zooming from broad context to the particulars of the case, or vice versa (or a combination of the two).	
4.	Day-in-the-life	To communicate a "feel" for the setting, for example by presenting the scene of the action of the first day of fieldwork.	
5.	Critical or key event	Focus on one or two aspects instead of trying to tell the whole story (which is not possible).	
6.	Plot and character	Staging a play by introducing characters and telling the story and guiding the audience.	
7.	Groups in interaction	To create distinct group identities to emphasize differences in a case.	
8.	Follow an analytical framework	Developing a narrative around a framework which imposes structure on the description.	
9.	The "Rashomon Effect"	From Akira Kurosawa's film "Rashomon": To describe the story thorough the eyes of different participants.	
10.	Write a mystery	Organizing and presenting the qualitative study as a mystery novel.	

Table 13 Ways to Organize and Present Description (based on Wolcott, 1994, pp. 17-23)

My basic approach in the description of the empirical material is an overall chronological (1) presentation. The main reason for choosing this approach is to give the reader a sense of the process which starts at one point in time and ends at a later stage. This approach is combined with some of the other approaches presented in Table 13. First of all the chronological presentation

is combined with a presentation according to a framework (8). This gives the reader options for how to read the description: a full chronological presentation which is found in Appendix H, a brief chronological summary in chapter 2, and a presentation according to a framework in chapters 5 to 7.

To some extent I use what Wolcott calls "day-in-the life" (4), which means that I present situations, or even examples of days, in my work as a researcher at the research site. I also use a considerable number of quotations, which also have the purpose of conveying a feeling for the setting. Furthermore, I focus on some key events in the description (5) rather then trying to cover everything. Finally, I also use a sort of groups of interaction (7) in the sense that I give some descriptions of different perspectives in the case study.

One question in every writing process is: "who is the reader?" In my case the main audience for this piece of research is found in academia. But even if the reader is depicted as a member of the academic society, there are different ways of writing, and it is important to find one's own way of writing and presenting a case study (Stake, 1995, p. 128). My personal approach is to write in such a way that it should be possible for someone outside the academic community to read the text. This is at least my aim. I try to write in an accessible style (cf. Robey and Markus, 1998, p. 11), like for example frequently using bulleted lists and summary tables, use of first person, and hopefully a fairly clear and simple writing style. The way of telling a story and the way of sharing the author's (i.e. my) biases, involvement with a particular setting, and the larger context are all important aspects in case study research (Dyer and Wilkins, 1991, p. 618).

In the actual work with writing the case study, I have used the coded empirical material. In practical terms I have split my computer screen into two windows: to the left the documentation (in Swedish) with the colour-coding on, and to the right the case-study description (in English). I have moved up and down through the different documents and translated bits and pieces and then rewritten larger sections in the case-study description.

I have chosen to present my case study with the organization kept anonymous. I am aware that there are contexts where this is not accepted, for example journals that do not publish anonymous case studies (Liebenau and Smithson, 1993, p. 239). Nevertheless, I find it important not to reveal the name of the organization or the persons involved. The main reason for this is that I see a potential problem in that the description would be negatively influenced by the fact that persons are presented with their real names. There might be implicit or explicit filters which make it harder for the people interviewed to reveal

details, if the case description is not kept anonymous. On the other hand, one problem with anonymous case studies is that they are said to be "entirely uncheckable work" (ibid). This is a matter of trust and I would argue that there is an issue of trust in case studies where the name of the organization is revealed too. In those cases it is hard to check to what extent the description is filtered, and as in every case study there are several levels of interpretations in the process towards a final case-study description which are very hard to check. This means that the trust in the researcher is important in any case study, whether the names are revealed or not.

3.6.9 Action and Reflection in the Research Process

The final part of this section on the research process concerns action and reflection. Here I will simply stress that I believe in combining these two concepts in the entire research process.

In the relationship between theory and practice, a researcher in an interpretive approach never assumes a value-neutral stance (Orlikowski and Baroudi, 1991, p. 15). One implication of this is the importance of being observant about how one's own prior beliefs, values and interests influence the research process. For me a way of being observant of these issues is to take time for reflection in the research process, and to ask myself what I see and what links there may be to my prior beliefs and interests. That is, I try to combine action, in the form of conducting interviews, attending meetings, writing, etc, with reflection, which is an important part of the research process in itself (cf. Alvesson and Sköldberg, 1994, p. 369).

In practice this has meant, for example, that I have ended the documentation of each interview with the two headings "Reflections" and "Questions". Under the first heading I have documented immediate reflections on the contents or the process during the interview, as well as general reflections at that point in the process. Under the latter heading I have listed questions that come to my mind regarding specific contents, process or people. By documenting my own reflections carefully during the process, I can then go back to them in retrospect and try to identify patters and hopefully improve the quality of my interpretations (cf. Coffey and Atkinson, 1996, pp. 191-192).

When Schön (1983) discusses the context of managers' work he describes reflection-in-action:

'It consists in on-the-spot surfacing, criticizing, restructuring, and testing of intuitive understandings of experienced phenomena; often it takes the form of a reflective conversation with the situation." (Schön, 1983, pp. 241-242)

I think there are many parallels with research work, and my aim has been to include moments of reflection in the research process, at least to some extent on a regular basis.

3.7 Summary: Methodological Approach

In summary this study is built on a view that reality is socially constructed. The study is conducted through an interpretive approach and a longitudinal case study of a managing director's work has been carried out with a clinical research approach. This means that I have adopted a helping role in the organization hoping thereby to increase the quality of the empirical material. The importance of closeness between the researcher and practice has been highlighted, as well as the need for a combination of rigor and relevance in research.

The longitudinal case-study description covers the period from January 1993 to January 1998. It is based on multiple sources of empirical material, where interviews have played a significant role (105 interviews and booked meetings). A summary of the empirical material is found in Appendix B. In addition to traditional sources of empirical material I have used a reflective dialogue. This series of unstructured or informal interviews with the managing director has been a valuable empirical source, as well as a forum for reflection on the process (see Table 9, page 60). Different interpretation processes have been described in the chapter, as well as how the methodological approach has been carried out in practice.

4 Theoretical Foundations and Previous Work

This chapter will present and discuss theoretical foundations and previous work relevant to the study. First there will be a discussion concerning information and communication which are two fundamental concepts in the study. Then I will present and discuss previous research on managerial work, with a special emphasis on management processes. Following this, I will combine the first two parts and focus on aspects of information and communication in managerial work. Finally the development perspective is described and discussed, and the chapter ends with a short summary on page 156.

4.1 Information and Communication

This section begins with a discussion of the concept of information and then continues with a discussion of the concept of communication. In the third part of the section I present a theoretical foundation for the study, the theory of logical types. Communication is seen from an action perspective in the fourth part, while the fifth and final part of the section discusses a holistic approach to information management, information ecology.

4.1.1 The Concept of Information

"A word in search of a definition" (Wurman, 1989, p. 37)

Definitions of Information

There are many different definitions or usages of the word information and no single dominant definition. Some authors simply state that they use the information in a very broad sense (e.g. Shapiro and Varian, 1999), but more often the word is used without any definition or comment, but simply referred to as "information". The word "information" can be traced to the Latin word "informare" meaning the action of forming matter (Wurman, 1989, pp. 37-38) and is said to have entered the English language in its present form in the sixteenth century (ibid). Table 14 below illustrates three fundamental definitions of information, i.e. definitions other authors often base their own definitions on (e.g. Boisot, 1995).

Definition	Author(s)
Information is a difference which makes a difference.	Bateson (1972)
Information is any kind of knowledge or message that can be used to improve, or make possible a decision or action.	Langefors (1973)
Information is a measure of one's freedom of choice when one selects a message.	Shannon and Weaver (1949)

Table 14 Examples of Fundamental Definitions of Information

The examples of definitions presented in the table above have their roots in different areas. Bateson comes from anthropology, communication and psychiatry; Langefors has roots in theoretical philosophy and systems theory; and Shannon and Weaver represent the areas of mathematics and communication. Bateson's definition focuses on the difference information makes, i.e. in relation to status quo. Langefors' definition on the other hand is more focused on how the information can be used. The Shannon and Weaver definition clearly has roots in signal transmission and is more focused on information's role of reducing uncertainty. These examples are three different angles from which the concept of information can be viewed: *information to make a difference*, *information to use in action*, and *information to reduce uncertainty*.

The concept of information has been elaborated and new words have appeared, such as for example "informate" derived from "automate" (Zuboff, 1988). Information is also often referred to as a resource (Eaton and Bawden, 1991) and the concept is furthermore used to name an age – "the information age" (Checkland and Holwell, 1998, p. 4). The list of examples of definitions and usage of information could be made much longer. The point made is that information is a concept which can be viewed from a number of different perspectives. Although it is a concept commonly used in various contexts (and sometimes even giving name to our time) the meaning of the word is often neglected. By making clear how the term information is used, misunderstanding could be avoided.

For my purposes I use the definition of information offered by Langefors:

'Information is any kind of knowledge or message that can be used to improve, or make possible a decision or action." (Langefors 1973, p. 319)

The primary reason for using this definition is that it puts information in its context and links information to its use. Langefors elaborates on this in "the infological equation".

The Infological Equation - A tribute to Börje Langefors

Langefors expresses the relations between data and information in the infological equation (Langefors, 1973, p. 248):

$$I=i(D,S,t)$$

where information (I) is a function of the interpretation (i) of data (D) by a person with the frame of reference (S) and the time (t) available. It is thereby a person's interpretation which determines what is information and gives meaning to the data. In the context of this study this means, for example, that when a general manager uses written reports, the value of the report to a large extent depends on that manager's interpretation of the data in the report, and the interpretation in turn depends on the frame of reference and time available for interpretation.

The infological equation may look like a rational approach as it is expressed in a mathematical language. Langefors, being an engineer with roots in philosophy and systems theory, used a mathematical language he found useful for the purpose. For those not so familiar with this language, it is a challenge to see beyond the expression of a formula to what it actually says. Although the equation clearly takes the personal aspects of interpretation into account, there is a danger that the language used may be misconstrued and Langefors' approach judged to be more rational than it actually is.

The distinction between data and information expressed in the infological equation plays a central role as it illustrates the importance of the people who interpret data. One implication of the infological approach is that information is a *relative* concept (Lundeberg et al, 1995). That is, the concept information is dependent on context and interpretative processes and, thus, cannot be defined in absolute terms.

Following Langefors, the word *data* ought to be used more frequently. A written document, for example, is really data, and not information until a person has made an interpretation of the data. Seen from this perspective the information age could be seen as an "explosion of data" rather than of information (Wurman, 1989, p. 38).

I will, however, follow common usage and employ the word information for what strictly speaking should be referred to as data in light of the infological equation. Nevertheless, the point (following from the equation) that every person makes his or her own interpretation and meaning into information, is of importance for this study.

Before continuing the discussion on the concepts related to information, such as data and knowledge, I will say a few words about related information concepts as defined by Langefors.

One such concept is "information system" which is frequently used in various contexts. Langefors (1973, p. 195) defines an information system as:

"A system of information sets needed for decision and signalling in a larger system (of which it is a subsystem) containing subsystems for collecting, storing, processing, and distributing information sets."

The concept "information system" was introduced by Langefors at the third International Conference on Information Processing and Computer Science, held in New York in 1965 (Langefors, 1995, p. 52). The idea behind the concept was that it should be a system of information defining both the system (computer-based or not) and the information. Langefors saw the term as useful for describing the scientific area that could develop in the "business data field" (ibid). The term information system has become widely used, but the concept Langefors had in mind has not (ibid). Instead information system has become an expression most often used for describing a program to run on a computer. The intentions Langefors had in mind with systems of information were broader in scope and he saw the information system in its wider context. The importance of considering the wider context links to another cornerstone in Langefors' work: the fundamental principle of systems work (Langefors, 1973, pp. 51-53). Here Langefors lays a foundation for working with systems of different kinds, not only computer-based ones.²¹

²¹ Regarding the computer, Langefors "invented" the Swedish term for computer, dator (Håkangård and Nilsson, 2000). He was looking for a term describing the information-processing machine and in accordance with the infological equation, the machines really processed data. Therefore, he introduced the term dator which was an attempt to use the word data and at the same time alliterate to words for other machines, such as "motor" and "tractor" (motor and traktor in Swedish). In my humble opinion, dator is at least as good as computer and I think that the Swedish language here, through Langefors, could have contributed to the English language, as it did with smorgasbord and ombudsman.

Data, Knowledge, Wisdom?

The discussion of information could be seen in more shades than simply data and information. There are other concepts that occur in discussions of information, such as knowledge, wisdom, etc. One example of a "chain" is described as data-information-knowledge-understanding-wisdom (Ackoff, 1989) and another is data-capta-information-knowledge (Checkland and Holwell, 1998). Common to these chains, or rather continua as the elements are difficult to distinguish absolutely, is an increase in human involvement as one move along each continuum (Davenport, 1997, pp. 8-10). The human involvement can be expressed in terms of value added in various ways, like for example contextualizing, categorizing, calculating, correcting or condensing (Davenport and Prusak, 1998, p. 4)

Three fundamental parts of a continuum are data-information-knowledge (Davenport, 1997). The distinction between data and information is addressed in the infological equation. We can distinguish between information and knowledge in that "information is a flow of messages, while knowledge is created and organized by the very flow of information, anchored on the commitment and beliefs of its holder" (Nonaka, 1994, p. 15). Knowledge is in this view said to be more action-oriented than information (ibid).

In the infological equation, data are interpreted by a person with her/his frame of reference during available time in order to obtain information. A number of years after the formulation of the equation, usage has changed. The information-knowledge pair now seems to be more similar to data-information in the infological equation. When Nonaka says that knowledge is "anchored on the commitment and beliefs of its holder" (1994, p. 15) there are parallels to the infological interpretation by a frame of reference expressed by Langefors decades earlier. The same parallel could be seen when Nonaka says that knowledge is more action-oriented, as Langefors linked information to action in his definition (see page 73 above). One consequence of this is that the argument that information is a relative concept (Lundeberg et al, 1995) is strengthened. There are interpretation processes including various forms of commitment and beliefs that play a central role when using data or information.

"Information Theory"

The term "information theory" is a bit puzzling (or even confusing) as it is often used for what could be described as "signal transmission theory" (Checkland and Holwell, 1998, p. 93). The background to this was the work of

communication engineers on a quantitative statistically-based theory of information transmission and the problem arose from their referring to this as information theory (ibid). The research done by Shannon and Weaver in the 1940s took its starting-point in signal transmission theory, i.e. how signals could be transmitted from point A to point B with a minimum of noise (Shannon and Weaver, 1949). Weaver himself recognized that the name "information theory" was misleading, and he stressed the importance of not confusing information with meaning (Shannon and Weaver, 1949, p. 8). Shannon and Weaver talked about their findings in terms of a "mathematical theory of communication", which has subsequently been commonly referred to as information theory.

Information theory could also be seen from a totally different perspective, coming from theories of evolution and order. Here information has a much broader sense than it has in signal transmission theory. From this perspective, traditional information theory has "gotten us into trouble" as "information is a dynamic element, taking center stage" (Wheatley, 1992, p. 102). Seen from this perspective, information is "the creative energy of the universe" (ibid) which is quite a bit from noise reduction when transmitting a signal from a sender A to a receiver B! There is something interesting in this "new science" approach to information as the contrast between the traditional view of information as flows of messages is challenged and information is seen from new perspectives. One example is that information can be seen as the contents of our DNA, that is information is making sure that we remain rather constant over generations (ibid, p. 103).

These two perspectives on information theory, from signal transmission theory to new science of evolution and order, point to the need to reflect on the context of information. The understanding of the phenomenon called information will depend on how widely the context is defined. In a narrow sense information can be seen as the transmission of signals and in a broad sense the information can be seen as the "creative energy of universe". In this study the scope falls somewhere between these two approaches. The infological equation will be one guiding principle with the frame of reference of the person highlighted, as well as the time available. Given the importance of the persons involved, information is seen holistically and in a human centered way (information ecology), as will be described below (see section 4.1.5). Furthermore, information is viewed in the context of managerial work (management processes) and it will be seen as part of communication processes.

4.1.2 The Concept of Communication

"We are in constant communication, and yet we are almost completely unable to communicate about communication." (Watzlawick et al, 1967, p. 36)

Definitions of Communication

As with information, communication is a term used with different meanings. Watzlawick et al (1967) use the term *communication* as the overall term for various units of human communication. They specify parts of communication as: *message*, which is a single communicational unit; *interaction*, which is a series of messages exchanged between people; and *patterns of interaction*, which is a higher-level unit of human communication (ibid, p. 50). Farace et al (1977) refer to communication as "the exchange of symbols that are commonly shared by the individuals involved, and which evoke quite similar symbol-referent relationships in each individual" (ibid, p. 26).

Both these definitions take a starting-point in the exchange of something (a message or symbols) between two people. Bateson expresses the core of communication in the following way: "The essence and *raison d'être* of communication is the creation of redundancy, meaning, pattern, predictability, information, and/or the reduction of the random by 'restraint'." (Bateson, 1972, pp. 131-132). Here the communication is put into a context of intentions. This is important as "a phenomenon remains unexplainable as long as the range of observation is not wide enough to include the context in which the phenomenon occurs" (Watzlawick et al, 1967, p 20).

For my purposes in this study I will refer to communication, and related concepts such as message and interaction, in line with the proposed usage of the terms by Watzlawick et al, 1967. These authors also state five communication axioms, with their roots in work of Gregory Bateson.

Five Communication Axioms

The *first* communication axiom is: "One cannot not communicate." (Watzlawick et al, 1967, p. 51). An implication of this axiom is that activity or inactivity, words or silence, all have communication value. The communication processes are always there.

The second communication axiom says: "Every communication has a content and a relationship aspect such that the latter classifies the former and is therefore a metacommunication." (Watzlawick et al, 1967, p. 54). There is communication taking place both in form of messages and in form of metamessages (Bateson, 1972, pp. 247-

248). The implication of this axiom is that it is necessary to consider context, in form of the metamessage, when trying to understand any communication process. The importance of metacommunication can be found in various fields: when communicating about statistics metadata are important in order to interpret the numbers correctly (Dippo and Sundgren, 2000); computers need both data and instructions about the data and how to process them (Watzlawick et al, 1967, p. 52). Another example of metacommunication is when someone says for example that "I am only joking" and thereby communicates about the communication (ibid, p. 53).

The third communication axiom states: "The nature of a relationship is contingent upon the punctuation of the communicational sequences between the communicants." (Watzlawick et al, 1967, p. 59). Even if an outside observer sees an uninterpreted sequence of interchanges, the participants in the interaction always introduce "punctuation of the sequence of events" (ibid, p. 54). An implication of this axiom is the need to get under surface when trying to understand communication processes, and thereby reveal punctuation.

The fourth communication axiom reads: "Human beings communicate both digitally and analogically. Digital language has a highly complex and powerful logical syntax but lacks adequate semantics in the field of relationship, while analogic language possesses the semantics but has no adequate syntax for the unambiguous definition of the nature of relationships." (Watzlawick et al, 1967, p. 66). A digital message is of higher complexity and abstraction whereas analogic communication could be seen more as nonverbal communication (ibid, pp. 62-64). In other words language is digital, and kinetics and paralinguistics are analogic (Bateson, 1972, pp. 372-374). An implication from this axiom is that there is a need for understanding, and making use of, both digital and analogic communication. This is obvious in, for example, communication with animals as the animals merely understand the wealth of analogic communication that accompanies speech (Watzlawick et al, 1967, p. 63).

The fifth communication axiom says: "All communicational interchanges are either symmetrical or complementary, depending on whether they are based on equality or difference." (Watzlawick et al, 1967, p. 70). Symmetrical interaction is characterized by equality and minimization of difference, while complementary interaction is based on maximization of difference (ibid, pp. 68-69). An implication of this axiom is the importance to understand the relationship between the communicants, persons involved in the communication process, and whether the relationship is based on equality or difference. In the first case the people tend

to mirror each other's behavior and in the second case their behavior complements one another's (ibid, p. 68; Bateson, 1972, p. 68).

Syntax, Semantics, and Pragmatics

Three aspects of communication which can be distinguished are syntax, semantics, and pragmatics (Carnap, 1942; Shannon and Weaver, 1949; Watzlawick et al, 1967). *Syntax* refers to how accurately symbols are transmitted in the communication. *Semantics* refers to how precisely the transmitted symbols convey the desired meaning. *Pragmatics* refers to how effectively the received meaning affects conduct in desired way.

In early information and communication theory with roots in signal transmission theory, there was an emphasis on task-related communication but there has since been a move to broadening the scope (Farace et al, 1977, p. 6). When, for example, building information systems (computer-based or not) it is important to take all three aspects of communication into consideration, separately and through their interaction (Sundgren, 1992, p. 26). In the context of this study the three aspects of communication are important in order to investigate communication from different perspectives (accuracy in transmission, precision in conveying meaning of messages, and effectiveness in affecting behavior). This will be accomplished by including the context of the communication, and thereby presenting a rich picture of the communication processes in managerial work.

4.1.3 Logical Levels

"There is a gulf between context and message" (Bateson, 1972, p. 247)

The Roots to Logical Types and Levels of Abstraction

The basic idea behind the theory of logical types is that there is a discontinuity between a class and the members of a class (Whitehead and Russell, 1910). This could for example be illustrated by the class means of transportation with members like train, car and boat. The class and its members are different logical types (ibid). They are on different levels of abstraction (Bateson, 1972, p. 202, 280-283). This means that a class cannot be a member of itself.

The theory of logical types has its roots in the philosophy of logic where Bertrand Russell developed the theory to help explaining paradoxes (Whitehead and Russell, 1910). Based on this work Gregory Bateson worked together with a number of colleagues toward a theory of schizophrenia where the levels

of abstraction were used to describe and treat people with pathological communication patterns (Bateson, 1972, pp. 201-227).

There is a thread from Russell via Bateson to Watzlawick in the usage of levels of abstraction to understand different situations, from logical mathematical situations to communication situations (Engquist, 1994, p. 147). Applied to the area of communication, the theory of logical types has proved to be useful as it helps to reveal paradoxes in this context too (Watzlawick et al, 1967). One can distinguish between three types of paradoxes, where a paradox is defined as a "contradiction that follows correct deduction from consistent premises" (Watzlawick et al, 1967, p. 188). The different types of paradoxes are elaborated and discussed in more detail elsewhere (ibid, pp. 187-229; Engquist, 1994, pp. 75-81). Here I will just describe them briefly. First there are logico-mathematical paradoxes (Watzlawick et al, 1967, pp. 190-192). These logical paradoxes, sometimes called Russellian paradoxes after Bertrand Russell (Whitehead and Russel, 1910), are due to confusion of logical types, or levels of abstraction. A class of something cannot be a member of itself. The second type of paradoxes is paradoxical definitions (Watzlawick et al, 1967, pp. 192-194). In these semantic paradoxes, inconsistencies of language rather than logic are the roots to the problems and a famous example is the statement "I am lying". The third type of paradoxes is pragmatic paradoxes (ibid, pp. 194-211). These paradoxes are usually from a more interactional context. Examples of this type of paradoxes are the statement "Be spontaneous!" and the sign which says "Ignore this sign!".

Applicability of Logical Types and Levels of Abstraction

Given the applicability of logical types and levels of abstraction in different contexts, one could ask: "How many levels are there?" (Bateson, 1979, p. 224). The answer is that no one can know. It depends on the definition of what one is studying and because the observer is part of the system at a certain level, one cannot know the outer limits of the system (ibid). This way of thinking becomes clearer if I describe some examples of applications of the basic idea of logical types or levels of abstraction.

Bateson has used levels of abstraction to construct a typology of cultures. In doing so his emphasis shifts from characterization of cultural configurations to characterizations of people, the members of the cultures, which led him to questions about processes. He proceeded from a classification to a study of processes that generated the differences summarized in the typology (Bateson, 1979, pp. 207-208). From this the next step was different types of processes.

He found that when the logical types were applied to real biological events (as opposed to the purely logical context used by Russell) "the hierarchy is not only a list of classes, classes of classes, and classes of classes of classes but has also become a zigzag ladder of dialectic between form and process" (ibid, p. 211).

Bateson suggested that this zigzag pattern between form and process could help model learning, and the social world in more general (Bateson, 1972, pp. 283-306; Bateson, 1979, p. 211). In this zigzag patterns structures and processes influence each other. that is, levels of abstraction where every second level is a classification (structure) and every second a process.

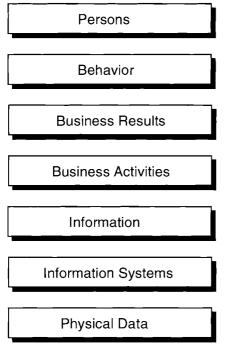


Figure 9 Seven Typical Levels in a Business Context (based on Lundeberg, 1993)

The zigzag pattern between form (or classification) and process has been elaborated and applied in the area of information management in the development of models for understanding and handling change processes (Lundeberg, 1992; Lundeberg, 1993, pp. 60-74). Here the logical types or levels of abstraction help put information technology in its wider context and thereby further the understanding of change processes, for example.

Figure 9 presents seven typical levels in a business context (ibid). The logic behind the levels can be described as follows. Persons act through their behavior in order to achieve business results. The results are accomplished through business activities of different kinds. To support these activities there are different types of information, which

in turn derives from different forms of information systems, which in turn uses physical data. The structures (persons, business results, information, and physical data) and the processes (behavior, business activities, and information systems) influence each other.

Persons / Behavior

Business Results / Activities

Information / Info. Systems

Figure 10 Three Basic Levels (based on Lundeberg, 1993)

In Figure 10 the typical levels are sim plified into three basic levels: persons/behavior, business results/activities, and information/information systems (including physical data).

Another area where the idea of logical types and levels of abstraction is applied is in the field of Neuro-Linguistic Programming (NLP) (e.g. Dilts, 1990, pp. 1-23, 209-212). Here logical levels (in their terminology) are used when

modelling human thinking (Neuro), and the analysis of language patterns (Linguistic) is used for strategies to transfer skills and change belief systems (Programming).

What one can observe from examples of applying the thinking of logical types, levels of abstraction or logical levels (whatever terminology used) is that once the thinking is applied, levels seem to influence much of the work both explicitly and implicitly. Structures of presentations tend to be arranged in accordance with some sort of levels (even if they are not explicitly identified as such) and figures tend to be drawn with links to different levels. There seem to be some fundamental factors underlying the thinking in logical levels (which will be the one expression I will be using). When I look to myself, the thinking in different types of logical levels influences my work in different ways. One example is that both interview guides and coding schemes in the work with the case study are partly influenced by logical levels. Not that this matters per se, but it is an indication of the profound influence that the thinking of logical levels can have.

Thinking in Terms of Systems

There are no "true" levels, but one chooses what to view as levels. This is in accordance with the systems approach where one chooses what to view as a system (e.g. Checkland, 1981; Churchman, 1979). Here it is worth noting that when I talk about the systems approach I refer to a wider view than the systems approach contrasted with the action approach by Silverman (1970, pp. 38-41; also discussed by Björkegren 1986, pp. 270-273). The systems approach, or systems thinking as suggested by Checkland (1981), offers a broader view for understanding a context instead of the view that reality is objective with little room for actors' influences.

The systems approach with this broader view has been used in different contexts, such as handling change processes, where a number of models have been developed for use in change processes (Lundeberg, 1993). Worth noting is that these models include actors and stress the importance of taking different perspectives into consideration. That is, this is far from the more narrow view of a systems approach where reality is considered something objective and the actors' roles are limited (cf. Silverman, 1970). One example is a general model for describing task and person (relationship) aspects of processes, called the X-model, see Figure 11.

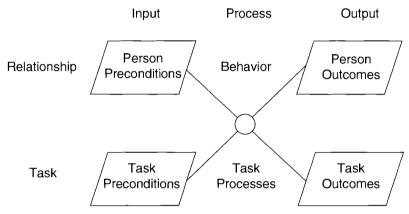


Figure 11 The X-model Describing Properties of a Process (Lundeberg, 1993, p. 109)

In the X-model two fundamental levels related to persons and task are described. The model basically says that there are both person-related and task-related aspects of a process.

Another example of the application of a systems approach in a broader sense is organizational learning (Senge, 1990). In this context systems thinking has been used to understand complex phenomena and to understand interrelationships between different parts of the system, and the persons involved in the processes are highly included in the picture. One idea here is that an essence of systems thinking lies in a shift of mindset where interrelationships rather than cause-effect chains are profiled, and processes of change are foregrounded rather than snapshots (ibid, p. 73).

In the context of communication theory Bertrand Russell, Gregory Bateson and Paul Watzlawick are all examples of researchers with a systems approach to communication (Engquist, 1994). Thinking in terms of different levels in communication is an example of an attempt to bring structure to complex communication processes. A systems approach can help in understanding a

complexity by offering ways to view the complexity in terms of different parts with relationships among the parts. Abstraction, for example in the form of logical levels, is a way for the human mind to deal with complexity (Argyris, 1982). In communication processes one can say that effective communication includes communication on different levels (Engquist, 1994, p. 162). In the following, the focus will be on what one achieves with communication.

4.1.4 Communication for Action

"Don't Shoot the Dog!" (Pryor, 1984)

Communication from a Change Perspective

So far the discussion on communication has focused on the concept of communication per se and logical levels related to communication. Now it is time to turn to underlying intentions for communication and how communication processes are used to accomplish something. In an organizational context communication processes can be seen as processes for gathering, processing, storing, and disseminating the communication that enables organizations to function (Farace et al, 1977, p. 4). Here the focus will be mostly on communication for action, or communication for change of some kind, rather than the entire picture of how an organization functions. Communication can be seen as a process to convey a message, an understanding, or a meaning. That is, communication as trying to create an understanding of meaning and intentions among other people (Grice, 1957).

I will point to three central issues in communication for change: to meet the other person where he or she is (the congruence aspect), to allow for a requisite variety in the communication (the flexibility aspect), and to see the situation at hand through different frames of references (the reframing aspect).

The congruence aspect of communication is the need to meet the other person where he or she is when establishing any form of communication. This is described and discussed in terms of a congruence model (Andersen et al, 1994, pp. 110-114; Lundeberg, 1993, pp. 176-178) where one key point is to establish a communication process with another person by starting a discussion with something that the other person is willing to discuss. The congruence aspect can also be expressed in terms of communicative steps: inform each other, exchange opinions, make use of each other's opinions, and create new ideas together (Andersen et al, 1994, pp. 117-119). The initial phase of a communication process builds a basis for further communication and helps create

conditions for achieving intended outcomes from the communication process, for example in the form of changes.

The flexibility aspect of communication is the need to be flexible in a communication process. This aspect is related to the first aspect about congruence where there is a need to meet the person where he or she is. The theoretical background to this aspect of communication can be found in area of cyber netics and industrial process control. Ross Ashby formulated the "Law of Requisite Variety" (Ashby, 1956, pp. 202-218) which basically says that "only variety can destroy variety" (ibid, p. 207). This may sound a bit destructive, but transferred to a communicational situation it means that the ability to be flexible, or show variety, is a key to successful communication. A greater degree of flexibility is more likely to result in intended outcomes.

The reframing aspect of communication is the importance of framing and reframing the situation where any communication is used to achieve changes (Watzlawick et al, 1974, pp. 92-109; Watzlawick, 1978, pp. 118-126). Reframing is here referred to as changing the "conceptual and/or emotional setting or viewpoint in relation to which a situation is experienced and to place it in another frame which fits the 'facts' or the same concrete situation equally well or even better, and thereby changes its entire meaning" (Watzlawick et al, 1974, p. 75). The reframing could also be expressed in terms of bisociation where a situation is not only associated to one context, but bisociated with two (Koestler, 1964, pp. 35-36). One example of reframing, or bisociation, is humor where the punchline often presents the facts through a new frame (Koestler, 1964). In accordance with the systems approach (as described above) the domain for change has to be defined (e.g. problem solving in a system or of a system), which in turn is closely related to the communication to achieve change (Watzlawick et al, 1974, pp. 1-12). In communication processes it is important to reframe situations in order to see new patterns when viewing a situation through another frame.

These three aspects, *congruence*, *flexibility* and *reframing*, are important when communicating to accomplish change. In this section on a change perspective on communication I have focused on process aspects in general and overall aspects of communication. That is, I have not included what one needs to communicate in order to accomplish change, like for example the need to communicate a change vision, etc. These aspects are discussed in detail in literature on change (e.g. Kotter, 1996). Here I merely have had the intention to point to general aspects of communication processes. From this I will move on to the role of language in communication processes.

Communication and Language

When discussing the use of communication for accomplish action, or change, it is important to say a few words about the use of language in communication. As this study is merely about information and communication in a managerial context and not in the area of linguistics, there will only be a brief discussion of some aspects of the use of language in relation to communication and action.

Conversations to find out what the possibilities for actions are, and conversations for achieving action are both essential parts of managerial work (e.g. Winograd and Flores, 1986; Shotter, 1993). Language is of essential importance in these conversations. As long as the communication is about things that can be classified and named, language is well developed, but when the communication is more about intangible objects and nonstandardized objects, things get much more difficult (March and Simon, 1958, p. 164), even if the communication process may display knowledge that we cannot recognize, or tacit knowledge (Polanyi, 1966, p. 5).

When language is used in communication processes for achieving some sort of action, the use of language is part of a relationship between two persons and about interpersonal behavior (e.g. Athos and Gabarro, 1978). This means that the use of language needs to be seen in its wider context where the use of, for example, body language and listening skills are taken into account, and not only the meaning of the words (ibid). The latter factor is of course of central importance though and has attracted a considerable amount of interest. One example is in the field of Neuro-Linguistic Programming (NLP) where three general mechanisms for committing the error of mistaking the model for the reality are outlined: generalization, deletion, and distortion (Bandler and Grinder, 1975, pp. 14-16). These three concepts have then formed basis for a set of questions to clarify and enrich perceptions in relation to change processes (Lundeberg, 1993, pp. 91-100). Another example of studies of the use and meaning of words is found in speech act theory.

Speech Acts

In speech act theory (Austin, 1962; Searle, 1969, 1975; Winograd and Flores, 1986) the focus is on use of language and the context of language. The perspective is to view the use of language as a part of a process performed by persons in a social setting. The use of language is viewed as a trigger for interpretations rather than just an act for conveying information. This is in line

with research illustrating the wider role of information in organization than simply for decision-making (Feldman and March, 1981) and in line with the research approach in this study to include the wider context of information and communication in managerial work.

The name "speech act" comes from the view that language is used to perform different types of acts, like making a statement, asking a question, explaining something and so forth. All linguistic communication involves some sort of linguistic acts, which was the background to speech acts (Searle, 1969, p. 16) and the different acts were named "illocutionary acts" by Austin (1962) and can be seen as "the minimal complete unit of human linguistic communication" (Searle, 1998, p. 136). Searle built partly on the work of Austin and found that there are only a rather limited number of basic things we do with language: tell people how things are, try to get them to do things, commit ourselves to doing things, express out feelings and attitudes, bring about changes through our utterances (Searle, 1975). He proposed that there are five and only five different types of illocutionary acts and suggested a taxonomy (Searle, 1975, 1998) which is shown in Table 15 below.

Illocutionary Acts	Explanation
Assertives	To commit the hearer to the truth of a proposition
	Examples: statements, descriptions and explanations
	The utterance can be literally true or false
Directives	Attempts to get the hearer to do something
	Examples: orders, commands and requests
	The utterance cannot be true or false, but denied etc.
Commissives	To commit the speaker to undertake some action
	Examples: promises, vows and guarantees
	The utterance cannot be true or false, but kept etc.
Expressives	To express a psychological state of affairs
	Examples: apologies, thanks and welcomes
	The truth taken for granted but sincerity varies
Declarations	To bring about a change in the world by representing it as having been changed
	Example: "War is hereby declared"
	Changes in virtue of the performance of the speech

Table 15 Illocutionary Acts (Searle, 1975, pp. 354-361; 1998, pp. 146-152)

One implication of speech act theory is the importance to "listen[ing] to the background" (Winograd and Flores, 1986, pp. 54-58; cf. Athos and Gabarro, 1978, chapter 9) or in other words trying to understand the context of a speech act in order to interpret it. Listening to the background stresses the significance of interpretative processes where individuals have different frames of references when making an interpretation (cf. the infological equation, see page 74 above). Winograd and Flores go one step further and argue that "nothing exists except through language" (1986, p. 68). This could be seen as a more radical parallel to the arguments made by Ogden and Richards that the relation between a symbol and a referent is only indirect via a thought or reference in the so-called triangle of reference (Ogden and Richards, 1923, p. 11).

The use of metaphor is another example of an indirect relation in the sense that there is a distinction between what the speaker means by uttering the words and what the words mean. Metaphors have attracted a significant interest in different areas, for example in describing organizations (Morgan, 1986) or information systems development (Kendall and Kendall, 1993). It seems that possible richness in the interpretation processes, and the differences between what someone means by saying some words and the meaning of the words per se, captures something both fruitful and important.

The speech act theory presented above has met critique in the sense that it works at a level that is too microscopic, and it is too abstract to be useful (Sillince, 1999, p. 486). Sillince (ibid) suggests instead that ideas from theory of political language could be useful when studying the role of language in organizational-change processes. There is however at least one important difference in the setting between political use of language and leaders use of language in organizational-change processes. Political leaders meet the public at large and smaller groups with an underlying purpose, to gain political support. In an organizational setting this may be one factor and intention, but in the setting of an organizational-change process there is usually an additional purpose, to achieve some results. Sillince points to significant shortcomings in usefulness of speech act theory, but to solve the problem by applying the theory of political language may be to move to a type of setting where the conditions for change processes are fundamentally different. I will therefore stick to speech act theory when analyzing use of language to influence persons and try to handle the abstractness by linking the classification to concrete examples from the setting where it will be applied.

Communication and Reinforcement

What about the dog? This section was introduced with the quote "Don't Shoot the Dog!". The discussion has then dealt with a change perspective on communication and the role of language and speech acts in particular. What does this have to do with a dog? And why should the dog be shot? The book where the quote is taken from is about behavioral training and reinforcement theory (Pryor, 1984) and has parallels to communication in managerial work to achieve change or action. Basically one can distinguish between two types of feedback processes: reinforcing (or amplifying) and balancing (or stabilizing) (Senge, 1990, pp. 79-88). In using reinforcement to change behavior, Pryor outlines eight different methods of getting rid of unwanted behavior (1984).

The author uses examples from the field of training dogs among other things. If you have a dog which barks in the night and you want to get rid of the barking there, are according to Pryor, eight methods of doing so: (1) "Shoot the animal", (2) Punishment, (3) Negative reinforcement, (4) Extinction (letting the behavior go away by itself), (5) Train an incompatible behavior, (6) Put the behavior on cue (and then never give that cue), (7) Shape the absence (reinforce what is not the behavior), and (8) Change the motivation (ibid, pp. 107-152). By shooting the dog the barking definitely stops, but the method obviously has side-effects too.

The eight reinforcement methods to change behavior suggested by Pryor could be applied in managerial situations. What to do with a subordinate who for different reasons does not work well in the management team? At one end of the spectrum of methods would be "to shoot the person" which in this case could mean to fire the person. That is, to get rid of the problem by getting rid of the person. At the other end of the spectrum would be to change the motivation through positive reinforcement, that is, to change the motivation by finding some part of the person's behavior that works well and reinforcing this type of behavior.

Pryor (ibid) argues that the best way of changing behavior is to change the underlying motivation and furthermore she argues that:

"the important impact of reinforcement theory on our society will be not to change specific behaviors or institutions but in the effect on individuals of positive reinforcement itself. Reinforcement is information—it's information about what you are doing that is working." (Pryor, 1984, pp. 171-172).

Linking back to the introduction quote, the challenge is "don't shoot the dog" and instead changing the motivation to accomplish the sought-after change. In

doing so there is first a need to understand the motivation among the persons concerned, which in turn points to the need to include the wider context of the information and communication used. There is a need to include a holistic picture.

4.1.5 A Holistic Approach to Information and Communication

"Structures of which we are unaware hold us prisoner." (Senge, 1990, p. 94)

The Wider Context

When discussing information and communication, I have used the expression "the wider context" a number of times. I have stressed the importance of this wider context in various respects. In this section I will come back to "the wider context" and take a closer look both on what it really means as well as consequences for this study.

One reason for stressing the context of information and communication is that communication processes in organizational settings often are described too simplistically, and there is a need to view these processes in their organizational contexts (Sjöstrand, 1987, pp. 214-219). In order to understand the information and communication processes it is necessary to understand the context and therefore necessary to analyze the whole picture, the holistic picture. This could be compared to thinking in terms of systems and with field theory, which stresses the importance of analyzing a situation as a whole (Lewin, 1942).

Another reason for including the wider context is the importance of including different perspectives. The use of different perspectives can be described as a case of binocular vision where the differences between the different perspectives add new information and an extra dimension (Bateson, 1979, pp. 73-74). An explicit example of the importance of different perspectives concerning information is, for example, that corporate library staff, information systems professionals, function-specific knowledge workers and executive assistants represent different information management roles and are most likely to focus on different contents and formats of information (McGee and Prusak, 1993, pp. 108-113).

The value of different perspectives is related to the view of reality. Given a basic assumption of social construction of reality (Berger and Luckmann, 1966) and that reality is a mental phenomenon, the value of including different perspectives is significant (cf. Lundeberg, 1993, pp. 75-87). By finding ways of

including both your own perspective, other perspectives and combined perspectives, one may increase the ability to perceive different aspects of reality (ibid).

Information Ecology

One metaphor used for holistic approaches in information management is information ecology (Davenport, 1997; Nardi and O'Day, 1999), where information ecology is described in terms of "holistic management of information" or "human-centered information management" (Davenport, 1997, p. 11). An example of an alternative metaphor used for holistic approaches to information management is architecture (McGee and Prusak, 1993). I will use the ecology metaphor, which is also used in organizational theory (Perrow, 1986, p. 208), and is built on the science of understanding and managing whole environments. This is a metaphor that is closely linked to human beings and better suited in the case of information than metaphors related to machines (Davenport, 1997, pp. 10-11) as persons are important when discussing contexts of information, given the interpretation processes described above.

A key point in an ecological approach to information is that humans are put at the center of the information world (ibid) as opposed for example to putting information technology at the center. I will mainly base the information ecological approach on Davenport (1997), where four key attributes of information ecology are stressed: (1) integration of diverse types of information, (2) recognition of evolutionary change as information ecologies constantly change, (3) emphasis on observation and description as there is a need to first understand the present situation before future plans are made, and (4) focus on people and information behavior, as opposed to previous attempts to focus almost exclusively on production and distribution of information and more or less ignore what the recipients have done with the information (ibid, pp. 29-33).

In his description of an information environment Davenport (1997) includes six critical components: information strategy, information politics, information behavior and culture, information staff, information processes, and information architecture. Based on Davenport (1997) the six critical components of information ecology could be described as the following. *Information strategy* concerns decisions about what to do with information in the organization. *Information politics* deals with the power information provides and the governance responsibilities for its management and use. *Information behavior and culture* are about how to use, modify, share and disclose information. *Information staff*

concerns content specialists, designers, and facilitators, etc. *Information processes* focus on how information work gets done and include processes to determine requirements, capture, distribute and use information. *Information architecture* is a guide to the structure and location of information within the organization.

As the focus of this study is on the environment of the information in managerial work, the six aspects of information ecology will be seen from the perspective of information in managerial work. That is, information strategy for example will focus on information strategy regarding information in managerial work, not information in the whole organization. The same goes for the other five aspects. There are of course links between information behavior regarding information in managerial work, and information in general in an organization, but these similarities and differences will not be in focus of this study.

The different components of information ecology as described by Davenport (1997) help to encompass a number of different dimensions in the holistic view of information. In my opinion the main thing is to get a rich picture and include several dimensions, not necessarily exactly these dimensions. One major argument for an information ecological approach is that there is a need to focus more on the persons involved and to include aspects of information usage (ibid). In this study this means putting the general manager in the center and seeing the use of information in its wider context, i.e. managerial work. This context also includes viewing information as part of communication processes as information often is used to influence other persons.

The entire organization can be seen as a communication system with certain information-handling rules, such as characteristics of the information taken into the firm, rules for distributing and condensing input information, rules for distributing and condensing internally generated information, and characteristics of the information leaving the firm (Cyert and March, 1992, p. 127). By understanding these rules applied in an organizational context, the information ecology in managerial work can be better understood as mechanisms of the wider organizational context are revealed.

To See the Wood as Well as the Trees

I have argued that the wider context is important and a holistic approach is fruitful. To be more specific it is important to see both the holistic view as well as the smaller parts of the big picture. Expressed differently one could say that it is important to see the wood as well as the trees, which could be seen as a key to management in a nutshell (Watson, 1994, p. 215). A challenge though is to see the wood and not just lots of trees, or maybe just a few of our favorite

trees. To meet this challenge, systems thinking may be useful in helping to deal with the complexity (Senge, 1990, pp. 127-128). The information ecology described above is another approach for dealing with complexity and helping to see the wood as well as the trees and to move between the different frames of the wood and the trees respectively, which is a form of reframing (cf. Watzlawick et al, 1974).

I began this section with a quote: "Structures of which we are unaware hold us prisoner." (Senge, 1990, p. 94). In the context of this study, structures concern information and communication in managerial work. One challenge is to identify the hindering structures which we may be unaware of. In practice this might mean for example different reporting structures and communication patterns. In order to identify these structures a holistic approach such as information ecology may be useful (as well as systems thinking in general). By looking at the activities from different perspectives as well as in different dimensions, structures may be revealed, which in turn can be seen as a first important step towards improving the situation.

In the discussion of information and communication in the chapter so far, the context has been described as important. Now it is time to look at the context of information and communication in this study, namely managerial work.

4.2 Managerial Work

Research on managerial work is a well-worn path. There are some "classical" and often cited pieces of research within the area of managerial work, e.g. Barnard (1938), Carlson (1951), Stewart (1967/1988, 1976), Mintzberg (1973) and Kotter (1982). There is also a Swedish research tradition in the area. Besides Carlson's (1951) famous study, there are more recent pieces of research presented by e.g. Forsblad (1980), Holmberg (1986), Tyrstrup (1993), Jönsson (1996), and Sjöstrand (1997). Here I will present and discuss previous research related to three questions of interest for this study: "What do managers do?", "How is the agenda formed?" and "How do managers learn?". But before addressing these questions I will say a few words about the question "How to study managers?".

4.2.1 How to Study Managers?

"We cannot learn what someone's theory-in-use is simply by asking him." (Argyris and Schön, 1974, p. 7).

Many Different Approaches

Managers' work has attracted considerable interest among researchers over a long period of time (Hales, 1986). The scopes of the studies have varied; some have focused on observed behavior and resulted in different types of classifications (e.g. Mintzberg, 1973), and some have worked with "second order constructs", that is with an aim to further the understanding of the observed behavior (Hales, 1986, p. 96; e.g. Kotter, 1982). Much research evidence on managerial work has traditionally focused on managerial role performance (Hales, 1986, p. 109). Kotter (1982) and Stewart (1976) could be seen as examples of studies where the behavior of the managers is studied in wider contexts (Hales, 1986, p. 109).

The ingenuity in the research approaches has varied; some researchers have broken new ground (e.g. Carlson, 1951) and some have replicated previous studies and research approaches (e.g. Kurke and Aldrich, 1983). In a retrospective commentary on an earlier article, Mintzberg makes the comment that "many studies have been carried out over the last 15 years, but the vast majority sought to replicate earlier research [...] we remain grossly ignorant about the fundamental content of the manager's job and have barely addressed the major issues and dilemmas in its practice" (Mintzberg, 1990, p. 175).

The list of different methods used in studies on managers' work could be made very long and some examples are: the diary method (e.g. Carlson, 1951), structured observation (e.g. Mintzberg, 1973), unstructured participant observation (e.g. Dalton, 1959; Watson, 1994), open-ended interviews (e.g. Stewart, 1982). In most studies different methods are combined.

The time-frame for the studies of managerial work differs considerably, from studies where managers have been studied during only one week (Mintzberg, 1973), to studies where the persons have been studied during a month (Carlson, 1951), to studies which have collected empirical material over a few years (Kotter, 1982; Tyrstrup, 1993), and even to studies based on about ten years field work (Dalton, 1959). The length of the time period is interesting as it says something about the intentions behind the different studies. In studies where interviews and periods of observation are carried out during a very limited time-period, the results can say something about a "snap-shot" of managerial

work and can, for example, add knowledge about classifications. In studies covering a longer time-period however, the results may help increase the understanding of the managerial activities in a process-related context.

Underlying Intentions and Intrinsic Problems

There is an epistemological stance underlying each study which to some extent is revealed, explicitly or implicitly, in the aim of the particular study. Dalton, for example, says about his study that "the aim is to get as close as possible to the world of managers and to interpret this world and its problems from the inside" (Dalton, 1959, p. 1). Given this interpretive approach to the study, one goal is to provide a rich description and to further the understanding of managerial work in its context.

When studying managers' work the attention paid to the wider context of the work varies between different studies. Carlson argues that "we shall only come to a full understanding of executive actions if we observe them in relation to the simultaneous actions of other people in the organization" (Carlson, 1951, p. 118). In other words, in his opinion the context is necessary for an understanding of managerial work. In my opinion I would say that whether or not it is necessary depends on the scope of the phenomenon we want to understand.

When addressing the question "How to study managers?" there are some intrinsic problems. First, a manager's work is not easily defined (Hales, 1986, p. 109). Second, the possible access to managers may be limited given the nature of their work (at least as far as we know from studies conducted, see below). Third, even with possible access to managers, it may be difficult to study the work as it can be difficult for a manager to describe it and for an observer to interpret the actions that can be observed.

The third issue could be described in terms of Argyris and Schön as in the quote in the introduction to this section: "We cannot learn what someone's theory-in-use is simply by asking him. We must construct this theory-in-use from observations of his behavior." (Argyris and Schön, 1974, p. 7). Applied to studies of managerial work, this means that it is not enough to simply ask a manager what he or she does, but one has to construct this from observation of behavior. This may offer one explanation of why many studies on managers' work employ, at least to some extent, some sort of observation.

Type of Results from Studies

Before discussing the actual results of research on managerial work, I will say a few words on what *type* of results one can find among the huge number of studies of managerial work. First, there are many different types of classifications, and second, there are results to be found on two different levels.

A number of studies on managerial work have resulted in different types of classifications. The most famous type of classification is perhaps the one into different managerial roles by Mintzberg (1973). These roles have attracted a considerable amount of interest in research over the last decades, in spite of the limited time period covered in the empirical parts of the study (as referred to above). Other examples of classifications are different functions by Barnard (1938) and different categories of activity by Sayles (1964). These classifications, as well as other types of classifications from other studies in the area, influence the way we understand the field of managerial work, as well as what studies are conducted (cf. Bowker and Star, 1999). When constructing classification systems "differences" are of fundamental importance (ibid, pp. 231, 281) as the design decides in what dimensions differences are highlighted, which in turn influences our understanding of the phenomena classified. (This could be compared to the importance of differences in Bateson's definition of information, see Table 14 above.) Worth noting when discussing classifications is that these are all socially constructed (cf. Berger and Luckmann, 1966) as there are no "true" classifications from my point of view.

The results from studies of managerial work can be seen on two levels. First there are studies resulting in descriptions and analyses of actual managerial behavior, or literally speaking results on what managers do, like for example: they make x phone-calls per day, they spend on average y minutes without interruptions, and they attend z meetings per week. These could be seen as results of the first order. Then there are studies resulting in descriptions and analyses of managerial behavior where there are attempts to explain the actual behavior of managers, like for example: they make a number of phone-calls per day *in order* to maintain their internal or external network, they spend a limited time without interruptions *because* of vertical and horizontal communication processes, and they attend both internal and external meetings every week *in order* both to learn about the organization and to convey their messages. The latter could be seen as results of the second order, "whereby observed behaviour may be understood" (Hales, 1986, p. 96), like for example the study by Kotter (1982).

4.2.2 What Do Managers Do?

"The picture that emerges from studies of what managers do is of someone who lives in a whirl of activity, in which attention must be switched every few minutes from one subject, problem, and person to another; of an uncertain world where relevant information includes gossip and speculation [...] It is a picture, too, not of a manager who sits quietly controlling but who is dependent upon many people, other than subordinates, with whom reciprocating relationships should be created [...] In short, it is much more human activity than that commonly suggested in management textbooks." (Stewart, 1983, p. 96)

Fragmentation - Information - Communication

Rosemary Stewart's eloquent description of a manager's work in the quote above is one answer to the question about what managers do. Another answer could be related to the following keywords: (1) *fragmentation:* managerial work consists of a large number of items apparently about anything and they do not spend much time on one issue before they change into something else or are interrupted, (2) *information:* a manager deals with huge amounts of information, for different purposes and with different intentions, and (3) *communication:* an important part of managerial work consists of communication with other persons.

There are different ways of measuring the fragmentation of managerial work (Stewart, 1988, p. 52). For the purposes of this study it is enough to note that previous research has shown that managerial work is fragmented, even if this is shown with different types of measurements, for example in number of periods spent alone, number of fleeting contacts, and number of entries in the diary (Stewart, 1988). Regarding how time is spent in managerial work, it has among other things been shown that much time is spent together with other persons in conversations (Kotter, 1982, pp. 79-81). Another dimension of time in managerial work is the manager's orientation toward time, which is an important part of the behavior (Thoms and Greenberger, 1995). Time orientation includes both the way in which the manager perceives events (temporal alignment) and the particular skills in dealing with time (temporal skills) (ibid, p. 275). Regarding how much time is spent on the managerial work, previous studies show different results as some studies suggest that managers work long hours (Carlson, 1951, p. 75; Kotter, 1982, p. 81) and some that they do not (Stewart, 1988, p. 32).

Information could be seen as the fundament for managerial work, and managers could be seen as information workers (McCall and Kaplan, 1990, p. 16). When

using information, managers act both as receivers and senders of information (e.g. Mintzberg, 1973) and they combine information from several different sources (McKinnon and Bruns, 1992). The use of information in managerial work could be seen from a number of different perspectives as will be discussed in section 4.3.

The third keyword about what managers do is *communication*. According to previous research, conversation with other persons is a main task for managers (e.g. Carlson, 1951; Mintzberg, 1973; Hales, 1986). For a manager communication is taking place constantly, intentionally or unintentionally. This is in accordance with the first communication axiom described above (see page 78) which says that "One cannot not communicate." (Watzlawick et al, 1967, p. 51). As a consequence of this, a manager cannot avoid acting: "At every moment, you are in a position of authority, and your actions affect the situation. If you just sit there for a time, letting things go on in the direction they are going, that in itself constitutes an action, with effects that you may or may not want. You are 'thrown' into action independent of your will." (Winograd and Flores, 1986, p. 34). This quote illustrates the close link between communication and action, which will be elaborated upon in the discussion on management processes for action.

The Manager as a Rational Human Being - and Not

The view of managers as rational human beings spending the days making a lot of important decisions has been questioned by research into managerial work over a long period of time (e.g. Carlson, 1951; Dalton, 1959; Mintzberg, 1982; Kotter, 1982; Stewart, 1983; Tyrstrup, 1993). Instead the picture is rather one of persons making decisions together with many other things, and often the decision-making is embedded in other managerial activities. The less rational, or irrational, aspects of managerial work have been expressed in different terms, for example non-logical processes (Barnard, 1938) and quality of good judgement (Vickers, 1967). Even if managerial work is not conducted with a rational approach, it is not totally irrational either, but instead there are both rationalities and irrationalities in a manager's work (Sjöstrand, 1997).

When looking closer at rational and irrational aspects of managerial work there are different types of classifications developed in previous research. Managerial work has been seen in terms of roles, functions and processes.

Different Roles

Even if the picture of the manager as a decision-maker has been adjusted, decision-making has played a significant role in research on managers' work,

and sometimes used as synonymous with managing (Simon, 1960). Worth noting though is that there are different definitions of decision-making and sometimes the entire process, finding the occasion for making a decision (intelligence), finding possible alternatives (design), and choosing among the alternatives (choice), is included in the decision-making (ibid, pp. 1-2). Besides focusing on the actual decisions, another approach is to view the situations in terms of different levels of ambiguity (e.g. Dalton, 1959; McCaskey, 1982). The ability to live with ambiguity links to the timing of decision-making, i.e. when to make a decision. This is an important part of decision-making and is expressed in the following way by Barnard: "The fine art of executive decisions consists in not deciding questions that are not now pertinent, in not deciding prematurely, in not making decisions that cannot be made effective, and in not making decisions that others should make." (Barnard, 1938, p. 194, italics in original). In attempts to support managerial work with IT-based solutions, the decision-making role in managers' work has often been emphasized, which will be elaborated below (see section 4.3.5).

Mintzberg (1973) distinguishes between ten managerial roles: three interpersonal roles (figurehead, leader, liaison), three informational roles (monitor, disseminator, spokesman), and four decisional roles (entrepreneur, disturbance handler, resource allocator, negotiator) (ibid, chapter 4). Other roles in managerial work have emerged in more recent studies, such as for example:

- the roles as designer, steward or teacher in relation to learning in an organization (Senge, 1990, pp. 339-357),
- the roles of vision setter, motivator, analyzer, and task master (Hart and Quinn, 1993),
- the role of a coach (Waldroop and Butler, 1996), and
- the role of the exemplar (Hunt and Laing, 1997).

Here it may be a matter of semantics how different roles are interpreted. In Mintzberg's terms the exemplar, for example, could be described as a figure-head and/or leader. My point here is rather to illustrate that the notion of different roles is one approach for describing managerial work, which has attracted a considerable amount of attention. This notion illustrates the number of nuances possible discernable in a manager's work. Research has shown that the ability to handle and combine different roles has a positive effect on performance (Hart and Quinn, 1993). This finding is not surprising as the roles most likely often are combined. I would rather say that it may even be difficult to separate different roles. In Mintzberg's (1973) study for example, the different roles suggested (and frequently cited in research) are not easily

separated in the empirical descriptions. Given the difficulty of separating different roles and that the roles likely are combined, I will not use roles as the main perspective in my study.

Different Functions

Another perspective on what managers do is to express their work in terms of different functions (e.g. Barnard, 1938). This description of managerial work is perhaps the most classical classification, for example often used in textbooks when discussing what managers do (Carroll and Gillen, 1987). The functions suggested by Fayol in the beginning of the century (1916) are often referred to as the classical view of management. These functions are: planning, organizing, commanding, coordinating, and controlling (ibid). When Mintzberg studied managerial work by observing what managers do, he found that the traditional functions were of limited use in explaining what managers really do (Mintzberg, 1990). I find this argument compelling. In my study of a general manager's work I will not therefore not use the traditional functions as the main perspective.

Different Processes

A third perspective on what managers do, beyond roles and functions, is to view managerial work as different processes. Kotter distinguishes three different key processes in managerial work on an overall level: agenda setting, network building, and execution in the form of getting networks to implement agendas (Kotter, 1982). With a process view of managerial work, it is more natural to include a temporal perspective in the descriptions compared to roles and functions. Furthermore, a process perspective is likely to help capture both intentional development efforts as well as unintentional evolution in managerial work. Given the focus for this study, the process perspective is of particular interest when trying to depict what a manager does. I will therefore use a process perspective in this study, and there will be a separate section on this perspective below (see section 4.2.3).

Ok, But What Do Managers Really Do Then?

Before discussing processes in managerial work in more detail I will return to the question asked in this section: what do managers do? In the beginning of the section I pointed to the three keywords: fragmentation, information and communication, when describing managerial work. As briefly described above there are many different ways of addressing the question about what managers

do (cf. different roles, functions, and processes). That is, managers could be said to work in a number of processes where they act in different roles to fulfill different functions in order to reach different goals. The three concepts of processes, roles and functions could be seen as different perspectives describing the same managerial work, and of course the choice of perspective has consequences for our descriptions and understanding.

When trying to answer the question about what managers do, or to capture the essence of management, Eccles et al (1992) found three elements to be the key factors: using and understanding rhetoric, taking action (robust action) and recognizing individual identities (ibid, pp. 8-12). They applied an action perspective as they saw managerial work as filled with different types of action (ibid, p. 47) and its ultimate goal is to accomplish action. This perspective in turn could be seen from three perspectives: to manage action *directly*, to manage *people* to take action, and to manage *information* to influence people to take action (Mintzberg, 1994, p. 15).

I see the attempt to capture *the essence* of management, as an attempt to move from one level to another level. That is, in my view the question about what managers do can be addressed on different levels. One level is to focus on what time is spent on in managerial work, as illustrated in a number of studies. Another level is to see the managerial activities in their wider context and explain the work in its context.

This could, for example, mean that managerial work that seems to be very fragmented on one level, could be much more coherent when seen on another level. Kotter's view that managerial work consists of three main processes (agenda setting, network building and execution in the form of getting networks to implement agendas, as described above) may help explain specific managerial activities. Even if the activities per se seem to be fragmented and uncoordinated, taken together they may help build the network or execute the agenda. That is, if the specific pieces of activities are put in a context, it may be easier to understand and explain managerial work. One may even go further and argue that it is difficult to investigate managerial work without identifying the purposes behind specific actions like telephone calls and conversations (Carroll and Gillen, 1987, p. 43). One implication that this view holds for this study is the importance of seeing different specific managerial actions in the wider context, and thereby trying to further the understanding of managerial work.

What about Scandinavian Managers?

Just as there are personal differences between managers, there might be differences in managerial work between countries or geographical areas. As this study is conducted in a Scandinavian setting, the question is whether there are any particular patterns in managerial work here? In a study of Swedish business leaders, Jönsson (1996) found that the core of a Swedish management style seemed to be "a tendency towards quick implementation after a rough and ready analysis, and then informal and teambased control of the process, learning under way" (ibid, p. 161). Furthermore, he found that the reliance on trust allows Swedish multinational organizations to manage complex control structures with matrices of country and product as the main pattern (ibid, p. 183). A possible threat to the Swedish style of management was identified in the form of the dominance of American consultancy firms with recipes from a different culture (ibid, p. 183).

It is beyond the scope of this study to focus on cultural differences between management in different parts of the world (cf. Zander, 1997). Still it is worth bearing in mind that there may be significant cultural differences between the settings of different pieces of research used in the study. I therefore have the aim to include studies on managerial work conducted in different cultures, or rather from an American as well as from a European perspective.

As mentioned above there is a Swedish tradition studying managerial work running from Carlson (1951) to studies like the following: Forsblad (1980), Holmberg (1986), Tyrstrup (1993), Jönsson (1996), and Sjöstrand (1997). Notable is the strong empirical bases these studies often show in an international comparison. Even if there is a Swedish tradition studying managerial work, there is a predominance of research from North America published in business research journals (Engwall, 1996). This means that a considerable number of the references used in this study are from an American setting, where cultural differences to some extent may influence the applicability, which has to be taken into consideration in the discussion of findings.

What Will Managers Do in the Future?

What are the trends in managerial work? Even if it is beyond the scope of this study to analyze trends in managerial work per se, there are some significant patterns that have implications for the study at hand. One trend that has been identified by some researchers indicates that there is a need for top managers to move beyond strategy, structure, and systems to a view which also is built on purpose, process, and people (Bartlett and Ghoshal, 1994, 1995; Ghoshal

and Bartlett, 1995). Research on managerial work also shows a greater interest in factors related to processes and interactions, as opposed to earlier research more oriented towards planning and analysis, which can be explained by today's more turbulent and complex environment (Sjöstrand, 1998, p. 28). This is of particular interest in this study as there is a process perspective and an attempt to capture the individual perspectives (people) in the processes described and discussed.

Another trend is the increased interest in investigations of unrecognized arenas for managerial work (Sjöstrand and Tyrstrup, 2001), i.e. managerial activities are not only taking place in traditional contexts like executives offices. Parts of managerial activities could be described as being "invisible" (ibid).

Finally one can assume that both what managers do and what managers will do is, at least to some extent, a reflection of their own personal interests and experiences (Stewart, 1988, p. 119). They can, within certain limits, choose what to do and what not to do (cf. Stewart, 1982). There are also, of course, a number of restrictions placed on general managers. One obvious restriction is from the owners. Here recent work has pointed to the risk that too narrow a focus on shareholder value places demands on general managers which may result in a focus on short-term activities, at the expense of activities to develop the business activities in a long-term perspective (Brodin et al, 2000).

4.2.3 Managerial Work in Terms of Management Processes

"Clearly, a process perspective has much to offer." (Garvin, 1998, p. 48)

The Process View

Managerial work will be seen from a process point of view in this study, as described above. Processes can be defined as "specific ordering of work activities across time and place, with a beginning, an end, and clearly identified inputs and outputs: a structure for action" (Davenport, 1993, p. 5). The process view in general, and especially in relation to business processes, attracted much interest in the beginning of the 1990s when Business Process Reengineering (BPR) was introduced (Davenport and Short, 1990; Davenport, 1993; Hammer and Champy, 1993). One main idea was to focus on processes in businesses and to innovate, or "reengineer", these processes. The BPR-wave increased the focus on processes in organizations.

The process movement has met with criticism as there is often an underlying assumption of processes as work-flows with clearly identified inputs and

outputs (Keen, 1997, p. 17). As there are many types of processes with other characteristics, an alternative process definition suggests that a process is "any work that meets these four criteria: it is recurrent; it affects some aspect of organizational capabilities; it can be accomplished in different ways that make a difference to the contribution it generates in terms of cost, value, service, or quality; and it involves coordination" (Keen, 1997, p. 19). This broad definition opens the process concept to a wide range of different applications.

Managerial work differs in several respects from business processes, but there are arguments for the usefulness of applying a process perspective in knowledge work, which could be seen as one description of managerial work (Davenport et al, 1996). The inputs and outputs of management process are not as tangible as those from business processes, but given the process definition suggested by Keen (1997) above, a process view can help structure a complexity in the form of managerial activities. In theory development in the area of managerial work, there has been a shift from a focus on planning- and analysis-oriented theories, towards more process- and interaction-oriented theories (Sjöstrand, 1998).

When looking at activities from a process perspective, the number of processes identified may be very large (cf. Keen, 1997, chapter 3 about the "process swamp"), but may also be limited to a set of core processes (cf. Davenport, 1993, p. 28). The number of core processes depends on the definitions of processes, ranging from a few broad and general processes to a larger number of narrow and more specific processes. One has to bear in mind that processes are socially constructed (cf. Berger and Luckmann, 1966) and we choose what we want to see as processes and how we define the differences between them (cf. Bateson, 1972).

Earl (1994) distinguishes between four different types of processes: core processes (central to business functioning), support processes (back-up of core processes), business network processes (beyond the boundaries of the organization), and management processes (plan, organize and control resources). Here the focus is on management processes, including different ways to look upon these processes.

Management Processes

Managing can be described as a social process: social because it is principally concerned with relations between people, and as a process because it comprises series of actions that lead to the accomplishment of objectives (Newman and Warren, 1977, p. 11). Several authors (e.g. Davenport, 1993; Champy, 1995; Garvin, 1998) have described management processes, and one example

of a description is: "Management processes involve planning, direction setting, monitoring, decision making, and communicating with respect to a firm's key operational processes and assets." (Davenport, 1993, p. 275). Given this overall description of management processes, the author lists a number of key management processes: strategy formulation and strategy decision-making, planning and budgeting, measuring performance and reporting, allocating resources, managing human resource, communicating with stakeholders, and infrastructure-building processes (both human and technical) (ibid, pp. 285-296).

In the same way as the number of core business processes depends on the definitions of the processes, the number of key management processes obviously depends on the definitions. On an overall level Kotter (1982) points to three key processes, as described above on page 101 (i.e. agenda setting, network building, and execution in the form of getting networks to implement agendas), Sjöstrand (1987, pp. 203-209) makes the distinction between two major types of management processes: strategic processes and operative processes (cf. Anthony, 1965), and Garvin (1998) divides management processes into three different categories: direction-setting processes, negotiation and selling processes, and monitoring and control processes. Perrow (1986) describes eight groups of aspects of organizations based on Likert (1967), which can be seen in terms of management processes: leadership processes, motivational forces, communication processes, interaction-influence processes, decision-making processes, goal setting or ordering, control processes, and performance goals and training. Other examples of classifications of management processes (or managerial work processes or processes carried out by the manager) are presented by for example Mintzberg (1973, 1994) and Champy (1995). General managers are also involved in different processes in relation to owners (cf. Larsson, 1989).

These attempts to define different fundamental processes in managerial work, i.e. key management processes, can be seen in light of a general plan-act-evaluate model (Lundeberg, 1993, section 4.3; cf. intelligence-design-choice, Simon, 1960; cf. test-operate-test-exit, Miller et al, 1960). These three basic factors are also expressed for example in relation to different types of control in terms of input control, behavior, and output control (Sjöstrand, 1987). The control aspects will be elaborated later (see section 4.3.9).

As described above, different authors describe management processes with different terminologies. This lends itself to some sort of classification. As discussed above (see page 97), "differences" are of fundamental importance when constructing classifications (Bowker and Star, 1999, p. 231, 281). The

design decides what dimensions are highlighted, which in turn influences our understanding on the phenomena classified.

When trying of classify management processes I take a starting-point in the general plan-act-evaluate model referred to above. The different specific management processes described by different authors can be seen as aiming at planning, acting, or evaluating in various ways. The expression "acting" is problematic in the sense that it may be misleading in terms of being a more general expression, i.e. it could include all other activities. An alternative expression is "performing".

The three types of management processes aiming at planning, performing, and evaluating capture three fundamental aspects of management activities. From a temporal perspective these types of processes describe before-during-after in an overall sense. Distinguishing between management processes for planning, performing, and evaluation offers aspects rooted in general theories of processes, and at the same time a simple overall division. The expression preparing will be used instead of planning in order to avoid the interpretation that all activities are planned. It is worth noting that the different types of processes are socially constructed (cf. Berger and Luckmann, 1966) and the three types of processes can be regarded as managerial work seen from different perspectives. That is, there is no "true" division of management processes.

One can distinguish between differences in aims of activities: activities aim at preparing, performing, or evaluating:

- *processes for preparing* expressed in terms like agenda-setting, network building, direction-setting, strategic planning, goal setting etc;
- processes for performing expressed like execution of agendas, operative, decision-making, communication, etc;
- processes for evaluating in expressed in terms like monitoring and control, etc.

There is a sequential dimension to these three types of management processes. It should therefore explicitly be noted that this does not imply a view of managerial activities as certain planned steps in a sequence. There may, for example, be processes focused on performing without any preparing in advance, or any evaluating afterwards, etc. The three categories are presented and used with the purpose of structuring different managerial activities in terms of management processes.

Processes Concerning Preparing

The cluster of management processes with the ultimate goal of preparing for managerial activities in a wide sense has been described in various terms by different authors, like for example: agenda setting (Kotter, 1982), planning and direction setting (Davenport, 1993), goal setting or ordering (Likert, 1967), defining (Champy, 1995), and direction-setting (Garvin, 1998). These processes are mainly described as focusing on task-related aspects in terms of the framework for perceiving processes described and discussed above (see Figure 11, page 84).

There are, however, also processes concerned with preparing efforts more focused on person-related aspects. Kotter (1982) for example describes the building of networks (for execution of the agendas) which can be viewed as preparing for person-related aspects of processes. Examples by other authors are for example: human infrastructure building (Davenport, 1993), mobilizing in terms of bringing people to accept direction and vision (Champy, 1995), and negotiation and selling in terms of obtaining needed support for the direction (Garvin, 1998). That is, previous works point to processes concerned with preparing both regarding task-related aspects and person-oriented aspects.

One important aspect of processes for preparing is setting of an agenda. This agenda-setting (or agenda-building) can be seen in different respects. There is an overall agenda-setting for goals of the organization, which is most often in focus in literature as referred to above. There is also agenda setting on a more specific level for managerial work, what issues to include on the agenda and to pay attention to. Agenda formation will be elaborated below in section 4.2.4.

Processes Concerning Performing

The cluster of management processes concerned with performing in a broad sense is often highlighted when discussing managerial work, expressed for example in terms of processes related to decision-making (e.g. Davenport, 1993) and different types of communication processes in managerial work (e.g. Davenport, 1993; Champy, 1995). In Kotter's terms the key management process here is called execution by getting networks to implement agendas (Kotter, 1982).

Management processes concerned with performing relate to decision-making (choosing what to act on) and communication (influencing the people in the network). There are parallels between these two types of processes and the framework for task-related and person-related aspects of processes (see Figure

11, page 84), as was the case with the processes concerned with preparing above. Decision-making processes can be seen as more task-oriented (even if the processes obviously can concern persons), while communicating processes can be seen as more person-oriented.

The role of decision-making processes has been elaborated in the discussion of what managers do (see section 4.2.2). Communicating processes on the other hand can be characterized by the dimension in which communication is taking place: vertical communication processes (e.g. between superiors and subordinates) or horizontal communication processes (e.g. between individuals within different units) (e.g. Johansson and Östman, 1995, pp. 17-19), and will be elaborated below in section 4.3.8.

Regarding dimensions of communication processes, the primary focus in this study is on the vertical dimension, i.e. between the managing director and his reporting managers, as well as the communication between the general manager and the board of directors. The horizontal dimension will be included to a limited extent, describing communication processes between managers of different regions and units.

Communication processes are often taking place at meetings of different kinds (cf. McKinnon and Bruns, 1992, pp. 109-118), but there are also other arenas where, often informal, communication processes (cf. Sjöstrand and Tyrstrup, 2001), such as communicating while waiting at an airport or on a golf course. Oral communication is found to be an important source of information for managers (e.g. McKinnon and Bruns, 1992, p. 109), and the study by McKinnon and Bruns also reveals that once managers capture information they are, in general, anxious to distribute it as soon as possible to those in the organization who might need it (ibid, p. 125). There is thereby a driving force for communication processes to distribute information in the organization, which in turn is a way of achieving action in the organization.

Processes Concerning Evaluating

The third cluster of management processes aims at evaluating in a broad sense. These processes are called, for example, monitoring (Davenport, 1993), measuring (Champy, 1995) and monitoring and control (Garvin, 1998). Once again one can observe the pattern that management processes mentioned mostly are focused on task-related aspects. Control aspects are elaborated in a separate section below, see section 4.3.9.

Those management processes for evaluating which focus more on personrelated factors could deal with reflection or learning. This type of processes seems to be less in focus than task-related processes in literature on management processes. I will elaborate on person-related management processes in the section on how managers learn in section 4.2.5 below.

An Attempt at a Synthesis of Management Processes

Three overall types of management processes have been described above, i.e. management processes concerning preparing, performing and evaluating. In the discussions of these types, or clusters, of management processes I have pointed to a distinction between processes mainly focused on task-related or person-related factors (cf. the earlier discussion on different aspects of processes, see Figure 11 above). By combining the three overall types of management processes with task-related and person-related aspects, a framework as described in Figure 12 is derived.

MANAGEMENT PROCESSES	Processes for Preparing	Processes for Performing	Processes for Evaluating
Person-focused Processes	Person-focused processes for preparing	Person-focused processes for performing	Person-focused processes for evaluating
Task-focused Processes	Task-focused processes for preparing	Task-focused processes for performing	Task-focused processes for evaluating

Figure 12 A Framework for Two Levels of Management Processes

In Figure 12 six fundamental different types of management processes are depicted. The different types of processes can be illustrated by examples of management processes suggested by different authors (as discussed above), see Figure 13.

MANAGEMENT PROCESSES	Processes for Preparing	Processes for Performing	Processes for Evaluating
Person-focused Processes	For example: Network building Human infrastructure building Negotiating and selling to gain support Training etc.	For example: Communicating with stakeholders Managing human resources Negotiating and selling to gain support Informal communication etc.	For example: Reflecting Learning etc.
Task-focused Processes	For example: Agenda setting Planning and direction setting Budgeting Technical infrastructure building etc.	For example: Decision-making Execution or implementing agendas Monitoring and control etc.	For example: Monitoring Measuring performance Reporting etc.

Figure 13 Examples of Management Processes

The examples of management processes included in Figure 13 are taken from examples by different authors, and illustrate the different basic types of processes according to the classification suggested in Figure 12. Worth noting is that some examples overlap as different authors use different terminologies.

The classification suggested in Figure 12 illustrates that classifications are socially constructed (cf. Berger and Luckmann, 1966), as discussed above (see page 97). That is, there are no "true" classifications, which is illustrated in Figure 13. Management processes can be seen from different perspectives. There are processes that from one perspective can be seen as one type of process, and from another perspective as another type. One specific example is monitoring and control-processes. From one perspective these processes can be seen as focused on performing in the sense that these activities may be an important part of what a manager carries out. From another perspective monitoring and control can be seen as focused on evaluating in the sense that

the activities aim at evaluating some sort of activities. Another example is negotiating- and selling-processes for gaining support. From one perspective these processes can be seen as processes focused on performing, i.e. a manager performs the negotiating and selling. From another perspective they can be regarded as processes focused on preparing as they aim at improving the conditions for some sort of activities.

These examples illustrate different perspectives and interpretations of specific management processes. Different interpretations can also be seen in light of different levels of abstraction (see section 4.1.3 on page 80). That is, on one level every management process could be seen as performing in the sense that they involve some sort of action. On another level one can distinguish the aim of the action, for example to prepare or evaluate something.

When I use the suggested framework, I will take a starting-point in the aim of different processes. This means that activities will be classified according to aim of preparing, performing, or evaluating. The purpose of the framework suggested in Figure 12 is thus to provide an overall structure for management processes and thereby to help further the understanding of content and meaning of managerial activities.

In literature on management processes it seems that task-focused management processes tend to be emphasized more than person-focused processes. A possible explanation for this is that these processes are (at least perceived) as more concrete and action-oriented. Person-focused processes, on the other hand, may be perceived as more abstract, which in turn may influence the likelihood of someone paying attention to this type of processes (see discussion on agenda formation, section 4.2.4, below). Kotter's study (1982) is one example of a study where there is more of a balance between person-focused and task-focused processes. (That study, on the other hand, highlights management processes concerning preparing and performing rather than evaluating.) The classification suggested in Figure 12 offers an overall structure for management processes and can be fruitful for capturing different aspects of managerial work.

Different processes are sometimes described as requiring different critical skills (Garvin, 1998). In processes for preparing, for example, synthesis and priority setting are said to be important, while questioning and listening are seen as more important skills in processes for evaluating (ibid). One has to be careful though, not to allocate different critical skills to different types of processes, as both the processes and thereby the skills are most likely to be integrated. That is, in an activity mainly aimed at preparing of some sort, it is likely that

the person is listening and learning about what has happened earlier (evaluating process). This means that the overall framework of different types of management processes has the intention to clarify the discussion of managerial activities. One has to bear in mind that management processes are intertwined and in some sense occur simultaneously. To view managerial work through a process lens is an attempt to capture dynamic aspects of managerial work and the synthesis of management processes described in Figure 12 is an attempt to capture different aspects of the dynamics in managerial work.

The discussions of the empirical material in this study will be structured according to a framework based on the classification of management processes discussed above. As information-related aspects are of special interest in the study, the task-related dimension will be divided into business- and information-related aspects. This division follows the three basic levels described earlier (see Figure 10 on page 83). The framework derived is illustrated in Figure 14.

MANAGEMENT PROCESSES	Processes for Preparing	Processes for Performing	Processes for Evaluating
Person- focused Processes	For example: Network building	For example: Communicating	For example: Reflecting
Business- focused Processes	For example: Agenda setting	For example: Agenda execution	For example: Monitoring
Information- focused Processes	For example: Building info platforms	For example: Utilizing info platforms	For example: Evaluating info platforms

Figure 14 A Framework for Three Levels of Management Processes

The purpose for using this framework derived from a combination of different classifications (e.g. Garvin, 1998; Lundeberg, 1993) is to apply a structure to the discussions of the empirical findings which is in line with the process view in the study. The framework may also help to capture different aspects of the empirical findings in order to present a holistic picture.

4.2.4 How Is the Managerial Agenda Formed?

"...managing is not merely a series of mechanical tasks but a set of human interactions." (Teal, 1996, p. 36)

Managerial Agendas and Their Purposes

A manager's work can be viewed in terms of the execution of an agenda (Kotter, 1982). The agenda concept can be used in various forms, ranging from an overall description of the long-range goals for the organization, to a list of issues to deal with during a meeting. The forms of agendas can also vary considerably: "subconscious mental notes, scribbled scraps of paper, and elaborate lists and charts" (Barry et al, 1997, p. 26). More specifically agendas can be seen to differ in four fundamental ways: size, focus (time and task), specificity and prioritization (ibid, p. 28).

The agenda perspective provides a view that assumes that new issues on the agenda are dependent on the set of issues that have already caught the manager's attention (Dutton, 1986, p. 15). This view in turn builds on the assumption that time and attention of managers are critical and limited resources and allocated to different issues according to different forces (Dutton and Ashford, 1993).

This may sound like a rational description of managers with a number of issues that nicely are fit on an agenda according to some rules for prioritizing. The reality is, of course, much more complex. There are political forces trying to convince managers to include different issues on their agenda, issues are "sold" to managers (Dutton and Ashford, 1993) and there are types of issues that cannot be divided between different persons, but included on the manager's agenda (cf. discussion on division of managerial work by Tyrstrup, 1993). As the introductory Teal quote indicates: even if an agenda consists of different tasks, it is mainly a matter of human interactions.

Different Types of Agendas

The concept "agenda" is used in different contexts: strategic agendas (Dutton, 1986), agendas for general managers (Kotter, 1982), life agendas (Carroll and Gillen, 1987), etc. One view of any type of agenda is to see it as an array of issues at any point in time (Dutton and Duncan, 1987). Agendas can be linked to a person (a manager in this context) or to an organization. Given the scope of this study the focus will be on agendas for managers.

Personal agendas can be divided into *life agendas* focused on personal goals like career goals and concerns about families etc (Carroll and Gillen, 1987, pp. 45-46) and *managerial agendas* (Carroll and Gillen here talk about "managers' work agendas"). The managerial agendas can, in the perspective of personal agendas, be regarded as means to fulfil parts of the life agendas.

Managerial agendas can be divided into *goal agendas* focused on a set of desired future states (Carroll and Gillen, 1987, p. 45) and *task agendas* (ibid, p. 46). The goal agendas correspond to the agenda concept as used by Kotter (1982). The task agendas are more specific agendas with tasks serving as means to fulfill the goal agenda and can thus help the manager both to focus on the issues of central concern and to help the manager with the schedule on a day-by-day basis (Mintzberg, 1994, p. 14). An overall purpose with agendas in managerial work is to help managers cope with job realities (Barry et al, 1997).

Formation of Agendas

A key question is how the agenda is formed? According to agenda building theory the issues and the organizational contexts determine what issues are included on the agenda (Dutton, 1986). Agenda building is here referred to as "the process through which strategic issues gain decision makers' attention and are legitimated in the organization" (Dutton, 1986, p. 3), where a strategic issue is seen as "a forthcoming development, either inside or outside of the organization, which is likely to have an important impact on the ability of the enterprise to meet its objectives" (Ansoff, , 1980, p. 133). In the context of this study general managers are the "decision makers". Dutton summarizes the factors influencing whether an issue is included on the agenda or not in the model shown in Figure 15 below.

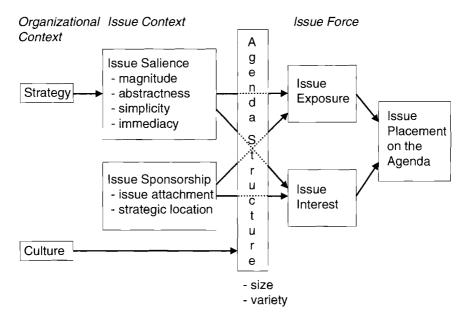


Figure 15 The Issue Context and Its Effect on Agenda Building (Dutton, 1986, p. 8)

Dutton points to two components in the issue context influencing the agenda building: the perceived attributes of an issue (issue salience), and the political foundation of an issue (issue sponsorship). The influence of these components depends on the size and variety of the agenda (agenda structure). As shown in Figure 15 above there are also components in the organizational context influencing the agenda building (strategy and culture).

Once again this may sound like a rational description where a number of factors easily can be described which then, according to some implicit or explicit rules, result in a managerial agenda. Reality is more complex. Managerial agendas are influenced in various arenas through interaction with various persons, often in form of informal small talk (cf. Sjöstrand and Tyrstrup, 2001). That is, a managerial agenda is developing over time, influenced by a social context. There may also be specific events in the environment causing dramatic changes in the managerial agenda, such as a hostile takeover bid (cf. Sjöstrand, 1997).

This means that when discussing the formation of managerial agendas, factors regarding specific issues are of importance (how issues are presented etc), but the context of the agenda formation is also of vital importance. The context

can be seen in a social dimension where interactions with other persons, both within and outside the managers' own organization, are of importance. The context can also be seen in an environmental dimension where events, which cannot easily be influenced, themselves influence the formation of managerial agendas.

Managing Agendas

In the model of agenda formation presented above in Figure 15 there are eight different factors in the issue context that influence the likelihood that issues are included on the managerial agenda. These factors are related to an issue's salience (magnitude, abstractness, simplicity and immediacy), sponsorship (issue attachment and strategic location) and the agenda structure (size and variety). Different examples of tactics linked to the eight factors are illustrated in Table 16 below.

Factors	Modifying Tactics	
Issue salience		
Magnitude	Magnify the issue vs. Minimize the issue	
Abstractness	Cloud the issue vs. Narrow down the issue	
Simplicity	Tie the issue to other concerns vs. Go to the heart of the issue	
Immediacy	Make the issue pressing vs. Play down the issue	
Issue sponsorship		
Issue Attachment	Alter issue attachment e.g. build personal commitment	
Strategic Location	Alter strategic location of issue sponsor e.g. expand bases of power	
Agenda structure		
Size	Alter agenda size	
Variety	Alter agenda variety e.g. committee membership	

Table 16 Tactics for Influencing Agenda Building (partly based on Dutton, 1986)

As shown in Table 16 there are different factors that could be influenced when trying to manage the agenda. The different factors are often combined when trying to increase the managerial attention paid to an issue. For example

someone can try to "sell" the issue to the manager by framing the issue in a certain way (cf. Dutton and Ashford, 1993).

The framing aspect of issues is important because framing influences the understanding of issues (Fairhurst and Sarr, 1996). Different language forms can be used to build frames of issues: metaphors (likeness), jargon and catchphrases (familiar terms), contrast (opposite), spin (positive or negative light), stories (more real) (Fairhurst and Sarr, 1996, p. 100). The use of metaphors has attracted a considerable amount of interest (e.g. Morgan, 1986) and can be analyzed in terms of different usages of language, but these factors will not be elaborated here as this would be beyond the scope of this study.

The managerial agenda is constantly changing as new information is received and new opportunities arise (Carroll and Gillen, 1987, p. 45). Here general managers actively search for information from different sources, which then in turn influences the formation of their own agendas (Kotter, 1982, pp. 60-67). The personal network is thus closely related to the dynamics of the agenda. According to Kotter (1982), a personal network is used not only for executing the agenda, but also plays an important role in the dynamic formation of the managerial agenda (cf. Sjöstrand and Tyrstrup, 2001). Yet another aspect influencing the dynamics of agendas is the entrance of new individuals to the organization, who may open the door for radical changes concerning issues on the agenda (cf. Dutton, 1986, p. 15).

4.2.5 How Do Managers Learn?

'It is impossible for a man to learn what he thinks he already knows." Epictetus (50-130 AD) (from Wurman, 1989, p. 158)

Single-Loop and Double-Loop Learning

In some sense trying to answer the question about how managers learn is an impossible task. Nevertheless I will address the question here in light of the evaluating processes in managerial work (cf. discussion on management processes in section 4.2.3). As discussed above (see section 4.2.1) managerial work is not easily observed in general. This also applies to managerial learning, particularly as such mental processes are not easily observable and thus not subject to study by observation alone (Carroll and Gillen, 1987, p. 46). In my study I include some aspects on managerial learning in the interpretation of different types of behavior, although the focus per se is not on the mental and learning aspects. I will limit the discussion to a few theoretical foundations which I will use later.

One view of learning is to distinguish between two types of behavior learning: single-loop and double-loop learning (Argyris and Schön, 1974, 1996; Ashby, 1952). Single-loop learning refers to "instrumental learning that changes strategies of action or assumptions underlying strategies in ways that leave the values of a theory of action unchanged" (Argyris and Schön, 1996, p. 20), while double-loop learning refers to "learning that results in a change in the values of theory-in-use, as well as in its strategies and assumptions" (ibid, p. 21). Expressed differently one could say that single-loop learning means learning within given setting and frames, while double-loop learning means changing the setting and moving beyond the frames. One example used to illustrate single and double-loop learning is a thermostat (Argyris, 1994). On a singleloop level the thermostat measures the temperature and adjusts the heat source according to a standard setting; on a double-loop level the setting for the temperature is challenged, and the heat source could be questioned, as well as why the current setting was chosen (ibid). That is, double-loop learning means questioning, not only facts in the situation, but also reasons and motives behind the situation (ibid). Argyris and Schön have borrowed the concepts single-and double-loop learning from Ashby's distinction between different feedback-loops (Ashby, 1952).

It is interesting to note that we might have a situation which almost seems like a paradox here (cf. Argyris and Schön, 1996). Behavioral strategies that are perceived as effective in managerial work (at least in a short term) might increase the likelihood of learning only at a single-loop learning. This means that effective routines for corrections in managerial work may reduce the likelihood of questioning the behavioral actions, and thereby the likelihood for double-loop learning. Correspondingly, according to this line of reasoning, an ineffective behavioral action could actually increase the likelihood for double-loop learning as this behavioral action could cause situations where the actions have to be questioned.

The distinction between these two types of learning (single and double-loop learning) can be expressed in different ways. Vandenbosch and Higgins (1996) for example discuss learning aspects in terms of *mental model maintenance* and *mental model building*, where mental model maintenance is similar to single-loop learning, and mental model building is similar to double-loop learning. The point here is to illustrate that there is a distinction between learning within a given setting ("single-loop" or "maintenance") and learning which changes the given setting ("double-loop" or "building") as described in Table 17 below, rather than to give a full account of different types of distinctions in a learning context.

Type of Learning	Explanation
Double-loop learning	Learning and changes of given settings
	"Beyond existing frames"
Single-loop learning	Learning and changes within given settings
	"Within existing frames"

Table 17 Single and Double-Loop Learning (partly based on Argyris and Schön, 1974)

Single-and double-loop learning can be seen in terms of a general model with not only two different states. Bateson (1972, p. 293) distinguishes between *Zero learning* which is characterized by specificity of response which – right or wrong – is not subject to correction. *Learning I* which is a change in specificity of response by correction of errors of choice within a set of alternatives. *Learning II* which is a change in the process of Learning I, e.g. a corrective change in the set of alternatives from which choice is made, or it is a change in how the sequence of experience is punctuated. *Learning III* which is a change in the process of learning II, e.g. a corrective change in the system of sets of alternatives from which choice is made. *Learning IV* would be change in Learning III, "but probably does not occur in any adult living organism on this earth" (ibid). This view of different types of learning is in line with the discussion on hierarchies of classifications (see section 4.1.3 on logical levels).

Besides individual learning one can also talk about organizational learning (e.g. Senge, 1990), which can be seen as a wider context to individual learning in managerial work.

Organizational Learning

Organizational learning has attracted a considerable research interest (Huber, 1991; Miner and Mezias, 1996) and the topic has been approached from several different disciplines (Easterby-Smith, 1997). There are many different definitions for the concept organizational learning (see Tsang, 1997, for a review of definitions) and different typologies of organizational learning systems (e.g. Shrivastava, 1983).

Given the information and communication perspective in this study, the study on organizational learning by Daft and Huber (1987) is of special interest because they propose a communication framework for analyzing how organizations learn. In their view organizations must solve two problems in order to learn: to acquire and distribute information and to reduce equivocality, devel-

oping a shared interpretation of messages (ibid, pp. 10-11). In other words they suggest that there are two potential problems for an organization to learn: *a logistic problem* concerning the amount of information available, and *an interpretation problem* concerning the equivocality of information.

This approach to organizational learning can be seen in the light of the infological equation (see page 74 above). That is, the potential logistic problems are linked to the "Data" in the equation and the potential interpretation problems are linked to the "Frame of references". The linkage between the communication framework suggested by Daft and Huber (1987) and the infological equation is another view of the link between individual and organizational learning (cf. Kim, 1993).

Learning and Reflection in Managerial Work

One aspect of learning in managerial work is to relate it to reflection in a manager's work (cf. Schön, 1983). Given a manager's type of work (see section 4.2.2 above), the time available for reflection is limited (cf. Carlson, 1951, pp. 71-74) with the result that many managers do not reflect carefully on their actions (Senge, 1990, p. 303). Still reflection can be seen as an important source for learning, and the responsibility for taking the time for reflection rests on the managers themselves (Daudelin, 1996).

In order to include reflection, and thus learning, in managerial work, reflection-in-action becomes important (Schön, 1983). This means finding ways to reflect *im* managerial action, and not only reflect *om* action, where the reflection is taking place before or after some activities. Sometimes reflection-in-action is triggered by uncertainty and may raise a question like "This is puzzling; how can I understand it?" (ibid, p. 241). Reflection-in-action can sometimes be regarded as improper or even dangerous as the reflecting would interfere with doing things (cf. ibid, chapter 9). The point is, however, that reflecting while acting can mean only split-seconds, like for example when a tennis-player plans the next shot (ibid). The reflection skills often start with recognizing leaps of abstraction, that is to move between different levels of abstraction (Senge, 1990, p. 192). Reflection is one aspect of learning, and it is important to bear in mind that different persons have different learning styles (cf. Kolb, 1984) with different emphases on reflection in the learning process.

Learning in managerial work can be related to difficulties, illustrated for example by defensive actions which inhibit learning (cf. Argyris, 1982, p. 230). Nevertheless, learning is an important part of managerial activities and the knowledge base could be said to be one key factor in the performance of

managers (Carroll and Gillen, 1987, p. 46). Learning is not only important for a manager's own learning processes, but a manager also plays a significant role for the learning among other persons in the organization (Senge, 1990). A manager can, for example, take different roles in relation to learning among persons in the organization (as mentioned in section 4.2.2): as a *designer* to design the learning processes; as a *steward* to give meaning to the vision and to put the vision in a larger meaningful context (e.g. by story telling); as a *teacher* to foster learning for everyone (ibid, pp. 339-357). The managerial work thus influences the learning culture in an organization (Schein, 1992, chapter 18).

4.3 Information and Communication in Managerial Work

This section brings together the two fields of information/communication and managerial work that have been discussed so far in the chapter. When discussing information and communication in managerial work, there are several questions that are important to address both regarding the information per se (such as: What types of information? What sources of information? What media? etc) and regarding the use of the information (such as: What are the triggers for using the information? In what context is the information used? How frequently is the information used? etc). First, this section will focus on the former issue in terms of information to support managers. Then, it will focus on the latter issue in terms information and communication use in management work. Finally, it will discuss previous work with a special focus on information for management control and action.

4.3.1 Information Needs and Requirements – What to Find?

"It is also difficult to know what information is needed and how to get it. And there is just so much potentially relevant information." (Kotter, 1982, p. 76)

'Information has economic value if it leads to the satisfaction of human desire." (Dertouzos, 1997, p. 236)

As the first quote above illustrates, previous research has pointed to the difficulties in determining general managers' information needs (e.g. Kotter, 1982; Davenport, 1997). And as the second quote illustrates, information has a value if it meets some needs (Dertouzos, 1997). The question is how to determine information needs of managers?

The information requirements cannot easily be caught in short interviews given the complexity of managers' work and their information environment (Davenport, 1997, p. 120). Determining information requirements of managers is a complex task as information plays many different roles in a manager's work. Davenport raises the question that perhaps the real issue is not to find the information needs, but to make sense of the business world and understand the managerial work (ibid, p. 138). This means that the real issue may be to learn more about managerial work and the actual use of information in order to understand information needs (cf. Mintzberg, 1973, p. 150). Research has long pointed to and discussed difficulties in determining general managers' information needs, and that it seldom is successful to simply ask executives about their information needs (e.g. Daniel, 1961). One reason is that executives usually do not know what information they really need (e.g. Ackoff, 1967; Wetherbe, 1991)

Nevertheless much attention has been paid to different techniques for determining information requirements (e.g. Byrd et al, 1992) including in a managerial context (e.g. Watson and Frolick, 1993). In research on determining information needs in managers' work, often with the purpose to build information systems, there seems to be an underlying, explicit or implicit, rationale built on decision-making, even if there are exceptions (e.g. Ims, 1987). Although research on managers' work has shown that decision-making is only one aspect of many in managerial work as discussed above (see section 4.2.2), attempts to capture information needs still seem to take their starting-point in decision-making activities.

In spite of difficulties, the determination of executives' information needs is important for building useful management information systems, which also has been known for a long time (e.g. Daniel, 1961, p. 113). The importance does not automatically mean that the determination of information needs is carried out successfully. Most information systems – formal or informal – to support managers, do not meet executives' needs (Wetherbe, 1991).

Several attempts have been made to find useful methods for determining executive information needs, and successful attempts are aid to provide insights into how managers work (Watson and Frolick, 1993). One method which has attracted a considerable amount of interest is the critical success factors (CSF) method developed at MIT (Rockart, 1979). This method focuses on individual managers and on each individual manager's current information needs (ibid, p. 85). The roots of this method could be found in work by Daniel

(1961) who introduced the concept "success factors". Basically CSFs could be described as a few key areas where things must go right (Rockart, 1979).

Furthermore it is shown that there are significant benefits to be had from taking the time to reflect on critical factors for each general manager in an organization (ibid, p. 88). It is worth noting that Rockart talks about "data needs" instead of "information needs", which could be seen in light of the previous discussion on the infological equation (see section 4.1.1).

Information needs for general manager are shown to be challenging. One explanation is suggested in terms of the manager's position as "the neck of an hourglass" (Mintzberg, 1973, p. 48). That is, there are information flows to him or her from various external contacts and the same goes for internal contact. Contrary to this argument one could argue that the same line of argument could be applied to quite a few members of an organization – not the least in light of the information technology offered for communication purposes.

In spite of the process of determining information needs having been described as difficult, Peter Drucker addresses the issues in an article (boldly) called "The Information Executives Truly Need" (Drucker, 1995). In addition to suggesting four basic types of information an executive needs (foundation information, productivity information, competence information, and resource-allocation information), he makes the following comment on the nature of information that an executive needs:

"An adequate information system has to include information that makes executives question [...] assumption[s]. It must lead them to ask the right questions, not just feed them the information they expect." (Drucker, 1995, p. 61)

This comment points to the issue that a general manager may need information that makes him or her ask questions, which in turn may be a result of *not* always get the information one wants. The pursuit of information needs may be a trap. To a certain extent general managers may need information which rather makes them challenge assumptions and ask questions as Drucker points out in the quote above (cf. double-loop learning).

4.3.2 Information Search and Scanning – How to Find?

"Most managers spend half their time trying to get the information they need" (Wetherbe, 1991, p. 51)

Basically information can be acquired in two fundamental ways (cf. Vandenbosch and Higgins, 1996): by scanning (Aguilar, 1967) and by focused search (Huber, 1991). The two ways could also be seen as *proactive* mode and *reactive* mode of acquiring information (El Sawy and Pauchant, 1988).

In the first type of information acquisition, managers' proactive scanning of the business environment for information, Aguilar (1967, pp. 19-22) distinguishes between four different modes of environmental scanning, see Table 18.

Type of Scanning	Explanation	
Undirected Viewing	general exposure, no specific purpose	
Conditioned Viewing	directed exposure, sensitive to particular data	
Informal Search	active search, limited effort with specific purpose	
Formal Search	deliberate effort to secure specific information	

Table 18 Four Modes of Environmental Scanning (Aguilar, 1967, pp. 19-22)

Which mode of scanning that is used is determined by the situation: which information is needed and available, which resources are available to obtain the information and what other issues there are to pay attention to (see Sproull, 1984, for a discussion on managerial attention). One example of a type of scanning given a popular name is "management by wandering around" or simply "MBWA" (cf. Peters and Waterman, 1982, p. 122).

The second type of information acquisition, managers' reactive focused search, means to "actively search in a narrow segment of the organization's internal or external environment" (Huber, 1991, p. 97). There are difficulties trying to draw a distinct border between scanning and focused search, as the latter could be regarded as one special case of scanning. One rather could see the information search activities as a spectrum from undirected viewing to formal search (to use the terminology suggested by Aguilar, 1967).

Correspondingly there are difficulties trying to separate information acquisition from interpretation and action based on the information, as the processes are reciprocal (Thomas et al, 1993, p. 240). All these processes could be seen as being part of a general "sensemaking" process (cf. Weick, 1979, 1995) where the manager is trying to make sense and learn in order to take action (cf. Kuvaas, 1998). This could be seen in a wider organizational context, where organizations can be seen as interpretation systems and the following are suggested to be fundamental steps: scanning (data collection), interpretation (data given meaning) and learning (action taken) (Daft and Weick, 1984).

These steps can be compared to general models for development processes discussed below (see section 4.4.1)

The concept of scanning is closely related to the person and can be elaborated into different types of scanning and different information scanning styles. Martin and Martin (1989, pp. 394-396) found that general managers tend to lean toward different information scanning styles, and identified four different styles: seeking style, sensing style, waiting style and delegating style. In their conclusions, Martin and Martin stress that "information gathering is a powerful executive communication strategy" (ibid, p. 397) and that the combination of different styles is important in the process of information acquisition. Their conclusion illustrates that the way managers search for information sends signals and influences other persons in the organization (cf. Mårtensson and Mähring, 1992).

Even if different types of scanning and seeking styles can be derived as described above, the different archetypes are most likely to be combined into different patterns and evolve over time. Previous research has for example suggested that organizational newcomers tend to be proactive in their information seeking (Morrison, 1993).

A quote from an interview with a top executive illustrates the difficulties in mapping information search and scanning in managerial work:

"This is a difficult subject to talk about because it is so much a part of everyday goings-on that one does not think about it. It is as if you were asking someone how he walks. He would probably tell you that he puts one foot in front of the other...and find it difficult to say much more." (a top executive quoted in Aguilar, 1967, p. 18)

That is, a large proportion of managerial activities consists of searching and scanning for information – with or without a specific purpose. The discussion in this section has pointed out that this embedded part of managerial activities can be structured according to different classifications. Nevertheless, in managerial activities the different types of search and scanning are likely to be mixed and combined in various ways depending on the situation and people involved.

4.3.3 Information Sources – Where to Find?

"A weekday edition of The New York Times contains more information than the average person was likely to come across in a lifetime in seventeenth-centure England." (Wurman, 1989, p. 32)

McKinnon and Bruns (1992) describe the information managers use in terms of an *information mosaic*, illustrating how pieces of information of different kinds and from different sources together form a picture for the manager. They conclude that there are five major sources of valuable management information: observation, their own work, other people, information repetitive reports, well-designed periodic reports (ibid, pp. 195-197).

General managers use a number of different sources of information for handling different issues on their agenda. During the last decade, research, mainly from the field of management accounting and control, has introduced a number of different models trying to capture different dimensions of information. One example is the so called "balanced scorecard" by Kaplan and Norton (1996) with four different perspectives of information: financial perspective, customer perspective, internal-business-process perspective, and learning and growth perspective. Another example of how different perspectives on information together form a rich picture for the manager is "levers of control" by Simons (1995). Here the author presents four different parts of control systems: beliefs systems (to inspire search for new opportunities), boundary systems (to set limits on opportunity-seeking), diagnostic control systems (to motivate, monitor and reward), and interactive control systems (to stimulate organizational learning).

A common pattern for these kinds of models is that they try to capture a rich picture of different types of information that managers use in a structure or model. These models can be used as tools when designing systems for the information flows and when changing the structures for control.²² The different examples also illustrate that triangulation (cf. discussion in the methodological chapter, see section 3.6.7) seems to be important in relation to information use in managerial work. That is, different pieces of a puzzle, or mosaic, are put together to give a good picture. How are the pieces chosen then?

Previous research on the characteristics of information perceived as useful in managerial work has found that the three most important characteristics of

²² Another common pattern in the examples mentioned above is that they all have roots in Harvard Business School.

information in order to be valuable are: timeliness, accuracy, and relevance (McKinnon and Bruns, 1992, pp. 197-201). In another study the most important characteristics were found to be: accuracy, timeliness, accessibility, engagement, applicability, and rarity of information (Davenport, 1997, p. 117). Taken together, these characteristics show that one main factor for what pieces of information managers choose for their information mosaic depends on the information itself and its characteristics.

There is another main factor influencing the choice of information sources and that concerns the specific *situation*. Research has for example shown differences between the choices of information sources at different stages in a decision-process (Saunders and Jones, 1990). Another aspect of the situation is related to the political power of information (illustrated by the characteristic of rarity above, i.e. information is perceived as more useful when it is rare). Information flows in organization have political dimensions and it is of importance for managers to harness the power of information politics (Davenport et al, 1992). There are also information flows, like gossip, which is of importance to take into consideration (cf. March and Sevón, 1984).

Regarding choices of information sources it has been found that a manager's background, in terms of education, etc, plays a role (McKinnon and Bruns, 1992, pp. 206-208). Managers with an accounting degree for example tend to view financial information as more useful than those without an accounting degree (ibid). That is, a third main factor is related to the *individual*.

To summarize the choices of information sources, one could say that there are three main factors influencing the choices:

- the information
- the situation
- the individual

Basically one could say that these three factors influence the choice of information sources, but it is worth bearing in mind that ultimately managers value information that they perceive as trustworthy and useful in their work (McKinnon and Bruns, 1992, p. 193). Following from this, two of the most important sources from the list above are personal observation and management work itself (ibid). A third important source is other people – when they have established themselves as reliable providers of information (ibid). The importance of human sources of information has been stressed in various studies (e.g. Keegan, 1974).

4.3.4 Information Media Choices

"...neither providers nor users of information have a well-developed sense of what media are appropriate for what purpose" (Davenport, 1997, p. 127)

Much research has been conducted on media choices (a compilation of previous research is found in Carlson and Davis, 1998). One line of research which has attracted a considerable amount of interest in previous work on information media choices is the information-richness theory (Daft and Lengel, 1984; Daft el al, 1987). The theory, originally proposed as a prescriptive model, basically says that different communication media have different information richness, like Table 19.

Communication Media	Information Richness	
Face-to-Face Communication	highest	
Telephone	high	
Written, Personal	moderate	
Written, Formal	low	
Numeric, Formal	lowest	

Table 19 Media and Their Information Richness (Daft and Lengel, 1984, p. 196)

The richness is defined as the potential information-carrying capacity of data (ibid) and research has shown that managers prefer rich media for ambiguous communication and less rich media for unequivocal communication (Daft et al, 1987). One strength of the theory is its simplicity, that is, the theory explains and illustrates rather complex phenomena in a simple way. The simplicity is also its main weakness. The theory has opponents arguing for a need to take more social factors into consideration, and not only describe communication processes in terms of rational comparisons between objective characteristics of media and contents of messages (e.g. Webster and Trevino, 1995).

Recent research has included even more harsh statements about informationrichness theory showing that there is no support for the proposition that matching media richness to task equivocality improves performance (Dennis and Kinney, 1998). Arguments have also been raised calling for new theories that better explain performance effects when new media are used, instead of adapting theories from old media (ibid).

In investigations of the use of new media, such as electronic mail, different theories have been used in order to explain choices of media, like for example critical social theory (Ngwenyama and Lee, 1997). It is worth noting that in spite of new electronic media in the communication area, business travel continues to increase, which suggests that face-to-face meetings are important in a manager's choice of media (Webster and Trevino, 1995). On the other hand, it has also been shown that rich communication can take place through electronic communication (Lee, 1994) and that messages sometimes are sent through more than one medium (cf. Markus, 1994; Mårtensson and Mähring, 1992).

As research has shown, there are social factors influencing choice of media besides rational factors (e.g. Webster and Trevino, 1995). One example is that choices of media in themselves may send symbolic signals (or cues) and a manager can influence social meaning attached to different media through statements and actions (cf. ibid).

In research on media choices it has been found that reasons behind choices vary between managers on different levels: senior managers tend to choose media based on effects on themselves (ease of access and ease of use), while managers on lower levels tend to choose media based on effects both on themselves and on others (relationship-oriented and communication partner-oriented concerns) (Carlson and Davis, 1998). This finding is of particular interest when studying general managers on a senior level, as the ease of access and ease of use are highlighted as important factors. In light of this, the richness of a medium may not be that important, as long as the medium is accessible and easy to use. This discussion also points to reasons to be careful when applying information-richness theory as there are complex issues where different social factors may play significant roles in the choices of media, as discussed above.

4.3.5 Use of IT to Support Managers

"I'd stand on my hands two hours a day if I were convinced that it would make this company more successful." (an executive quoted in Boone, 1991, p. 2)

"Attempting to automate top-management information systems is the wrong way to tackle the problem." (Dearden, 1964, 134)

There has been a large amount of research focusing on use of information technology to support managers in their work. The idea that computers could be useful tools for managers has been explored over a long period of time: the Management Information System (MIS) concept in the 1960s (e.g. Ackoff, 1967), to the Decision Support System (DSS) concept (e.g. Keen and Scott

Morton, 1978), and to the Executive Support System (ESS) or Executive Information Systems (EIS) concept (e.g. Rockart and De Long, 1988). EIS has become the most common expression for this kind of systems lately, although the systems first were called ESS.

The basic idea has been to build computer-based systems to support managerial work, but attempts often have failed (e.g. Rainer and Watson, 1995). The two quotes introducing this section illustrate the situation: the first quote tells us that managers are willing and interested in using any tool that may help them in their job; the second quote that attempts to automate information systems may not be the right way to go. Since Dearden wrote about the issues in the 1960s the technological development has advanced tremendously, but the key issue here is to continue questioning the strong belief in technological solutions. One of Dearden's points was that:

"[M]ost companies can improve their management information systems considerably. In nearly every case, these improvements are in no way dependent on the use of a computer." (Dearden, 1964, p. 135)

The introduction of computers did not radically change the work of general managers (Dearden, 1983). More recent research has also pointed out that although technology can be part of a solution, technology alone is not a guarantee for better information for managers (e.g. McKinnon and Bruns, 1992, p. 194). As shown in research on building computer-based information systems in general, one important part of the process is to define information needs of potential users of the systems (e.g. Lundeberg and Andersen, 1974; Sundgren, 1996). In the context of managerial work it is difficult to define information requirements, and there is a need to learn more about the context (Davenport, 1997, pp. 136-140).

When developing a computer-based information system to support managers it has been shown that a major problem is to identify executives' information requirements (e.g. Watson and Frolick, 1993; Watson et al, 1995). Much research on the development of executive information systems (EIS) has been focused on different techniques for determining information requirements of managers (e.g. Watson and Frolick, 1993). Both systems analysts and researchers have shown an interest in identifying information requirements for EIS, and research has shown that information needs for an EIS seldom can be determined by using one single method (ibid).

Much research has been built on underlying assumptions that information needs in managerial work are rather static and that it is valuable to build information systems to support managerial work, often expressed in terms of decision-making (e.g. Wetherbe, 1991). Based on these assumptions, the reasons that information requirements are difficult to determine are presented, as well as solutions to the problems (ibid). There is also research pointing to variations in information needs, and thereby also the need to design systems to support decision-making which are flexible and possible to adopt to changing information needs (e.g. Leidner and Elam, 1995; Sundgren, 1996). The wider social context of the systems to support managerial work is often not taken into consideration to any greater extent.

Attempts to support managers with computer-based information systems have been made over a large number of years. In spite of many attempts, the number of successes has been limited. In a working paper on "Executive Information Support Systems" Rockart and Treacy (1980) wrote that:

"At the top executive level in most corporations there is very little perceptible impact from three decades of computer technology." (Rockart and Treacy, 1980, p. 4)

In a study of use of EIS in Sweden it was found that less than 20% of the 200 largest companies in Sweden had an EIS in 1995, and in these companies the top managers were not always the main users of the systems (Thodenius, 1996, pp. IV:5-8).

In spite of the difficulties in relation to development of IT-based support for managers and the limited number of success stories, there are managers who use computer-based information systems. Boone (1991) studied the use of computers among twelve top managers. Her findings include the need for the managers themselves to participate in the development process in order to design systems in accordance with business goals and information needs (ibid, p. 277). In other words, the knowledge about managerial information needs is a crucial factor when building computer-based information systems for managerial work, and it is very difficult for people designing these systems to know enough about the managerial environment.

Besides the critical factor of information needs, a number of additional critical success factors for executive information systems have been identified (Rainer and Watson, 1995). There are critical factors identified both in the development of the systems (e.g. executive sponsor, definition of information requirements, and top management support) and in the operation of the systems (e.g. timely information, efficiency improvements, and accurate information) (ibid). When motivating expensive development efforts of an executive information

system, one main argument is often to provide easier and faster information (Watson et al, 1995).

The perceived usefulness of computer-based support to managers does not only depend on the systems and the process to develop them, but also on the managers themselves. Not all managers find an EIS to their taste, even if the technology is available (Rockart and Treacy, 1982). One possible explanation may be found in that information systems driven by decision rationality may not be supportive in action rationality or narrative rationality (cf. Weick, 1995, p. 178). That is, underlying assumptions in computer-based support are not entirely in tune with managerial work, and there is a need to know more about what is supported (ibid, p. 179). In other words there is a need to focus on the fit between the information systems and their organizational contexts of use, the organizational validity (cf. Markus and Robey, 1983). Concerning decision rationality vs. action rationality, there have been arguments raised that an information system designed to provide objective, precise and comparable information may help to increase understanding, but not necessarily be totally adequate for taking action (Argyris, 1980).

In a study by Vandenbosch and Higgins (1996), learning aspects in relation to information systems for executives were investigated in terms of mental model maintenance (reproductive thought, assimilation, accretion) and mental model building (productive thought, accommodation, structuring). Their findings show that information scanning (cf. section 4.3.2 above) can lead both to mental model maintenance and building, whereas the focused search rather implies mental model maintenance. Among their conclusions was that executive support systems contribute more to mental model maintenance than to mental model building (ibid, p. 210). These findings were later extended to claim that executive information systems contribute more in efficiency than to gains in effectiveness (Vandenbosch and Huff, 1997).

When summarizing previous work on use of IT to support managers there have long been indications that the practical potential of such systems seems to be limited, as described above. From a research perspective there have been voices saying that the field is in need of researching itself and needs to broaden its assumptions (Preston, 1991). Research in the area is said to be focused more on practical than on theoretical issues (ibid).

In spite of perceived difficulties, much attention still has been paid to this kind of systems. The technological solutions can offer many possibilities, but the link to the activities they are supposed to support is not always prevalent.

There seems to be underlying forces driving such systems and these underlying forces could be seen from different perspectives:

- technological driving forces: from a technological perspective the potential in computer-based information systems for managerial purposes is seen in terms like the systems have all this functionality and offer all these possibilities. Examples of people representing these driving forces are vendors of software or consultants developing such systems.
- supporting driving forces: from a supporting perspective the potential in computer-based information systems for managerial purposes is seen in terms like the systems offers possibilities to retrieve and combine information from various sources. Examples of people representing these driving forces are information providers like controllers at central staffs.
- pilot-using driving forces: from a user perspective the potential in computer-based information systems for managerial purposes is seen in terms like it is interesting to explore what these systems can offer, if anything. Examples of people representing these driving forces are managers interested in experimenting with new technology or in sending the message to other persons that they use new technology.

One possible explanation for the efforts put into the development of computer-based information systems for managerial use could be found in driving forces from a combination of these technological, supporting, and pilot-using perspectives. There seems to be a vision that possibilities offered by information technology ought to be put to practical use in managerial work. The dimensions of driving forces suggested above could help describe attempts to achieve this vision, which in some cases may turn out to be utopian.

4.3.6 Managerial Information Processing

"[T] he job of managing is fundamentally one of processing information, notably by talking and especially listening." (Mintzberg, 1994, p. 17)

Traditionally, providers of information to managers have focused on production and distribution of information, with limited notice of how the information is used (Davenport, 1997, p. 32). Even if there are different possible approaches to information in managerial work, these include human information processing when the information (or data) is interpreted into meaningful knowledge, and form a basis for different types of actions (Schroder et al, 1967). In human information processing a combination of different types of information reveals new patterns and contributes to a better understanding (cf.

Bateson, 1979, chapter 3), which makes it natural that a manager continually searches for information (McKinnon and Bruns, 1992).

There are links from this discussion to the question of why managers perceive needs for information. One answer to this broad question is that they try to reduce perceived uncertainty in managerial work (cf. Sjöstrand, 1997). Coping with uncertainty is in some sense the essence of administrative processes and a fundamental problem in organizations (cf. Thompson, 1967). Following from this, the question is whether more information actually reduces uncertainty or instead leads to another type of uncertainty sometimes called ambiguity based on large amounts of information (Weick, 1995). It is beyond the scope of this study to try to answer this question in full, but in the following I will discuss some aspects of information processing in managerial work.

The managerial information processing not only has implications for the managerial work per se, but also for the organization in a wider sense. Managers can influence mental flows for acquiring and processing information in an organization as part of their managerial activities to accomplish shared visions of the organization as well as of the environment (Hellgren and Löwstedt, 1997, p. 27).

When discussing information processing in managerial work, political aspects of information need to be included (cf. Davenport et al, 1992). Control of information plays an important role in mobilizing power in decision-making situations (Pettigrew, 1973). Often different kinds of executive summaries are used in the context of decision-making. From an information-processing point of view these executive summaries are described as clumsy tools for manufacturing new information patterns (Macdonald, 1995).

Cognitive aspects of managerial work are closely related to the information in managerial work (e.g. Walsh, 1995). These aspects can be regarded as internal information-processing aspects of managerial work (cf. Anderson, 1990). In some sense the question "how do managers think?" is impossible to answer simply. On the other hand there is some previous research that has tried to capture cognitive aspects on managerial work, like for example in studies by Isenberg (e.g. 1984, 1986).

Isenberg takes a starting-point in how managers do *not* think: it is hard to pinpoint if or when decisions are made, and they seldom think in ways that may be called 'rational', i.e. systematically formulating goals, assessing their worth, evaluating probabilities of options, etc (Isenberg, 1984, p. 82). Instead, senior managers tend to think about two kinds of problems according to

Isenberg: how to create effective organizational processes, and how to deal with one or two overriding concerns, as managers often are preoccupied with a limited number of general issues (ibid). These findings are in line with Kotter's findings regarding main activities of general managers, as described above.

Intuition is one word to describe how senior managers think, at least to some extent, and is something based on extensive experience and not the opposite of rationality (Isenberg, 1984, pp. 85-86). This means that the underlying experiences could be based on rational and logical analyses. One implication from the use of intuition in managerial work is that "thinking" is inseparable from acting (ibid, p. 89).

In a study illustrating both the close link between thinking and acting, and the use of information in these situations, there was a comparison between how experienced managers and students solve a business case (Isenberg, 1986). The findings included huge differences about how the two groups used the information they were provided. The managers did not collect all available information but came up with ideas for solutions before they had all information or had done a thorough analysis. Furthermore, they used their experience rather than additional case information to interpret the information presented and limited their search for information heavily (ibid, pp. 783-784). The way the managers acted in this study could be explained in terms of intuition, or rather a personal bank of experiences. In terms of the infological equation (see page 74) their frames of reference differ considerably from those of the students.

Managerial information processing influences the formation of the agenda. One reason for this is differences in perceptual filters, which amplifies relevant information and attenuates irrelevant information (Starbuck and Milliken, 1988, p. 41). For example, one person could perceive an increased importance of an issue when it is presented abstractly, while someone else could perceive it the opposite way, see the discussion on agenda formation in section 4.2.4.

The manager has been described in terms of an "information worker", a craftsperson whose raw material is information (McCall and Kaplan, 1990, p. 16). One can distinguish a number of different distinctions in relation to information for managerial work. For example, there is a distinction concerning sources: information from prepared information platforms and information from information improvising (from various sources). A second distinction concerns the formality of information: formal information and informal information. Third, there is a distinction concerning the degree of planning: information from planned activities and from unplanned. A fourth distinction

concerns the information contents: hard information ("objective" in some sense) and soft information ("subjective" in some sense).

All these dimensional pairs express possibilities for combining two parts: to combine two contradictory terms, and not to rely on one or the other. How a manager combines both rational and irrational approaches in his or her leadership has been described with the use of the metaphor of the double-faced god Janus (Sjöstrand, 1997). This metaphor can be used to illustrate the importance of combining two types of information in managerial work, not to rely on one or the other, but rather to use a combination where both parts are needed.

In managerial information processing one aspect worth noting is that people tend to think differently when understanding a problem vs. when taking action (Argyris, 1982). In terms of the infological equation discussed above (see section 4.1.1) a person makes interpretations, which then form the basis for actions of different kinds. One alternative view, which highlights the process factors, is to talk about sensemaking (Weick, 1995). The sensemaking in turn could then result in different frame-of-reference shifts (cf. Koestler, 1964; El Sawy and Pauchant, 1988), which may result in different types of actions. The results of the actions taken can then have both intended and unintended effects (cf. Schön, 1983, p. 153).

4.3.7 Information Overload?

"Managers are continually seeking, receiving, processing, and sending information." (McKinnon and Bruns, 1992, p. 105)

Managers use information from different types of scanning and searching activities, as discussed above (see section 4.3.2), and they create a sort of personal information system for their own use (McKinnon and Bruns, 1992). One driving force for the search for information is the need to reduce uncertainty, as discussed above.

The huge amount of information available is often described in terms of an information-overload problem (e.g. Shapiro and Varian, 1999, p. 6). But the question is to what extent this really is perceived as a problem in managerial work? In a study of 73 managers by McKinnon and Bruns no evidence for the phenomenon called information overload was found, as none of the managers interviewed complained of information overload (McKinnon and Bruns, 1992, p. 209). Instead the authors found managers using "enormous quantities of

data and information" (ibid). There was perhaps unwanted information, but this does not mean that there is an information-overload problem.

Development of information technology has offered new possibilities to produce information for manager, but the amount of information has long been described in terms of problems. The situation was for example described as an "information explosion" in 1971 (Dewhirst, 1971) and a decade earlier the problem with inadequate data and a "management information crisis" was described (Daniel, 1961). Yet another decade earlier Carlson reported that the number of pages in reports to managers had a tendency to grow more and more (Carlson, 1951, p. 89). That is, the perceived problem with the amount of information was discussed before the advent of today's information technology. Once again the question is whether there is a problem with information overload for managers?

One possible explanation is that there are differences in perspectives between persons describing the information situations and a managerial perspective. As the study by McKinnon and Bruns (1992) described above showed, there was no evidence at all of an information-overload problem among the managers in their study – in spite of huge amounts of information. Another possible explanation could be found in the information-processing capacity. It has been found that managers with limited information-processing capacity tend to interpret situations as more threatening (Thomas and McDaniel, 1990). The information-processing capacity may also influence the speed of decisionmaking processes, which according to some studies has emerged as an important issue in organizations' management processes (Davenport, 1993, p. 282). That is, a limited information-processing capacity may both make situations perceived as more threatening, and slow down decision-making processes (which may be a result of the perception of threats). It can be noted that accelerating decision-making involves not only information-processing aspects, but also confidence to decide as well as group dynamics if taking place in a group context (Eisenhardt, 1990).

This discussion may be interpreted as if information use by managers take place in rational processes aimed at decision-making. It is worth stressing that much information use (and non-use) is the result of political processes. That is, there are different political reasons for using and sending information (Davenport et al, 1992), and there is gossip which cannot easily be ignored (March and Sevón, 1984). Information is a source of power (e.g. Galbraith, 1973; Pettigrew, 1973) and the use of information can thereby also be a tool in a social context where actors use the information with different underlying

purposes. As an implication of this there are psychological costs for asking for information (Dewhirst, 1971) which may influence the use of information.

4.3.8 Information in Communication Processes

"[T]he essence of what management is all about: the effective use of language to get things done" (Eccles et al, 1992, p. 211)

'I have no illusions about how hard it is to communicate clearly and quickly to tens of thousands of people around the world. [...] You don't inform, you over-inform." (Percy Barnevik quoted in Taylor, 1991, p. 104)

Information use in managerial work is often part of communication processes as managers often are anxious to get information they have captured into the hands of other people as quickly as possible (McKinnon and Bruns, 1992, p. 125). There is a long research tradition to investigate communication aspects of managerial work (e.g. Barnard, 1938; Carlson, 1951; Galbraith, 1973; Kotter, 1982) which is hardly surprising, as research has shown that communication plays significant roles in managerial work (Hales, 1986), especially unplanned instant communication (Mintzberg, 1973, p. 36). In spite of previous research there are still arguments for more intensive studies to increase the knowledge of information use in managerial work (e.g. Ims, 1987).

Recent research efforts have investigated informal and invisible aspects of managerial work, which reveals that informal small talk is of significant importance in managerial communication (Sjöstrand and Tyrstrup, 2001). One possible reason for this could be that mangers have preserved the orality of their culture (Zuboff, 1988, p. 178). From an authority perspective this has been described as a way to protect "the opacity of their know-how" (ibid).

Communication takes place both for the functioning of an organization (e.g. March and Simon, 1958) and for the functioning of relationships (e.g. Schein, 1999). In other words there are needs for communication both in a task dimension, as well as in a relationship dimension (cf. Figure 11 on page 84). When talking about "needs" for communication, these needs could be seen in light of the importance of good communication for improving performance (cf. Argyris, 1994).

Basically managerial work includes communication relationships with three groups: superiors, subordinates, and persons outside the unit he or she manages (e.g. Mintzberg, 1973). The communication processes can be seen in two dimensions: vertical communication processes between superiors and subordinates, and horizontal communication processes between members of different

units providing input to or receiving output from each other (cf. Johansson and Östman, 1995).

Information use in vertical communication processes is based on information needs by superiors or subordinates and may be driven either by the superior making demands on the subordinates, or the subordinates requiring dialogue about demands (ibid, p. 17). Depending on the direction of the information flows in the vertical communication it is either downward or upward communication (Katz and Kahn, 1978, p. 440), and one type of vertical communication which has attracted research interest is between general managers (or CEOs) and board of directors (e.g. Kimberly and Zajac, 1988). In this type of dialogues there are different perspectives regarding aspects like for example the time horizon (e.g. Brodin et al, 2000).

The content of the vertical communication from superior to subordinates have been described to be of five basic types (Katz and Kahn, 1978, p. 440):

- job instructions (specific task directives)
- job rationale (understanding of the task and its relation to other tasks)
- procedures (information about organization procedures and practices)
- feedback on performance
- values (information of an ideological character, indoctrination of goals)

In attempts to influence subordinates, managers use different tactics (e.g. Lamude and Scudder, 1995). Here rhetorical theory can help explaining managerial activities (cf. Müllern and Stein, 1999). When trying to understand information use in dyadic communication processes one has to include control aspects and political aspects of communication. That is, communication is used to signal the degree of influence people have over another, which is known as relational control through communication (Farace et al, 1977, p. 53).

As described above, communication plays a significant role in managerial work. That is, time is spent on communication in different directions, with different stakeholders, and with different purposes. In communication processes there are misunderstandings, as communication is not always taking place without problems, and one problem in vertical communication processes is the tendency to evaluate and to misunderstand without really hearing the message (Rogers and Roethlisberger, 1991).

The complexity of communication processes in managerial work can be explained by the need to view the communication in its social context. Pieces of information in communication are used, intentionally and unintentionally,

as signals and symbols in a social context (cf. Feldman and March, 1981). This means that communication processes need to be seen in their wider context and informal small talk could help explain the communication processes (cf. Sjöstrand and Tyrstrup, 2001; Sarbaugh-Thompson and Feldman, 1998).

The communication processes could take place both when persons are physically present and absent, as it is possible to be available and unavailable in both cases (Sarbaugh-Thompson and Feldman, 1998). Here new information technology has opened for new possibilities, for example through electronic mail (ibid). A concept introduced with a purpose to increase the understanding of communication in organizations is "communicative genres" which draw on rhetorical theory and structuration theory (Yates and Orlikowski, 1992). A communicative genre is described as types of communication actions that are enacted by members of a community with a social purpose (ibid).

New technology changes communication in managerial work and new theoretical concepts help explain communication processes in managerial work. Not only does communication play important roles in managerial work, as described above, but the importance of communication increases when the nature of managerial work changes over time. According to some research there is a shift taking place from managing through specific rules, instructions, to managing through ideas and visions (e.g. Sandberg and Targama, 1998). The role of managers to get subordinates to make their own judgements and decisions is becoming more important. This in turn places demands on communication processes, and the managerial role often becomes a more consultative role (ibid).

4.3.9 Information for Management Control

"Managers do not see themselves as puppets, but many worry about whether they are sufficiently in control, or indeed know what is going on below them." (Stewart, 1988, p. 118)

Management control is used here according to the following definition: "Management control is the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives" (Anthony, 1965, p. 17). Anthony made a distinction between management control (implementing a given strategy on organizational level) and operational control (controlling specific operations). The control in itself aims at providing means to compare performances with norms, forecasts and goals (Vickers, 1967, p. 27).

Behavior control and output control are two basic modes of organizational control which are not interchangeable, but rather are independent of each other (Ouchi and Maguire, 1975). These basic modes could be compared to the dimensions in the model for describing aspects of processes (see Figure 11, page 84). Behavior control could be seen as focusing on the relationship dimension, whereas output control focuses more on the task dimension. Sjöstrand (1987) suggests three forms of organizational control as he also distinguishes between influencing input, in addition to behavior and output.

In control processes, managerial accounting plays a significant role and here agency theory is of fundamental importance (e.g. Baiman, 1990). Basically, agency theory says that there are agency relationships where one party (called principle) engage another party (called agent) in order to delegate rights and responsibilities for a task to be accomplished (ibid; Jensen and Meckling, 1976). The conditions in their relationship is agreed upon in some sort of contract between the parties. The principle-agent relationship is general and exists at every level of management in firms (Jensen and Meckling, 1976, p. 309), such as between a general manager and his or her subordinates, or between a board of directors and a general manager (cf. Kimberly and Zajac, 1988).

One type of information flow to managers (principles) is different types of management reports, where a special focus of previous research has been on accounting and financial reports together with reporting procedures. In the beginning of the 1970s, when computer-based accounting information systems were introduced, the condition for providing accounting reports changed, even if the introduction of computers in itself did not change decision- and information systems in organizations (cf. Östman, 1973). Technological development has continued and new solutions are offered, but the main purpose is still the same: to provide information to managers, and the technology in itself does not change the situation.

Johansson and Östman describe four basic functions of accounting information (1995, pp. 16-19):

- as direct aid for individual decision-makers (for own decisions, self-confirmation, and learning),
- as a means for vertical communication (between superior and subordinate),
- as a means for horizontal communication (for example between different units), and
- as an element in the business activity per se.

That is, accounting information for decision-making is only one example of use of the information, and it is important to view accounting reports in their wider contexts (cf. March, 1988, chapter 17).

The information could be seen in relation to fundamentally different mechanisms for coping with control: markets, bureaucracies, and clans (Ouchi, 1979). Basic information requirements vary between the three mechanisms: they focus on prices in markets, rules in bureaucracies, and traditions in clans (ibid). The aim of the different mechanisms is, in different ways, to achieve cooperation among individuals to accomplish partly divergent objectives (ibid). When applied in managerial practice, the different forms of control are combined and not mutually exclusive (cf. Holmberg, 1986, chapter 5). From an information perspective this means that different types of information are combined into suitable combinations, like an information mosaic (cf. McKinnon and Bruns, 1992).

During the last decade there have been several approaches to defining different dimensions of information in management control (e.g. Simons, 1995; Kaplan and Norton, 1996). These attempts could be regarded as ways to include a variety of different types of information in order to give a richer picture than just traditional financial information can offer, and in other words as attempts to structure the information mosaic.

Besides the information contents of management control, there are other factors influencing the design of management control systems: media and distribution forms, routines in control processes, incentive systems, and influence over information processes (Johansson and Östman, 1995, p. 339). These factors illustrate the complexity of designing and implementing management control systems (computer-based or not) as there are different stakeholders involved in the processes. Two major perspectives are the general manager perspective (information users) and controller perspective (information providers), where there are different types of controllers playing different types of roles (cf. Olve, 1988). The relation between general managers and information providers concerning their communication and closeness has shown to be important for the information support to managers (Mårtensson and Mähring, 1992).

One particular aspect of information for control is the *timing* of the information. Basically information can express demands in relation to expectations and then to conduct reviews (cf. Johansson and Östman, 1995). These reviews are means for interventions during a process and/or means for control after a process. That is, from a timing point of view one can distinguish between

information for control in relation to expectations (before), to interventions (during), and to outcomes (after). Here one can see the parallel to the basic modes of control described above: input control (before), behavior control (during), and output control (after). There seem to be three fundamental phases, which could be compared to the discussion on basic types of management processes, see section 4.2.3. Another aspect of timing in management control relates to the delay between an event and the information about the event (cf. Nilsson, K., 1999). Here there is a trade-off between time spent on producing the information (quality checks, etc) on the one hand, and the delay in the information on the other.

Information technology has opened for new possibilities to put "power in control systems" (cf. Bruns and McFarlan, 1987). But the information technology in itself is not the solution, as mentioned above. There are several different factors influencing information delays in control processes (Nilsson, K., 1999). IT-solutions may also turn out to cause problems in the sense that it may become so easy to produce different types of reports that the number of reports increases to a point when it becomes a problem. The increasing number of reports in Ericsson, for example, became a major problem at one point in time, according to the CEO²³. Here technological solutions may facilitate the introduction of new reports and cause problems. But information technology in itself is neither the solution, nor the problem in this case.

4.3.10 Action Aspects of Information Use

"Words may come and go, but action is always the managerial imperative." (Eccles et al, 1992, p. 1)

"The figures should be action-oriented" (Wallander, 1999, p. 413)

Although a number of previous sections have been on how to accomplish action implicitly through communication or control, this section will take its starting-point in previous work with the action perspective in focus. As the first introductory quote says, from some perspectives action is the key in managerial activities. The second quote illustrates an action-based perspective on information expressed by Jan Wallander, a former CEO of one of the largest commercial banks in Sweden. In his view, information which does not influence actual behavior should not be sent out at all (ibid).

²³ See article in the Swedish newspaper Dagens Industri, 12 August, 1999, p. 7.

There are close links between what is measured and the actions taken (e.g. Eccles et al, 1992), hence information in management control is related to aspects of action. The information could be said to influence cognition as well as motivation and commitment in order to achieve action (Swieringa and Weick, 1987). There are differences between individuals concerning use of information for action: some prefer a thorough analysis before taking action, while others may have their strengths in execution (Johansson and Östman, 1995, p. 20). The following quote by Percy Barnevik illustrates one perspective on analysis and action:

"I have found that execution, not strategy per se, is primarily what differentiates the winners from the losers..." (Barnevik, 1994, p. xi)

By execution he here refers to "the ways top management motivates and mobilizes the company's many managers and front-line employees and how management communicates with employees to achieve consensus" (ibid). To some extent there is a need both for a strategy (or analysis) and the execution of the strategy, but Barnevik makes the point that the execution, that is to achieve action, is the key challenge.

The more philosophical issue about how thought effectively could be combined with action has attracted much research effort and been described as having "plagued philosophers, frustrated social scientists, and eluded professional practitioners for years" (Argyris and Schön, 1974, p. 3). The two concepts thought (or analysis) and action (or execution) are fundamental, but the issue of combining thought and action will not be elaborated further here, as that would be beyond the scope of this study.

Action is usually taking place in a social context in relation to other persons, in interaction. This could be described as (inter)action to highlight the close links between action and interaction (cf. Sjöstrand, 1995, p. 22; 1998). Concerning social context and interaction, previous research has pointed to the importance of small talk (Ekman, 1999; Sjöstrand and Tyrstrup, 2001). That is, a line of action is agreed upon and partly achieved through informal conversations with persons.

Action can be managed *directly*, indirectly through *people*, or even more indirectly by *information* through people (Mintzberg, 1994), as described above in section 4.2.2. The representatives for the different approaches could be described in terms of *doers*, *leaders*, and *administrators* (ibid). The distinction between these three approaches can be seen as archetypes for managing action.

In practice managers use all three approaches in various combinations to manage action depending on the situation.

Circumstances attracting action have been described in relation to three elements: there is a perceived *problem*, there is some sort of external *pressure*, and there are necessary *resources* to take action (McCall and Kaplan, 1990, p. 41). One can argue that the pressure does not necessarily need to be external, but on the other hand internal pressure may derive from some sort of external demand. From an information perspective, information flows can help to identify a problem, to learn about different types of pressure, and to learn about available resources of different types. As discussed above, information plays many different roles including political ones, which may influence what actions are taken or not.

In literature discussing managerial action there is sometimes an underlying assumption that a manager can choose to act or not (e.g. McCall and Kaplan, 1990). One can question this assumption, as a manager constantly is acting by sending messages as "one cannot not communicate" (cf. the first communication axiom, see page 78). From a communication point of view one can therefore argue that a manager is acting constantly. The close links between speech and action has been elaborated above in the discussion on speech act theory (see page 87).

When studying action there is a fundamental difference between espoused theories of action and theories-in-use (Argyris and Schön, 1974; and reconstructed logic and logic-in-use, Kaplan, 1964). That is, a manager may for example express one type of action as being important (espoused theory) while acting in another way himself or herself (theory-in-use). Expressed differently, one could say that the harmony between what is expressed in words and what is expressed in action is important when trying to influence other people.

One aspect on action is to what extent action taken still allows for flexibility in future steps, sometimes referred to as *robust action* (Eccles et al, 1992). That is, when acting the future flexibility is of importance, which in turn points to the close links between vision and execution. I will end this section with another quote by Barnevik illustrating the importance of viewing action (or execution) in the context of other aspects in managerial work:

"I would argue, in fact, that the common thread among successful companies is their leaders' combination of vision, leadership, communication, and execution." (Barnevik, 1994, p. xii)

4.4 A Development Perspective

In this section aspects of a development perspective will be discussed. First there is a discussion on development processes of information systems and supporting structures, with or without the use of IT. The second part is focused on previous work on development of management processes. Finally, there is a discussion of first-order and second-order development processes, including ways to mishandle change and learning aspects of development processes.

4.4.1 Development Processes – With or Without IT

'Remember our 33 1/3 rule: if you're spending more than a third of your time, effort, and money on technology, you're neglecting the other factors [...] — the content, the organizational culture, the motivational approaches, and so forth." (Davenport and Prusak, 1998, p. 173)

Developing Supporting Structures

When developing supporting structures for managerial work one question facing managers concerns the right balance between building information structures that last and structures that can easily be modified (Davenport, 1997, p. 31). On one hand, systems and structures can be built for information support in the format of an infrastructure which is supposed to last. On the other hand, information could be collected more informally, for example through "management by wandering around" (Peters and Waterman, 1982, p. 122). The question is how to know when to build an information infrastructure and when to rely more on information improvising?

There is research arguing that companies overinvest in formal systems designed to get information to managers (McKinnon and Bruns, 1992, p. 216). The authors argue, however, that the solution is to improve the systems rather than abandon them (ibid). In addition to formal systems, every manager "develops" her or his own personal information system with a balance suitable for the individual in the particular situation (cf. McKinnon and Bruns, 1992, p. 215). One can note that the expression "information system" is used with various meanings in research on supporting structures for managerial work. In some contexts, information systems are equivalent to computer-based information systems, and in other contexts information systems are more systems of information in the original meaning suggested by Langefors when the term was introduced (see discussion on page 75 above). In order to avoid confusion

it is essential to distinguish between the different meanings (just like Langefors suggested and predicted a number of years ago).

As discussed earlier (see section 4.3.5) development processes for IT-based solutions to support managers often have led to results that are far from successful. There seems to be what is sometimes called "techno-utopia" (Davenport, 1997, p. 77) meaning: "As soon as we get the (fill in an information technology), we will be able to (fill in an information behavior)" (ibid, p. 78). An underlying problem here is that there is a confusion between IT-based solutions and their usefulness in information behavior, for example in managerial work. A development effort regarding an IT-based solution does not automatically result in a development in behavior. This may sound trivial, but unfortunately there seems to be confusion in these matters.

A possible difficulty in IT-development processes is that IT-specialists fail to build sufficient trust in the process (cf. Bashein and Markus, 1997). The magnitude of this problem is likely to increase given the nature of managerial work with limited time to spend with IT-specialists (cf. section 4.2.2). The possibilities for building sufficient trust in the development process may be limited, which in turn can increase the risk of failure in the development of supporting structures in the form of IT-based solutions for managers.

Nevertheless, the potential of IT is critical to the development of more effective management processes (Rockart, 1995). Regarding the use of IT for management processes, the general manager's vision is the key as it sets the tone, but the general manager cannot do it all (ibid, p. 168). It is important to emphasize, however, that the information technology per se is not the final solution, although it is an important part in the development processes. There is no single magic bullet to rely on in development processes (cf. Cooper and Markus, 1995, p. 49). But what role does the general manager have to play in development processes? To what extent can the "difficult" issues be delegated and to what extent does the manager has to involve herself/himself?

Managerial Involvement in Development Processes

When trying to address what extent managers need to involve themselves in development processes, one answer is, of course, that it depends on the process and the situation in general. Much research has been conducted investigating managerial strategies for handling information technology in general (e.g. Earl, 1989), general managers' responsibilities regarding IT-issues (e.g. Boynton et al, 1992), and about general managers own involvement in IT-issues (e.g. Jarvenpaa and Ives, 1991). One reason for general managers to

involve themselves is to help change the culture and perceived importance of the IT-issues (cf. Schein, 1992, p. 211) as the general manager's involvement in management of IT reflects the degree of importance placed on the issues (cf. Jarvenpaa and Ives, 1991, p. 206). Another reason for managers to involve themselves is to increase their own knowledge about an increasingly important issue, sometimes seen as a fourth major resource besides people, money and machines (Rockart, 1995).

Interesting to note is that much research in the area of managerial involvement is expressed in terms of "top management support" and is sometimes expressed in terms of *convincing* top management of the strategic potential of information systems (Lederer and Medelow, 1988). That is, there is a perspective of convincing "them" about the importance of IT-issues (cf. the discussion on agenda formation in section 4.2.4), which in itself may emphasize the differences between a general management perspective on the issues at hand and an IT-perspective on the issues. Instead of dealing with the underlying reasons for the differences in perspectives, techniques to overcome top management's reluctance to recognize the importance of IT are suggested (ibid, p. 529). One could question this type of "solution".

Discussions on managerial involvement in development processes concerning IT-issues have been running for decades (e.g. Rockart and Crescenzi, 1984). Senior executives have been described in terms of spectators in the development and use of information systems as in "it is time for top management to get off the sidelines" (ibid, p. 3). The importance of managerial skill to ask the "right" questions in the context of development of computer-based information systems has also been highlighted for a long time (e.g. Adams, 1972).

Focusing on how to convince general managers to involve themselves in development processes (whether including IT-issues or not) is to place a great focus on the *means* as opposed to the *goals*. Instead it could be seen as more important that the results are as good as possible for the organization.

Aspects of Development Processes

The link between, and emphasis placed upon, means and goals is of importance in change processes (e.g. Lundeberg, 1993). The need to view the development process in its wider context has been emphasized in theories on information systems development (e.g. Lundeberg et al, 1981). Here perceived needs in business activities can be seen as goals for development efforts regarding information systems, which thus in turn could be seen as means to fulfill these business needs. Different types of development efforts have been

distinguished in the form of strategic development, process development, and systems development in attempts to clarify how methods for development work are interrelated (Nilsson, A. G., 1999).

In later theories on change processes, business needs in turn have been put in their context in terms of people involved and their intentions (Lundeberg, 1993). Here theories of logical levels (see section 4.1.3 and Figure 9 above) can help describe how different contexts are interrelated. In Figure 10 (see page 83) three basic levels related to persons, business and information were described. These three components are closely interrelated and when discussing development processes they could be viewed as three dimensions useful for depicting development processes in a business context.

A development process can be placed in its wider context as described above. The process can also be seen in terms of interaction between change and evaluation (cf. Lundeberg, 1993). That is, in a planned change process one might choose a goal, conduct different kinds of change efforts, then evaluate, which in turn may lead to new change efforts, etc. This interaction between change and evaluation has been expressed in different terms, such as intelligence-design-choice in relation to decision-making (Simon, 1960) and test-operate-test-exit in relation to studies of behavior (Miller et al, 1960), as described above in section 4.2.3. These attempts to capture dynamics in development processes in different forms of plan-act-evaluation could be traced to cybernetic ideas (cf. Ashby, 1956; Wiener, 1961).

When discussing planning and evaluating in development processes there are links to the managerial roles in change processes. Many research efforts have been focused on aspects of leaders' roles in change processes, and much of the results of these efforts have been published with a practical and partly normative stance (e.g. Kotter, 1996). One particular aspect of leaders' roles in relation to development processes is related to the sense of urgency in the organization or the climate for change (cf. ibid, pp. 35-49). Research has pointed to the relationship between climate for change and an organization's culture (Moran and Volkwein, 1992). Furthermore is has been shown that interventions to change a climate need to consider patterns in the culture (ibid, p. 43).

4.4.2 Development of Management Processes

"[T] he nature of knowledge work is different from administrative and operational work and [...] people who perform it resist structured approaches." (Davenport et al., 1996, p. 53)

Hard and Soft Aspects

This section focuses more on the development of management processes as compared to the previous section where the discussion focused on development processes in general. Organizational change "always" requires significant change in people according to some research (Cooper and Markus, 1995, p. 49). When focusing on changes in management processes this means that managers must change themselves in order to achieve any changes in management processes (cf. Champy, 1995, p. 35).

As discussed above (see section 4.2.3) different management processes can be distinguished. Some management processes are more task-focused, while other are more person-focused (as discussed above). Nevertheless, there are arguments saying that every process has both task-oriented and person-oriented aspects, and when developing processes it is important to consider both aspects (Lundeberg, 1993).

This section's introductory quote indicates that managerial work, seen as a type of knowledge work, is different from administrative and operational work (Davenport et al, 1996). But even if this type of work differs from many other kinds of work, a process view may be helpful when trying to achieve improvements (ibid).

Much attention has been paid to attempts to change processes in organizations, but information and knowledge oriented processes have seldom been in focus (Davenport, 1997, p. 154). There may be two reasons for this. First, managers are not aware of the importance of these processes, and second the activities are difficult to address in process terms (ibid). Yet another possible reason could be found in theories on agenda formation (see section 4.2.4). That is, development of information and knowledge oriented processes could be difficult to include on the managerial agenda depending on the characteristics of the issue (cf. Figure 15, page 116).

Aspects of When and How

One question regarding development of management processes concerns when to develop this kind of processes. Prior research on management succession has shown how certain management processes are more in focus at an early stage, for example building working relationships with key subordinates (Gabarro, 1979). It has also been shown how different stages can be identified when managers take charge (Gabarro, 1987, chapter 2). In the "taking charge-process" in an executive assignment, early choices about controlling activities can be made in order to direct subordinates' attention to specific problem areas (Holmberg, 1986). That is, the focus on changing certain management processes may be ruled by intentions to send signals of importance of different areas.

Managerial actions are to a certain degree guided by personal motives (e.g. Holmberg, 1986). A consequence from this is that the timing of development of management processes to a certain extent is influenced by personal motives or needs. Personal preferences are likely to influence what and when management processes are changed. Some managers may have distinct plans for their actions on a detailed level as well on a career level, while others may not have this, or at least not explicitly (cf. Stewart, 1982). One answer to the question about timing is that development efforts will take place when there are sufficient driving forces for a change. In accordance with field theory all changes are due to forces which bring about the change (cf. Lewin, 1942).

Another question regarding development of management processes concerns how to develop this kind of processes. Here one can find previous work with a practical and normative approach describing how to design management processes and offering tools for doing so (e.g. Nøkkentved and Rosenø, 1995), or more generally about how to create values by getting processes "right" (e.g. Keen, 1997). Trying to look beyond this type of more normative literature, one can distinguish two fundamentally different avenues for developing management processes: maintaining old or building new processes (cf. discussion in section 4.2.5 on information acquisition and mental models in relation to work by Vandenbosch and Higgins, 1996).

These two fundamental avenues for developing management processes could be compared to the concepts of exploring new possibilities and exploiting old certainties, used in relation to organizational learning (March, 1991). That is, when changing management processes there may be a focus on exploitation in terms of improving existing processes (cf. maintenance), or there may be a focus on exploration in terms of developing new processes (cf. building).

These two different avenues link to the difference between first and secondorder development processes.

4.4.3 First and Second-Order Development Processes

"For the more complex and uncertain challenges they face today, managers must make second order changes, rethinking the patterns connecting the pieces. Such meta-level thinking is more fundamental and demanding, but it opens up correspondingly greater opportunities." (McCaskey, 1982, p. 4)

First-Order and Second-Order Changes

As indicated in the previous section, development of (management) processes can take place on two levels, or be of two different orders. There are first-order development processes where changes are taking place within a system, and there are second-order development processes where changes of the system are taking place (Watzlawick et al, 1974). The two orders could be seen as taking place on two different logical levels (Bateson, 1972; also see discussion in section 4.1.3 above).

The two fundamental different types of changes have become most well-known in a learning context through the concepts of single and double-loop learning (Argyris and Schön, 1974; see discussion above on page 118). That is, learning within given setting and frames, versus learning by changing the setting and move beyond the frames.

Three Ways to Mishandle Change

Watzlawick et a (1974) have suggested three basic ways of mishandling change, illustrated in Figure 16.

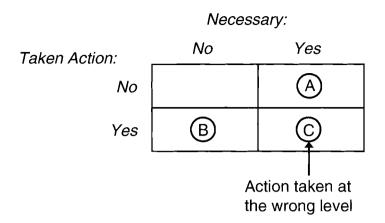


Figure 16 Three Ways of Mishandling Change (based on Watzlawick et al, 1974, p. 39)

The three ways of mishandling change could be described as: (A) action is necessary but is not taken, (B) action is taken when it should not be, and (C) action is taken at the wrong level (Watzlawick et al, 1974, p. 39). Action taken at the wrong level could mean that there is need for second-order change activities, but efforts are only made in terms of first-order changes. That is, more efforts will not help such a situation, instead there is a need for a shift in focus to change at another level. Underlying this view of change one could trace the theories of logical levels (as discussed above).

Learning Aspects

There are natural links between first and second-order development processes and learning aspects, as shown in the previous discussion. Beyond this parallel to single and double-loop learning one can view development processes from another learning point of view, that is, to see how people involved in (first- or second-order) development processes can learn from experiences.

One way of capturing these opportunities for learning is through reflection on action (i.e. on development efforts). In order to enhance the possibilities of learning in relation to development processes there is a need for an ability for "reflection-in-action" (Schön, 1983). This ability is not automatically taught in traditional educational institutions, but call for rethinking of education and is a challenging task for professional schools (cf. Schön, 1987).

Educating managers in reflection-in-action can in itself be seen as development of a second order. Learning could also in itself be seen in terms of two types change: changes in cognitive structures, and changes in motivation (Lewin, 1942). In these terms educating managers in reflection-in-action could be seen as belonging to the former type, changes in cognitive structures.

Changes, and learning in relation to them, are in some respect eternal issues, and at the same time there are trends in how both changes and learning are viewed. In some more recent literature on change (after Lewin) organizational change is described to be more process-centered, as opposed to being previously more structure-oriented (Keen, 1997, p. 11). This shift is in line with the argument presented by Ghoshal and Bartlett that the role of top management is changing beyond structure to processes (1995), i.e. to be not only about structures, but also about processes. The need to take both structures and processes into consideration is also expressed in theories on logical levels, as discussed in section 4.1.3.

Literature not only points to a shift in focus, but also to a change in use of language in change processes: from use of a language of control to a language that is appropriate for a situation which is not possible to predict (Keen, 1997, p. 11). There seems to be an underlying assumption that situations are more difficult to predict now, as compared to earlier situations. One could question the extent to which this assumption is correct, but it would be beyond the scope of this study to pursue this inquiry.

A final reflection when concluding this chapter on previous work is to ask to what extent the expression "structures of which we are unaware hold us prisoner" (Senge, 1990, p. 94) is applicable to research presented and discussed here? That is, in the spirit of second-order changes, or double-loop learning, one can ask to what extent research is developing new knowledge within the same old rut, and to what extent new knowledge of a second-order is developed? One illustration of when a researcher thinks beyond existing structures was when Vannevar Bush in the 1940s reflected on the development in society and how information could be stored:

"The Encyclopædia Britannica could be reduced to the volume of a matchbox. A library of a million volumes could be compressed into one end of a desk." (Bush, 1945, p. 103)

His vision about the library compressed into one end of a desk is now more or less reality, although with a new technology in the form of Internet.

4.5 Summary: Theoretical Foundations and Previous Work

In this chapter theoretical foundations and previous work have been described and discussed. The first part was on *information and communication*. Here the concept of information was discussed and the view presented that information is something relative which depends on the person interpreting some sort of data. Communication axioms were described including one which says that one cannot not communicate, that is we are all communicating all the time, intentionally or unintentionally. The concept of logical levels was described as well as the systems approach. A framework for change processes including both a task-oriented and relationship-oriented dimension was discussed. The close links between communication and action were discussed in the light of speech act theory. The first part was concluded with a discussion on a holistic approach to information and communication, stressing the importance of putting information and communication in their wider context.

The second part of the chapter was on *managerial work*. This part started with a discussion of how managers can be studied. Here different approaches to studying managers were illustrated, and intrinsic problems in this type of research were addressed. Then there was a discussion of previous work on what managers really do. Here managerial roles, functions and processes were discussed, and the process perspective on managerial work was highlighted. The discussion on different types of management processes (processes for preparing, performing and evaluating) was concluded with a suggested framework for management processes. Following from this was a discussion of different agendas in managerial work and how these are formed. Among the factors identified as influencing the formation of the agenda were the abstractness and perceived immediacy of issues. The second part was concluded with a discussion on learning aspects in managerial work, stressing the distinction between two types of learning: single-loop learning (within existing frames) and double-loop learning (beyond existing frames).

The third part of the chapter could be seen as a combination of the first two parts, that is *information and communication in managerial work*. This part started with discussions on different aspects on *information to support managers*, basically addressing the questions "what to find?", "how to find?", and "where to find?". The information needs of managers are difficult to capture; managers search for information more or less constantly from various sources through various media. Previous work on supporting managers with IT-based solutions was discussed, and many of these attempts were found to have had limited

success. Possible explanations could be found in, among other things, difficulties in defining information needs and an over-emphasis of decisional aspects of managerial work. Three driving forces for attempts to develop IT-based solutions were identified in technological, supporting, and pilot-using driving forces.

The third part also described and discussed aspects of *information use in manage-rial work*. Managerial work has been shown to be largely about information processing from some perspectives, and managers have been described in terms of information workers. Information overload is sometimes described as a problem in managerial work, but that position was called into question. One possible explanation for this was offered, that the managerial perspective may differ from the non-managerial perspective in describing the (non-)problem. Information use in communication processes was addressed, especially in vertical communication processes. This links to the final discussions in this part on information for management control and action, where different aspects of previous work, with a particular focus on control and action, were described and discussed.

The fourth and final part of the chapter addressed a development perspective. Here the managerial activities were put in a development context, and that section began with a discussion on managerial roles in relation to development processes in general, with or without IT. Here the importance of putting development processes in their wider context was stressed, and managerial involvement was seen in relation to means and goals. When discussing the development of management processes one aspect of the discussion was how these activities enter the agenda, linking back to the previous agenda discussion. Here it was noted that the development of management processes often encounters difficulties in entering the managerial agenda. Two types of development were described: maintaining old processes and building new processes. The fourth part of the chapter included a discussion on the distinction between development processes of first-order and second-order, which could be seen in light of the previous discussion on single-loop and double-loop learning. Finally, previous work pointing to three ways of mishandling change (action is necessary but is not taken; action is taken when it should not be; and action is taken at the wrong level) were described and discussed.

Part II: Empirical Discussions

In the following three chapters I will go into more detail on the empirical material. The discussions of the empirical material are organized according to different management processes rather than chronology. The main argument for this organization of the material is that it will help focus the material and the discussions. That is, in each chapter I present empirical findings linked to certain management processes and in relation to these findings I interpret events, suggest alternative interpretations and point to different patterns.

When describing and discussing events from the case study in chapters 5-7 I will do so in the past tense in contrast to the present tense in the chronological descriptions. I will include quotations frequently (with links to the chronological case-study description in Appendix H), in order to give the reader a better flavour of the atmosphere in the situations.

The purpose of the empirical findings is to form a basis for analysis, which will be carried out in three major steps, in accordance with the discussion on the analysis process in the chapter on methodology (see section 3.6.8). This means that in the first step of the analysis I will interpret the empirical findings. I will ask the question "what is going on here?" and present different possible interpretations. This first interpretation process, in chapters 5-7, will reveal my own various interpretations of the empirical findings. Further steps of the analysis will be carried out in chapters 8 and 10.

In chapters 5-7 I will basically address and summarize what happened, seen from my point of view, as well as attempt to see possible interpretations from different perspectives (such as for example, seen from board-members' perspectives and management-team members' perspectives). The chapters will be structured according to the framework for management processes discussed above, see Figure 14 on page 113. In connection with each type of processes (for preparing, performing and evaluating), I will point to patterns that I see in the empirical findings.

Figure 17 offers an overview of the empirical presentations and discussions to follow in chapters 5-7.

MANAGEMENT PROCESSES	Processes for Preparing	Processes for Performing	Processes for Evaluating
Person- focused Processes	Section: 5.3	Section: 6.3	Section: 7.3
Business- focused Processes	Section: 5.2	Section: 6.2	Section: 7.2
Information- focused Processes	Section: 5.1	Section: 6.1	Section: 7.1
Patterns	Section: 5.4	Section: 6.4	Section: 7.4

Figure 17 An Overview of Empirical Presentations and Discussions in Chapters 5-7.

Once again I want to stress that the framework will be used to give an overall structure to the discussions. The empirical findings will be described and discussed from the perspectives of different types of management processes. There are complementary perspectives and just where some of the empirical findings should be discussed is open to debate. I will therefore describe my usage of the framework more explicitly.

The perspective of processes focused on preparing (chapter 5) includes activities aimed at improving conditions of different kinds. In the first section (5.1) there is an information focus, especially on building or improving an information platform for managerial work. In the discussion with a business focus (section 5.2) I concentrate on an agenda perspective, i.e. different aspects of agenda setting, in order to limit the discussion. In the person-focused discussion (section 5.3) I focus on network building, or human infrastructure building, activities. The chapter ends with a section (5.4) where I identify a number of patterns.

In the *perspective of processes focused on performing* (chapter 6) I include and discuss various activities in managerial work according to the following guidelines: in the section with an information focus (section 6.1) I concentrate on aspects of *utilizing the information platform*; in the section with a business focus (6.2) I highlight aspects of *agenda execution*; and in the section with a person-focused perspective (6.3) I emphasize *communicating* aspects of managerial work. The chapter ends with a section (6.4) where I discuss patterns.

Chapter 7 includes discussions seen from the perspective of processes focused on evaluating. In the information focus (section 7.1) I concentrate on aspects of evaluating the information platform, including various dimensions of evaluating information. The business focus (7.2) is centered on monitoring and control. Here is one example of a complication as the use of information discussed earlier (section 6.1) is closely related to monitoring and control. My application of the framework is that I discuss aspects closely linked to information use (e.g. information sources, filters, feedback processes) in the chapter focused on performing, and I discuss factors related to the business activities in terms of monitoring and control in chapter 7. In the person-focused perspective (7.3) I concentrate on reflection. The last section of this chapter (7.4) includes a discussion of patterns.

A key to the application of the framework is to view the different types of management processes as different possible perspectives which can be applied to a general manager's work. In the following chapters these perspectives are applied in accordance with the discussion above.

5 Empirical Discussion I: Processes Focused on Preparing

In this chapter empirical findings on management processes focused on preparing will be described and discussed. There will be sections related to information, business and person levels respectively. Each section will end with some immediate interpretations in order to illuminate some aspects of the empirical findings, but also differentiate these interpretations from the empirical descriptions. The chapter concludes with interpretations of some patterns in the preparing processes (see section 5.4 on page 181).

5.1 Information Focus

This type of management processes means information-focused processes for preparing. One example is processes for building managerial information platforms in the form of different types of reports etc.

In the next few paragraphs I will first give brief summaries of the perceived situation when the man-

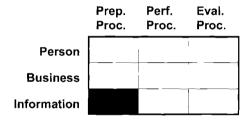


Figure 18 Information Focus on Processes for Preparing

aging director MD²⁴ had been in office for several months, seen from three perspectives: the managing-director perspective, the management-team perspective and the board perspective. I will then discuss aspects of processes for preparing related to information.

5.1.1 A Managing-Director Perspective

The newly appointed managing director (MD) was not happy with the present situation regarding information supporting managerial activities. He wanted to improve the contents and the form of reports, as well as the processes for producing the reports. He expressed that he lacked an overview of the business activities and the projects that were running.

²⁴ A list of all persons and their positions is found in Appendix E.

Regarding content he wanted to improve the possibilities to make comparisons between the different units, increase the graphic presentations in the reports and improve the quality of the comments in the reports. Regarding the process, he wanted to improve the communication concerning the contents of the reports, both within the management team and between the management team and the rest of the organization.

5.1.2 A Management-Team Perspective

The management team consisted of a number of different persons (see above on page 18) and thereby also a number of different perspectives. There were some issues where most of them were in agreement. They were, for instance, of the opinion that the monthly report was not a useful tool for managerial activities. The reporting process was also subject to severe criticism from several members of the management team.

There were some, although rather few, different views on what information should be included in the reports. One view expressed by some people was that key ratios were very important, whereas other persons thought key ratios were difficult. (These two opinions need of course not to be contradictory.) Another view was that the information used was perceived as useless for achieving changes as it was too general (e.g. BD and SR).

Most of the members of the management team were of the opinion that the distance to the board was too far. They usually did not present issues concerning their unit at board meetings, and they hardly knew who was on the board. In other words, they perceived a great distance to board members and felt a need to be more involved in work with the board and wanted to present their own projects. Some members of the management team felt dissatisfied with the previous situation (i.e. with the former managing director), where the board had not been informed about all details, and management-team members now wanted to make sure to include all details concerning their own projects. Some management-team members now also saw an opportunity to change the situation with a newly appointed managing director and wanted to become more involved in the work on the board level.

A common view was that there were high expectations on MD and what he would do. Some people expressed that communication within the organization had already been improved during the first few months, but there was still much to be done.

5.1.3 A Board Perspective

The board members were very dissatisfied with the information they received. They believed that they did not get a good picture of the business activities and that the information per se was not good enough. Their dissatisfaction was expressed in coarse terms, like the following examples:

"The monthly report stinks! One don't get it. I can't manage to read it. There are no comparisons. There is a lot of information in the report, but one cannot see the big picture in it. [...] Important pieces are missing in the monthly report: What have we done and what consequences did it have and what scenarios do we see now? There is no analysis of the present situation." (BMA, H-20)

"Blabla... soon I won't manage to get through this anymore. I would like to know what is profitable – not that it turned out this way or that way... Much of the information is uninteresting information. Structure is important: 'this I promised, this has happened, this I promise now'. Furthermore, the design should be consistent so one is familiar with the report." (BMB, H-20)

"There is a lack of understanding among those who write the reports about the fact that actions and intended effects have to be closely linked. [...] The person who is reporting is not a businessman, but an accountant." (BMC, H-23)

Furthermore, the board members had long expressed their dissatisfaction, but still nothing had happened to improve the quality of information. They were simply very disappointed regarding the information.

The background to their disappointment was that there were several investments made before MD was appointed, and these had turned out to be unprofitable. The board now wanted to get a better picture of the business activities in Omega. They expressed that they might had been rather negative lately due to previous experiences.

The board members expressed a perceived distance to the different managers in Omega and suggested ways to reduce this distance (e.g. board meetings at different units in the organization). One can note that both the board members and the members of the management team perceived a gap between the two groups.

The expectations on MD were very high from the board members, and after several months they said that they had seen some improvements, although they also expressed some questions regarding his knowledge of their business activities per se.

The board members' view of their own role was that they thought that Omega had not used the potential inherent in the board's competence and experiences. In other words, they thought they could contribute more to Omega. One possible interpretation of this is that this was yet another way of expressing their dissatisfaction with the situation before MD was appointed managing director.

One of the board members thought the issues of information flow between the management team and the board were minor issues, and the main issues instead were about business activities and the management of the organization.

5.1.4 An Urgent Need for Change

There was a perceived urgent need for change regarding the information platform for managerial activities. The managing director felt a need, the management-team members felt a need and board members felt a need. There was thus a strong driving force for changing the situation.

It was a challenging situation, though, as the managing director did not know the organization, and he stressed the difficulties in changing the information before he knew the organization and the people. Nevertheless, given the urgent need for change he decided to rebuild the managerial information platform at an early stage. He had only been in office for a couple of months when these efforts were initiated.

5.1.5 The Initial Process of Changing Managerial Information

The process of changing the managerial information platform took place during MD's first year in office. His aim with the change process was to improve information support in terms of the monthly reports to the management team and the board, as well as to improve the processes for reporting. MD hoped to include a richer picture in the information platform for managerial activities, i.e. to include information and measurements of different kinds, as he expressed a danger in focusing entirely on issues easily measurable in monetary units. Even if these "softer" measurements could be difficult, MD wanted to include them with the argument that they are better than nothing, and that the measurements could be improved over time. In other words, MD saw the need to continuously improve the managerial information platform, and it was not just a task to accomplish once and forever.

MD stressed the difficulties in handling soft issues as a newly appointed managing director. He was new to the business activities and realized as time

went by that he would learn more about them, which in turn could change his perceived information needs. In other words, he stressed the links between the business activities and the information, and the need to know about the business activities in order to determine what information could be useful. In spite of this, he wanted to start improving the quality of information before he knew the business activities in more detail.

In the initial process there was largely a consensus in the sense that everyone was of the opinion that there was a need to improve the present information situation. One issue which was not discussed very much, but where there might have been different opinions, was to what extent decisions regarding information should be centralized or decentralized. One member of the management team stated his opinion clearly:

'I am not a central bureaucrat, but... I think it is necessary to centralize and take better control over information than the case is today." (BD, H-23)

This issue was never a big one, but what is worth noting is that the person who stated his opinion was not one of those most involved in the reporting processes.

5.1.6 Views of Information

In the preparatory processes concerning information, there were different views of information in Omega. However, the decisions concerning what information to include in the managerial information platform were rather undramatic. MD had quite a pragmatic view of information, that it is there within the organization and it is a question of give-and-take, and that information is a perishable commodity, "just like milk – it turns sour quickly" (MD, H-10). One challenge for MD was to find the trends as early as possible. In the information used when he came to the organization he saw the contents of the reports much like historical descriptions, as though statements of facts and analyses were missing. Instead there was a common view that information to the management team and the board should be "correct, on time, relevant, and have been analyzed" (MD, H-11). To what extent this really was their opinion or just an expression about how information "should be" in a general sense is difficult to know. In the coming work to improve the managerial information platform the keywords expressed about information did not really play a significant role and could perhaps be seen more like some general expression about how information should be.

Regarding the information needs among the members of the management team and the board members, there were some discussions concerning the use of different key ratios. Overall, however, the information needs among the members of the management team and the board were very similar and, except the discussions on some key ratios, the process for defining the contents of the new reports was generally perceived as unproblematic.

A consensus held not only with regards to the contents of the information, but also with regard to the presentation form. Everyone wanted more graphic presentations. MD's argument was that graphic presentations make it harder not to make comments on how to take measures:

'If one sees a graphic presentation with a declining curve it is much harder not to make comments on how to take measures than if there is only a figure, such as 0.3." (MD, H-18)

That is, his argument for graphic presentations was to force the people presenting the information to explain the reasons behind the information and what consequences for action the persons saw. He did not argue for graphic presentations for his own use of the reports, but instead he emphasized the importance of report writers reflecting on the contents of the reports and making comments.

5.1.7 Continued Efforts to Change Managerial Information

The process of building and improving the information platform for managerial activities was obvious when the managing director was newly appointed. The process of improving information support continued throughout the following years however, although with less focus.

One aspect of information that caused a struggle in the organization was to improve the information about projects of different kinds. Both the managing director and the financial director expressed that there was a need for better information on all projects, and not least IT-projects. As MD started to work with a higher level of activities organized in projects, the total number of projects increased significantly, and thereby the information needs for projects came to play a more important role. MD said:

"There is a lack of an overview. [...] I would need a binder with an overall picture of the project." (MD, H-100)

When the initial managerial information platform was built, different projects did not play such an important role. This illustrates how the organization of the business activities had consequences for the information needs. These changed information needs were not obvious for the people involved, but evolved over time as discussions on different projects began to take more time and attention at meetings in the management team. Then people started to make inquiries for more information about the different projects.

When the change efforts continued over time to improve the managerial information platform this meant that there were challenges for the people involved in the reporting processes. FD, as financial director and responsible for the reporting processes as the head of the Finance and IS department, raised the question about how the people involved in the reporting processes would be able to run a change process and at the same time focus on business control etc. The comments by FD raised questions about how and when to "freeze" the development of the managerial information platform. In Omega there was a major redesign and development of the platform during the first year MD was in office and then there were some changes evolving over time, but to a limited extent.

Frustration arose when some change processes regarding the information were not explicitly concluded. This frustration was expressed for instance by BD when he commented that all key ratios were not completely settled. He used the word "disaster" in the context.

Here there were different perspectives on the situation. From the managing director's perspective the information needed to be developed over time, in tune with his increased knowledge about the organization. From the financial director's perspective there was a concern about how to cope with the change processes in combination with the production of the information. From the frustrated management-team member's perspective there was a perceived problem that the information change process was not concluded.

In the preparing processes concerning information FD made the comment:

"It is not only about a report." (FD, H-32)

This expression pinpoints the need to see the information in its context. When the initial change process concerning the managerial information platform had resulted in a new monthly report to the management team and the board, MD felt that this was not enough. Beyond his belief that the reports could be improved, he saw the need to change the context in which information from the reports was discussed. In other words, when the managerial information platform was changed, it was not perceived enough to change the report and

the reporting processes. The context in which the information was used had to be changed too.

5.1.8 Interpretations

MD decided to change the managerial information platform at an early stage when he only had limited knowledge about the organization and its people. He did so in spite of the difficulties he anticipated. One possible explanation for this is the very strong driving forces for change among the members both of the board and the management team. Given that the board members were greatly dissatisfied with the quality of information, MD may have felt an obligation to start changing the information situation more or less at once.

The managing director wanted to improve both the content of the reports and the processes for producing them. As a part of this process he included softer measurements even if they could not be measured easily and were perceived to be difficult when he was new in the organization. This in turn may have influenced him to see an ongoing process of improvement in the information platform for managerial activities over time when he learnt more about the organization.

But what was the problem behind the decision to change the managerial information platform? There were complaints about information. There were for instance comments from board members about the information being too general. One can raise the question whether the problem actually was an information problem, or if the problem really was about something else? The information may be blamed as a scapegoat.

The process of defining information needs and deciding what information to include in new reports was rather unproblematic. This could be seen in light of the hypothesis that the information per se was not a major problem. Regarding the form of the information it is worth noting what argument the managing director used. He argued for graphic presentations not on the basis of own use, but to force the people informing him to explain what was shown in the graphic presentations. That is, he put the information into the context of a communication process. Another possible argument could have been to use graphic presentations to help the managing director as a user of the reports, but instead he saw the main advantage that the quality of the information was increased by better comments from the reporting managers. The graphic presentations could force reporting managers to make better comments on the information.

At an early stage the managing director saw the need to continue the work with changing and developing the information over time. This was exemplified with the need to develop "softer" measurements over time. Where there any difficulties with this intention indicating continuous improvements? From a production perspective the financial director stressed the challenge to change the managerial information platform over time, as the people involved in the change efforts also had to produce the information at the same time. The question was raised about when or how to freeze the information?

From an information user perspective there was frustration expressed by BD about the uncompleted key ratios. One interpretation of his frustration is that some key ratios were of specific importance from his perspective. Another possible explanation is that the key ratios which were not settled were merely symptoms of other problems, such as for example trust among the members in the management team. Yet another possible interpretation is that BD disagreed with the pace in the change processes.

The different perspectives on the change process concerning information could be interpreted in terms of different driving forces for change. From the managing director's point of view the continued change was a way of assuring that the information was in harmony with his knowledge of the organization. He had a driving force for continued improvements of the information. From the financial director's point of view there was concern about how his staff would be able to cope with the situation of both producing the information and at the same time changing it. He had a driving force for freezing the information changes, at least temporary. From the other management-team member's point of view the priority was to conclude the changes, and more explicitly he was waiting for some specific key ratios to be settled. His driving force was to conclude the change efforts. In other words there were different driving forces for, and against, continued change efforts regarding information.

There were changes taking place on a business level which influenced the information as the managing director began to introduce more projects. This in turn led to a need for more information on projects. Here, there was a change on a business level in how activities were organized, which in turn influenced the perceived information needs.

This need to see information as closely linked to business activities was illustrated by the comment about the change efforts not being only about a report. It was also illustrated when one of the board members expressed the view that he saw the information as a minor issue while the main issues concerned business activities and management of the organization. He shifted the focus

from an information level to a business level. Information could be seen as a means for carrying out business activities, and when there were perceived problems regarding information, the main issues may have concerned the business activities.

The different change efforts that took place during the first year the managing director was in office, as well as continued change efforts regarding information, pointed to the need to view information in its larger context. There was a perceived view that it was not enough to change the information and there were opinions expressed that the problems perceived as information problems, were not really on an information level but rather symptoms of other types of problems.

5.2 Business Focus

This type of management processes concerns business-focused processes for preparing. There will be a focus on agenda-setting and direction-setting processes. When discussing agenda-setting processes the agenda can be seen on different levels of detail (as discussed earlier, see section 4.2.4). First there are specific agendas for different meetings

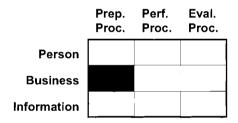


Figure 19 Business Focus on Processes for Preparing

etc, where foci for discussions in the management team and the board are set. Then there are agendas focusing on certain activities, i.e. what to spend time and effort on in the managerial work. Finally there are overall goal agendas setting directions for the organization. The three different types of agendasetting processes will be included in the following discussion, as they all can be seen as management processes for preparing, although on different levels of detail. The discussion will start with the most specific type of agendas and move towards the overall goal agenda.

5.2.1 Fixed Agendas for Managerial Meetings

Following from the initial work to improve the managerial information platform, MD perceived a need to increase the focus in management-team meetings. He wanted to change the context in which information was discussed and he wanted to set the agenda for the discussions in the management team. This type of preparing process can be seen as an attempt to harness and focus the work in the management team. By setting a more firm agenda for the meetings, MD had the possibility to focus the discussions on the issues he perceived as most important.

Fixed agendas for the management meetings were established, as well as guidelines for presentations at the management meetings. In the process of developing fixed agendas, MD involved himself in the task force to develop the agendas to a greater extent than in the development of the new managerial information platform. Furthermore, the tempo in this change process was increased as compared to the development of the managerial information platform.

One explicit purpose of the fixed agendas was to improve the focus and quality of the discussion of information. Another explicit purpose of the fixed agendas was to increase the level of consistency between different units. MD lacked a structure for the meetings with the reporting units as well as for the presentation at the meetings in the management team. One purpose of those structures was to make it easier to compare different units. That is, even with the improved information platform, the managing director perceived a need to get a better picture of the situation in the organization and especially to compare the different units. He felt that the different units tended to present the results from their units in terms that were favourable for them, and thereby the possibilities for comparing the different units were limited, which made it difficult for him as newly appointed managing director.

When fixed agendas were introduced, there was a genuine perception of improvement in the focus of the discussions in the meetings, but still MD had the feeling that this was not enough. During the work in the task force for fixed agendas there were problems revealed concerning the communication between people at the Finance and IS department on one hand, and people at the different reporting units on the other hand. This uncovered a problem concerning a perceived lack of balance between accounting control and business control.

The preparing process to set the agenda for management meetings was most focused when MD was new in office. That is, the introduction of the fixed agendas was a major step to set the conditions for the management meetings. At that point in time there was a driving force for the change and a perceived need for improvement. As time passed by, the foci on the management meetings had deteriorated somewhat and after slightly more than a year there were complaints again. MD expressed frustration over the time spent on issues he thought should not be on the agenda and that the issues were not prepared adequately. As a consequence of the deterioration of the focused agendas for the management-team meetings there were many items of the agenda and not always time enough to deal with them all, illustrated by PM2 when she said that there were "15 items left for the last 20 minutes of the meeting" (PM2, H-107).

Over time the focused discussions at the management meetings were blurred and the number of issues on the agenda increased. It is worth noting that even if the managing director felt frustration over these developments, actions to change them were limited.

5.2.2 Specific Managerial Task Agenda

The contents on the managing director's agenda were to some extent determined by the board in the beginning, as one important part of MD's assignment was to take care of prior unprofitable investments. This meant that one major issue on the managerial agenda during the first year was to conclude these investments. Another major issue was to work on overall goals and long-term strategies. Yet another major issue on the agenda was to build the managerial information platform as described above.

After about one year the old investments were wound up, and MD had more time to spend on learning more about the business activities of Omega. He could schedule more time for meetings and visits etc. He described this development as challenging and said that it was now up to him to take the time to do this.

The preparing processes in setting the agenda for the managerial activities were influenced both by internal and external forces. On one hand MD had the possibilities to shape his own agenda and decide how to spend his time. On the other hand his assignment included a number of obligations (e.g. to conclude the prior investments) from the board, which greatly influenced his degrees of freedom. This could be seen both from the perspective that it made the setting of his agenda an easier task, as some items were already necessarily to be there, and from the perspective that his freedom was limited.

In the process of setting the managerial agenda MD identified a need to increase the cost control in the organization and a need to improve analyses from a business control point of view. These issues became important agenda points and were deliberately given high priority on the agenda. Nevertheless, it then turned out to be difficult to accomplish changes in the organization. Here the preparing process to include the issues on the agenda was carried out by the managing director, i.e. the agenda-setting process was clear, but the execution of these issues turned out to be difficult.

5.2.3 Overall Managerial Goal Agenda

On an overall level the managerial agenda included a few major items when MD took office: to finish the unprofitable investments made by his predecessor and to increase the cost control in the organization. In the minutes from his first management-team meeting it said:

"We should not only stand out as an organization capable of creating revenues, but also as a cost efficient organization." (MD in minutes, H-11)

MD found his situation as challenging for several reasons. The first reason was that he had to take care of the prior investments and at the same time build new structures and processes for managerial activities. This was, however, something he enjoyed. He said that he liked to clear up things and to bring structures to activities where there are a lot of things to do, rather than to administrate and maintain. Another reason for the situation to be challenging was that he felt a need to be visible in the organization in order to reach as many people as possible with his messages.

Consequences from this initial agenda can be seen from different perspectives. From MD's point of view the major items on the agenda were very clear. From the point of view of the other management-team members the agenda was fairly clear, as they were aware of most of the content. From the point of view of other people in the organization, one signal effect was that MD spent much of his time being invisible to them. This in turn then led to comments and questions about where he received his information since he did not visit units frequently etc. Different interpretations of the managerial activities were not explicitly considered in the agenda-setting process, as the entire focus at that point in time was to identify the most important issues and include them on the agenda.

5.2.4 The Increased Use of Projects

One significant part of the preparing processes on a business level was to increase the usage of the project form for different types of activities. MD started to organize different activities in the form of projects. One comment about this was that "MD likes projects" (PL, H-64), i.e. there were personal preferences for this method of organizing activities.

From the board perspective there were some question-marks raised about the interest in different projects. Some board members felt that projects tended to be more fun to spend time and effort on than on core business activities, and thereby distracted the managing director (and the rest of the management team) from more important issues. Here it may be important to distinguish between different meanings of the expression "project". The board members were concerned that the core business activities did not attract enough interest. This was expressed in terms of focus on different projects, while the form of organization per se really did not have to do with the focus on certain activities. Nevertheless, MD increased the number of projects, which in turn led to need for new forms of monitoring activities, which will be discussed later.

5.2.5 Interpretations

MD involved himself to a greater extent in the development of fixed agendas than he did in the development of the new monthly reports. What were the reasons behind these priorities? One possible interpretation could be found in his view of their relative importance, i.e. that the focus of the context of the information was perceived as more important than the information content. Another possible interpretation is that by the time the fixed agendas were developed he had been in office for about one year and knew more about the organization, etc. A third possible explanation is that the managing director felt pressure to conclude the work with preparing processes.

One explicit purpose for develop fixed agendas for the monthly management-team meetings was to improve the focus and quality of the discussion of information. This could be seen as an example of using *structures* in the form of agendas to focus *processes* in the form of discussions during the meetings. Another purpose was expressed in terms of increasing the possibilities for comparing different units. Could there be other possible interpretations? Yet another possible explanation is that the managing director felt insecure about the situation in the organization and wanted to reduce his uncertainties by placing more structures on the meetings. Increasing the structure of the

meetings, he could, at least be perceived, as achieving a greater amount of control.

The preparing processes for setting the specific agenda for management meetings were mostly in focus when MD was new in office. One interpretation of this is that first the preparing processes for the management meeting were in focus, then when the style of work was settled there was not so much time spent on maintaining the preparing processes. When he was new in his role it was a natural to spend time and effort on setting the conditions for the management meetings, but later it was for some reason more difficult to spend time on the issue.

Regarding MD's own agenda there was a change after about one year and he could schedule time to learn more about the business activities. When MD described it as challenging to actually schedule the time to visit different parts of the organization, this could be seen as an example of the difficulties in scheduling time for issues not urgent for the moment. That is, to conclude old investments, to work on an overall strategy and to build a working information platform could all be seen as fairly tangible issues which have to be done. When some of the initial emergent issues were settled, the focus turned more towards issues that could be regarded as more intangible, such as meeting different groups of people in the organization in order to get to know more about the business activities. Furthermore, the receiver of the results of the initial tasks of the agenda was more clearly defined: the board wanted him to sort out the prior investments, the organization wanted to know about the strategies, and the management team and the board wanted the information platform to be improved. The more intangible tasks of learning more about the business activities and traveling to meet different groups served more of an internal purpose for the managing director himself, and the usefulness of these tasks were more indirect.

The increased use of projects could, besides reflecting personal preferences, be interpreted as a way of increasing the overview and control. With activities organized in a project there was one person in charge, a time plan for the activities, and hopefully defined planned output.

From the board perspective the form of organizing activities in projects became a symbol for focusing on "wrong" issues. Given the history of unprofitable investments, one possible interpretation is that the word "project" also symbolized prior mistakes in the eyes of some of the board members.

5.3 Person Focus

In the discussion on person-focused processes for preparing, the focus will be on management processes to establish the network. This includes both processes to build networks through recruitment activities and processes to establish suitable conditions for managerial activities. First there are brief discussions on initial recruitment efforts and

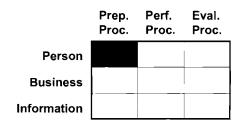


Figure 20 Person Focus on Processes for Preparing

then on efforts to change personal preconditions at later stages.

5.3.1 Initial Recruitment Efforts

When MD first made efforts at preparing processes concerning information (improvements of the managerial information platform) and then on preparing processes concerning business activities (fixed agendas for meetings) he felt a need to improve business control in the organization. As a first step toward doing so he decided to strengthen the management team with a new business controller. Regarding persons to deal with information, the managing director felt a need for a close relation to business activities, described in following terms:

'The one who works with information needs to be close to the business activities and not only deal with the information." (MD, H-17)

In the process to recruit a business controller, a process which started when MD had been in office for slightly more than one year, MD engaged himself to an even higher degree than in the process to develop fixed agendas. MD made the following comment on this:

'I see it like an investment that will yield a good return at a later stage." (MD, H-54)

In other words it was a deliberate choice to spend much time and effort on the preparing process to recruit a new business controller, with the intention to gain from it at a later stage. In his use of language MD drew the parallel to an investment situation, which indicates a sort of "calculation" (in a broad sense)

behind the decision to spend much time in the process (both in the recruitment and in the introduction of the business controller).

The recruitment of the business controller illustrated how matters got more sensitive when they were closely related to the people involved. The recruitment process in itself led to different interpretations, which is illustrated by FDB at the Finance and IS department:

"BC plays in another league than FDA and myself regarding financial key ratios. It is sort of an insult to us and we have asked if it was a vote of no confidence in us [when he was recruited], but it was not. I think BC is here more to relieve the pressure on MD." (FDB, H-69)

For quite some time there was tension between people at the Finance and IS department and the newly recruited business controller, but after a while things were settled. One reason for the tension was that people made their own interpretations of why the new person was recruited, like FDB above for instance. FD as the head of the Finance and IS department was also curious about underlying reason for recruiting a new person. FD suggested an internal candidate for the position (who was later rejected by MD for being too junior) and was curious about how MD looked at the recruitment. FD said:

'I have checked if there is any special person he [MD] wants for the position, but that does not seem to be the case." (FD, H-40)

Although MD tried to explain that he wanted to strengthen the control function and it was not a form of "vote of no confidence", there were still several occasions when this type of interpretation was mentioned. This can be seen as an example of a communication process where it was not enough to simply explain the reasons for recruiting the new person. MD did not try to force a solution to the problem, but instead he let the process take quite some time and came back to the issue at a much later point. He wanted to state his opinion through actions instead of words and was waiting for a suitable moment.

At an early stage other key persons were recruited as well. MD recruited a new regional manager and FD recruited a new IT-controller. The recruitment of the new regional manager was an attempt by MD to bring more structure to the management team (cf. MD, H-41). (MD was later pleased to see how ER brought more structure and stringency to meetings.)

Through these recruitments the managing director wanted to build "his" management team. The recruitment of a new regional manager who should

help bringing structure to the management team was consistent with the introduction of fixed agendas to the meetings.

MD stressed the importance of a secretary, or a personal assistant, as a "tentacle" in the organization as a means to catch signals of different kinds. Here he brought his personal assistant from his previous position, which meant that he brought a person to the organization who he knew well beforehand and who he could trust from the very first day. This could be seen as a first step in a preparing process regarding people in the organization.

Overall MD emphasized the importance of people in the organization, and in the recruitment process for the business controller he argued that:

"I hold the view that in principle one can have any form of organization as long as one has the right people. The person I am looking for should be damn competent and be a driving force." (MD, H-40)

One implication of his view was that there was no major re-organization when he took office, or even during the first years. MD continued to work through the same form of organization, but instead changed the people in the organizational structure, and began to put more activities in separate projects outside the ordinary organizational structure.

5.3.2 Personal Preconditions at Later Stages

The preparing processes concerning the person level were important throughout the managing director's work, and not only when MD first took office. The effort spent on setting the personal preconditions took different forms and here I will point to a few examples.

The first example is from the major tendering process in the Southern Region where a project group was formed. Here MD brought a controller from the Western Region with the following argument:

'I brought this controller to the group first because he is very competent, second because he has an external perspective on the contract." (MD, H-50)

There might as well have been an attempt to share knowledge between regions, as there was a similar tendering process coming up in the Western Region at a later stage. In case this was an intention behind the action, it is yet another aspect on setting personal preconditions.

A second example of preparing processes focused on setting personal preconditions is when MD tried to change the mind-set of members of the manage-

ment team in the sense that he wanted to move away from the view "MD has decided" and instead reach the view "we have decided" (cf. MD, H-79). The organization was entering a tougher phase and MD wanted to strengthen the commitment among the management-team members. The difficulty in improving the preconditions in terms of accomplishing a mental change in the management team bothered MD. He wanted to change the way people thought and acted but did not find a good way of achieving this. He expressed this in the following way:

"We need to get away from the way of thinking that there is not so much to influence, but instead think in terms of the question: Can you influence anything? [...] One has to get them to work differently. I have worked like a beaver to get them to work differently." (MD, H-79)

He was frustrated because he did not manage to set the personal preconditions the way he wanted.

A third example of the work concerning preparing processes for personal preconditions concerns the difficulties in creating a climate for change in the organization when the results were very good. Several people expressed this difficulty, but there were severe difficulties in creating a perceived good climate for change when the results were good. The shift in climate for change did not take place until the loss of the contract in the Southern Region occurred. They did not manage to generate the climate for change internally, but it was only when an external event (here a loss of an important contract) occurred that they achieved a new climate for change.

A fourth example of working with the personal preconditions was sending the people involved in the information-support process for training when the information platform was improved. There was an attempt to educate the people involved in the process in order to produce better results in the form of new reports.

These examples illustrate situations where preparing processes were focused on achieving suitable personal preconditions. MD made an explicit comment on the importance of shaping suitable conditions when he made the comments on his view that one can have any form of organization as long as one has the right people. He also commented on the importance of shaping suitable conditions for communication:

'Persons' ears work differently depending on who is sending the message. It is important to give and shape suitable conditions for communication through the way

one acts. In certain situations the receivers are not ready to hear the message." (MD, H-49)

In other words, he pointed to the need for suitable conditions for communication, including the importance of good timing for communication.

5.3.3 Interpretations

MD decided to recruit a business controller to strengthening the management team. One interpretation of this is that the first improvements on an information level revealed needs for improvements on a business level, which in turn revealed a need to strengthen the personnel. Given this perspective, it could be seen as an illustration of how changes on one level can lead to uncovered needs to make changes on other levels as new aspects are revealed during a change process.

The example of bringing a controller from the Western Region to the tendering process in the Southern Region illustrates how a preparing process concerning personal preconditions could be used to influence the activities. MD explicitly added an external perspective to the process, which could be seen as an attempt to both add value to the tendering process by adding the person, and also to add value to the Western Region by sharing experiences.

When MD tried to change the mind-sets of the members of the management team, he met problems. How come he did not manage? One possible explanation is that the way he tried to change the mind-set of the management-team members did not convince them. Another possible explanation is that communication processes within the management team did not work properly. Yet another interpretation is that there where underlying disagreements about the overall direction, which took the expression of "blaming" decisions on MD instead of being part of the decisions oneself. It is worth noting that MD had his view on how he wanted to change the mind-sets of the members of the management team and that the change should take place on his terms.

Regarding the attempts to change the climate for change in the organization, the managing director met difficulties as well. One interpretation of this is that the overall atmosphere of good financial results was so influential that his speeches about the need for change did not have any real effect. People in the organization simply did not perceive any need for change as they could see the financial results being very good. Speeches were not enough.

These examples illustrate the importance MD placed on the person preconditions, and also the difficulties in changing person preconditions. In some cases

the conditions were changed by recruitments, i.e. new people were added to the organization. In other cases there were attempts to change the preconditions by replacing people, which turned out to be difficult for different reasons, which might not be surprising, but was nevertheless perceived as a problem for the managing director.

5.4 Patterns in Preparing Processes

Here I will identify patterns in the empirical findings on processes for preparing. I will look at the findings concerning the different levels: information, business and person, taken together and present patterns from the discussion on the empirical findings above. The patterns are attempts to make interpretations which may not be revealed when

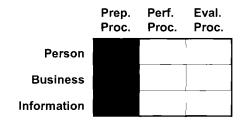


Figure 21 Patterns in Processes for Preparing

investigating the different levels separately as has been the case above. Still, the patterns in the following discussion are directly related to the empirical material. That is, the empirical interpretations will be discussed in light of previous work later (see chapter 8).

5.4.1 Information to Business Activities to Persons

Regarding the initial managerial efforts concerning preparing processes there was a sequence of events taking place. First, the managing director started to improve the managerial information platform. Then when the new reports were introduced, there was a perceived need to focus discussions where the information was used. There was a need to change the context of the information, which led to the introduction of fixed agendas for management meetings. A third step in the sequence concerned people and led to the recruitment of new key members to the management team.

What at first seemed to be an information problem, i.e. a need to change the managerial information platform in the form of different reports and reporting routines, turned out to concern more than the information level. Soon after the new information solution was introduced, a need to change on the business level was revealed, which led to fixed agendas in order to change the context

of the information. Then it turned out that this was not perceived to be enough either, but rather there was a need to achieve changes on a person level, which was done by for instance recruiting new people. In other words, there were changes taking place on all three levels.

This sequence information-business-person started with changes concerning information, which in some respects were perceived as rather tangible and politically insensitive. The change of the managerial information platform was a rather unproblematic change process: the perceived information needs were defined with very few problems and there was largely a consensus on the information level. In the latter part of the sequence, concerning the person level, there were more discussions, and the change efforts on this level took a longer time, and the managing director spent more time and attention to these processes.

Pattern: Changes on the information level led to changes on the business level which led to changes on a person level. It was not enough to limit the change efforts to the information level.

5.4.2 Managerial Involvement

Managerial involvement varied considerably between different preparing management processes. In the processes related to information, the managing director involved himself only to a limited extent, but rather acted in a sponsoring role. In processes on the business level his involvement and attention increased significantly. Here he spent more time and effort in the process, which was illustrated by his active role in the task force concerning this change process. When the preparing processes took place on a person level he involved himself even more. In the work with the information support most of the work was delegated, but regarding the agendas he was in charge himself, and even more so in the recruiting processes.

Pattern: The level of involvement by the managing director increased as the change process moved from an information focus, via a business focus, to a person focus.

5.4.3 Driving Forces for Changes

The change efforts concerning preparing processes illustrate close links between possibilities to achieve change and persons' driving forces for changes. An example was when a board member earlier wanted to change the information but there was not enough support for the change. When the information

situation on the other hand had reached a point when more or less everyone was displeased with the situation there was enough driving force for change.

This pattern was also illustrated by the difficulties in achieving change when the results were very good and there was not enough insight into the needs to change. The situation changed drastically when the contract was lost.

Pattern: It was easy to accomplish changes of preconditions on different levels when there were driving forces for change, and very difficult when there was no sense of urgent need to change, or in other words: no change until it was perceived as necessary.

5.4.4 Changing Preparing Processes over Time

There was a focus on changing preparing processes when the managing director took office. From one perspective this could be seen as natural because a new managing director wants to set the stage for coming managerial activities. From another perspective one could argue that preconditions could best be set after a person has acquired better knowledge of an organization than is the case in the beginning of a tenure. In this case the preconditions on an information level were initialized first, followed by initiatives on a business level and on a person level. One possible explanation is that preconditions on an information level are easier to set at an early stage. The comments made on the difficulties of knowing what information is useful is an argument against this explanation, however. Another possible explanation is that the external forces for changing the information platform were profound.

One pattern that emerged seems to be that the driving force for changing the preparing processes diminished over time. Nevertheless, preparing processes play significant roles throughout the process, and knowledge of the organization and the people could help improve the conditions for managerial action. The importance of the knowledge of the business activities was mentioned frequently, and some questions were raised about how much the new managing director knew about the business. In order to improve managerial preconditions, the managing director must strike a balance between, making efforts to change the preparing processes at an early stage and waiting until he has a better understanding of the organization.

Pattern: Driving forces for changing preparing processes were reduced over time, including both internal and external forces for change. There was a balance between changing the preparing processes at an early stage (like on the information level) and changing them at a later stage (like on the person level).

6 Empirical Discussion II: Processes Focused on Performing

In this chapter empirical findings on management processes focused on performing will be described and discussed. There will be sections related to information, business and person levels. Each section will end with some immediate interpretations. The purpose here is to illuminate some dimensions of the empirical findings, but at the same time differentiate these interpretations from the empirical descriptions. The chapter concludes with interpretations of some patterns in the performing processes (see section 6.4 on page 222).

6.1 Information Focus

This type of management processes concerns information-focused processes for performing, focusing on information use in terms of using reports from the managerial information platform, as well as from other sources.

On an information level the new report and its processes were introduced as the new managerial

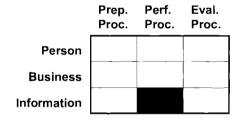


Figure 22 Information Focus on Processes for Performing

information platform was developed. In the following sections different aspects of the use of information will be discussed. There will be discussions of information use per se, information sources and filters, information processes and feedback, and there will also be a discussion where performing processes on the information level are seen from a board perspective.

6.1.1 Information Use in a Context

One of the settings where information from the managerial information platform was used was in the work within the management team. Here the fixed agendas which were introduced helped focus the context. Given that the team consisted of different people, there were different perspectives and interpretations of the information based on the individual levels of knowledge and values.

The managing director stressed that the information had to be put into its larger context and that use of key ratios had to be supplemented with other types of information. He said:

"One cannot run the business based only on key ratios, one has to meet with people. A lot of management is about interpretation of reactions in behavior, body language etc. This is never caught in key ratios or in phone-meetings. The drawback is that it is time-consuming." (MD, H-10)

MD stressed in other words, the importance of meetings between individuals and not relying exclusively on the written information in reports, or phonemeetings. But even when the members of the management team met monthly for lunch-to-lunch meetings there were different opinions of the quality of the use of information in the management team. BD said the following concerning the use of information in this context:

"The information in the management team is lukewarm. This means that we seldom discuss each other's problems. It is important to get the management team to work as a group. Some people bring their problems there, e.g. personnel. We have presentations but these are rather causal." (BD, H-27)

Here the importance of having a useful context for information is stressed – in this case the importance of having a management team that is working well.

The managing director pointed to different types of information use and he distinguished three categories of information (which could overlap): (1) Need to know, (2) Nice to know, and (3) Information to pass on (MD, H-102). He stressed the latter category as very important and the importance of knowing enough about the business activities for information use. In his view information was here part of communication processes and there were links between information and action. That is, the first two categories he listed were merely for his own use, but his third category was for using information in communication processes in order to influence other people and achieve some sort of action. He stressed the importance of being aware of the possible signals and he talked in terms of "information influences" (MD, H-102). MD expressed this in the following terms:

"One has to know what effects one wants to achieve. It is a bit like an iceberg, first you just see the tip, but there is more under the surface. There are several sidetracks and there are demands for thinking in several ways in order to use information to inform the organization." (MD, H-102)

For the managing director it was important to use information to achieve some sort of action. Information use for individual needs was stressed to a more limited degree. MD expressed that he often asks for information in order to send signals rather than to use the specific pieces of information. When he used information for his own purposes he used a pen to highlight what he thought was important with the underlying purpose of adding value if he passed on the information. By highlighting what he found important he could add value to the information and send signals about his view of importance regarding different matters.

There are processes to interpret information content of reports. This was illustrated by the comments of the financial director regarding the previous reports in Omega:

'It was not until I sat down at the kitchen table at home and went through everything I really got a clear picture of what was behind the figures..." (FD, H-19)

This points to the need to actually spend time on interpretation processes. Another example of putting efforts in information use processes was when the local financial manager in the Western Region was annoyed of the reporting process and did some extra work in his own information systems order to keep track of the situation (cf. WRF, H-21)

When looking at information use in different contexts, there was one thing that MD came back to a number of times over time: his perceived a lack of overview. In different situations he asked for a master overview ²⁵. Even though the managing director asked this overview several times, he did not introduce it.

6.1.2 Information Sources

The focus of the discussion has been on written reports, which is one important information source for managerial activities. But there are several other sources too. Regarding the relative importance of different sources, the managing director was of the following opinion:

"Maybe the most important way to learn about the business activities is "management by wandering around". You are out and see and hear much without gunning for anything particular." (MD, H-102)

Another information source judged to be important was the participation in different external boards as they were perceived as "a way of catching external

²⁵ MD often called the master overview for a "master plan". As it was an expression of a need for a better overview of activities and not an attempt to get a "master plan" in the sense of a grand plan for activities in a rational approach, I will use the expression overview in the description.

signals" (MD, H-106). MD was a board member in several external boards and perceived the time spent on these assignments as useful.

Regarding use of so called Executive Information Systems, MD explicitly rejected the idea that this type of information source would be useful for him. His main argument was that he thought that this type of information source could be more useful for managers closer to the operative business activities (cf. MD, H-76).

The list of sources used could be made very long. There were meetings with suppliers, partners, and customers etc. There were press cuttings, different forms of external reports etc.

6.1.3 Information Filters

In the processes for using information in managerial work, one aspect which was highlighted in the empirical findings concerns the use of information filters. Different types of information filters were used in selection processes on the information level. The personal assistant's role in the use of information in the managing director's work is one example of this. MD said:

"I am surprised to see the amount of mail I receive those days PA is not here." (MD, H-103)

That is, the personal assistant filtered the mails to the managing director and the effects of this is not really obvious until the filtering of the information was temporally removed. This type of personal filter demands knowledge of managerial activities in the sense that the personal assistant needs to have a good understanding both of the managerial tasks as well as of the personal preferences of the managing director.

Another example of an information filter was the use of press cutting services. Regarding this type of filter MD said:

"Finding the time to read everything is a dilemma. These press cuttings are very good as they summarize. How I use them depends on how squeezed I am. There are three modes: 1) If I have really much to do I put the press cuttings aside immediately. 2) If I have slightly less to do I save them to read them later. 3) In other cases I skim through the headlines at once to read more later." (MD, H-103)

Here there was filtering in different steps. First the press cutting service only summarized information that met certain criteria, then the use of the summaries was filtered according to the managerial context. In other words, first there

was a task-oriented filtering process through the press cutting service, and then there was a personal filtering process.

One can notice the stress-factor revealed in the quote about the press cuttings. MD talked about a "dilemma" concerning the information and how to find the time to read it. He was concerned about how to deal with the external information and asked himself: What to read? and How to know what to spend time on? (MD, H-102).

6.1.4 Information Processes and Feedback

Behind the use of information in the form of reports there are underlying information processes resulting in written reports and other forms of presentations. Here people at the reporting units sometimes expressed frustration over processes that did not work well. There were, for instance, a huge number of forms to fill out and send to the headquarters, which SR in the Southern Region commented upon:

"We have to send one form after another. Every month my financial manager has to send about 100 forms. That is too much! It costs us a lot of time. It ought to be done electronically. All this works gives us no time for analyses. This is not acceptable." (SR, H-21)

Even if the figure 100 may have been slightly exaggerated, the information processes did not work smoothly. The different regional managers all expressed this problem in different ways, and early in the process the information systems were even referred to as "Stone Age" (WR, H-25). They were frustrated because their people at the local finance departments had to spend time on the actual reporting processes instead of spending time on analyzing the figures. NR in the Northern Region said:

'It is a huge problem that there is no time for analyzing the figures once they are available." (NR, H-22)

The regional managers simply wanted the central Finance and IS department to find better solutions. From a sender (region) perspective the perceived problems concerning the information processes could be summarized as:

- Reporting routines that were perceived as inconvenient.
- Many manual parts in the reporting routines.
- Too little time for analyzing the material.

From a receiver perspective (central Finance and IS department) the information processes also resulted in a number of perceived problems:

- Difficulties in receiving comments on the reported figures. Huge differences in quality of the comments.
- Lack of respect for the people producing the reports at the central Finance and IS department
- Analyses often missing in the reports.

In other words, both the senders and the receivers of the information were frustrated. What about the final users of the information? The managing director was not happy with the results of the information either. He expressed problems in terms of his own involvement. He sometimes felt that he had to involve himself too much in order to receive the information he needed. He gave the following example:

"Today the basis for decisions is not ready when I receive them, but I have to involve myself in the process to achieve the documentation for a decision. I want the documents to be ready including risk analyses etc. when I receive them. I do not want to take part in the discussions and preparation of the material." (MD, H-36)

Furthermore he said:

'I want them to try the documentation first and not involve me until a later stage in the process when there is something to decide. The formalities should be done first." (MD, H-36)

When trying to interpret different reasons for this situation, one of the board members gave one plausible explanation:

"The problem with the information may depend on either the system or the people involved." (BMC, H-21)

This can be seen as a crisp concluding interpretation of the underlying problems concerning the information processes. It is also worth noting that all involved parties, the senders at the different reporting units (regions), the receivers at the central Finance and IS department, and the final users of the information, were dissatisfied with the situation. The producers of the information perceived problems with the information processes where reports were produced, while the users of the information perceived problems concerning both the results of the information processes, and the need to be involved in the process of producing the information.

One possible explanations for why this situation had occurred is that old routines in the information processes had been left from earlier situations like sediment and that these routines were not easy to change. Another explanation is that the new managing director had introduced new demands on informa-

tion in accordance with his increased focus on cost control, and that the old routines could not handle the new demands. Following from these explanations, one can ask questions regarding the dialogue between the different parties involved in the information processes.

Even if the need for a dialogue between information users and the producers of the information was stressed as important, there was a perceived lack of feedback in the reporting units. The managing director emphasized that "it is important to openly explain what the information reported is actually used for, who uses it, and why it is important" (MD, H-11). Still there was a frustration that there was no feedback on the information reported. At the Finance and IS department FD even explicitly noted the importance of feedback:

'The reporting units find it interesting when we ask questions. It shows that we use the information that is collected. [...] It is important to ask a lot." (FD, H-22)

Even if the information processes in Omega were improved over time including new IS solutions, difficulties in establishing a fruitful dialogue remained.

6.1.5 A Board Perspective on Information

The board members were not happy with the information they received, as described above. Their views could be illustrated by the following quotes by board members:

"Some of the information to the board is just figures in the spreadsheet. They say nothing about causes and consequences. Garbage-in-garbage-out." (BMA, H-20)

"The question is what the figures in the report really say? Where is the pain threshold? I do not know how good they are?" (BMB, H-20)

"The reports should reflect the business you run! It should show how the business activities work in order to achieve the goals. The reports should force those who report to reflect and report. One has to report the critical factors to achieve the goals. The reports should be a tool for control and link the business together. [...] The actions have to be linked to what one wants to achieve." (BMC, H-24)

In summary the board members were thus dissatisfied with:

- a lack of links between the information and what the management team wanted to achieve
- a lack of "pain-thresholds" in the information, which could better help them to judge how good the results were in relation to something
- the actual quality of the board information

Regarding the quality of the information the board members pointed out that small mistakes in the information raise questions and uncertainties about the information in general. They also emphasized the close link between the preparation of information to the board and the likelihood of achieving intended results, illustrated by a comment from one of the board members:

"The better the information [to the board] is prepared, the better are the chances that the intended results are achieved. [...] In board-meetings there is often a lot of information and at the same time no information: One million figures, but they do not say anything about the overall picture." (BMA, H-24)

The information to the board had been criticized, which had influenced the board's view on the business activities. One of the board members expressed the following:

"Maybe the board has been too negative lately regarding projects etc. The board has probably been regarded as negative. [...] Some issues have been ill-prepared when they have been presented to the board of directors. The information to the board has been damn unsatisfactory, both regarding contents and form." (BMA, H-29)

MD was aware of this situation which is illustrated in the following:

"They [the members of the board] feel that they have not been informed about the development of the investments in new business activities. [...] They probably feel that they have got their fingers burnt, which may characterize their perceived need for information on details at present." (MD, H-29)

Regarding the discussion of details one of the board members made a comment on the usefulness of discussing details:

"The purpose of the board of directors is not to discuss too many details, but sometimes details can say quite a lot about the overall picture." (BMA, H-29)

The board wanted to get a better grip on the business activities of the organization, and their expressed needs for better information reflected their needs to improve the grip of the organization in a wider sense.

6.1.6 Interpretations

When there were comments on the use of information in the management team and some complaints were made, the focus shifted from information to the work in the management team. One interpretation of this is that the information per se is not the key issue, but the information has to be seen in its context, which means including the business level. The managing director listed different types of use of information and stressed the importance of passing information on to other persons. When trying to interpret his view of information use, it seems to be important to view information as part of a system of signals in communication processes. He also stressed the links between information use and some sort of action, and furthermore the "demands for thinking in several ways in order to use the information to inform the organization" (MD, H-102). Once again the close relation between information use and communication processes are emphasized.

Even when the information use could on the surface be seen as being for his personal use, its actual use by the managing director was often to communicate. This was illustrated for example when he asked for information in order to send messages. When the managing director used information for his own use he highlighted text in case he would pass on the information later. Taken together there seemed to be many arguments for the interpretation that there are close links between information use and communication.

In the processes of using information, the importance of taking time for interpretation was illustrated by the comment by financial director that he sat down at the kitchen table at home. If the financial director himself expressed the situation like this, one can raise questions about the actual understanding of the other members of the management team? Most likely the financial manager's preknowledge put his in a better position than several other members of the management team. At what level did they understand the reports?

Regarding the need for a master overview expressed by the managing director there are several possible interpretations. One is that he wanted to move beyond the information in different reports and move to an overall level. This in turn could be a sign of a perceived need to get a better grip. The need for an overview could also be interpreted as an attempt to move from information and discussions perceived to be too detailed. Given his perceived need for an information overview, the question is why it was not introduced? One possible explanation is that the problem was not on the level of information, but the expressed need for information was a symptom for something else (e.g. perceived participation in decision processes), and could not easily be solved on the information level.

Concerning information sources comments illustrate that written reports form one type of information source, but its relative importance could be questioned. According to the comments made by MD, there were other more informal information sources that were judged to be important. But maybe the question of relative importance is a misleading question to ask, as it is not a

question about *either* written reports *or* other more informal information sources. The comments made about other information sources should be seen in a context where there were different written reports and other sources were supplementing these reports. Or vice versa if one wants.

The different sources taken together, resulted in a huge amount of information. The managing director revealed a stress-factor embedded in his dealing with all the information when he commented on his press cutting services. A question to raise in connection to this stress-factor is how the changing environment, with new IT-solutions that offer new ways to collect and produce information, will influence this perceived stress. In Omega the managing director used his personal assistant to help him filtering his electronic mail. One interpretation is that it will be even more important to know about the context of the information both in order to value the information and to know what information is useful and relevant in a particular situation or setting. In this case there was a person who knew about the managing director and made some of this evaluation.

Regarding the information processes to produce the information in the organization, there were complaints, as described above. There was a lack of a dialogue between the different parties involved. Even if there was an insight into the importance of feedback on the information reported, this understanding was not transformed into action, at least not to a sufficient level, seen from a perspective of the reporting units. The lack of a working dialogue between the different parties involved could be seen as one possible reason for the dissatisfaction some information users perceived. If so, one question is why such a dialogue was not established as all the parties involved seem to be aware of its importance? Either the real understanding of the importance was not there, or the issue to establish the dialogue never became important enough to be included on the agenda. There were perhaps underlying assumptions regarding whose terms should dictate the information processes. Yet another possible interpretation is that there was a built-in tension between the different parties, and a working dialogue which pleases all parties involved was a utopian idea.

What about the board perspective on these issues? When trying to interpret what the board members said about information, it may be important to view their comments in a wider perspective: a new managing director was appointed, there was a need to sort out prior investments, which had not been successful, and there was a need to increase the cost control in the organization. When looking at this picture one interpretation is that the board very

distinctly wanted to mark a difference and stress the importance of changing the situation, which most likely meant to improve the information.

Their expressed needs for more details could be interpreted as a means to make sure that the managing director and the other members of the management team were aware of the details themselves. (A parallel to this interpretation is the managing director asking for more graphic presentations not for his own sake, but rather to make sure that the reporting managers paid attention to this information.)

6.2 Business Focus

The section on management processes for performing focused on business will focus on different aspects of execution of the managerial agenda. First agenda contents will be discussed. Then two examples of issues on the agenda are highlighted: tendering processes and IT-issues. Then some board perspectives are discussed. Following from this, contexts of

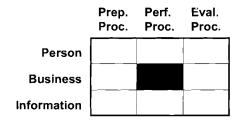


Figure 23 Business Focus on Processes for Performing

the execution of the agenda are discussed in terms of both the meetings processes and work by the managing director. Finally aspects of the decision-processes in the organization are addressed.

6.2.1 Contents of the Managerial Agenda

There were many issues on the managerial agenda and according to MD the number of issues on his agenda increased over time (MD, H-105). This means that a major challenge in the managing director's work was to know how to spend time on the different issues. The character of the agenda changed over time, and MD made the following comment after his first year in office:

"During the first year much time has been devoted to a few issues, now when the work is entering a new phase I will have more time to spend out in the organization and to meet with people in different parts of the organization. Now it is up to me to actually take the time to do this. It is about scheduling time for it." (MD, H-27)

The issues that took much of his time during the first year were to a considerable extent ruled by assignments from the board members. Most of the time, MD had a few major issues on his agenda. There was more or less always time available for these issues when trying to arrange meetings etc. That is, he gave a few key issues very high priority. He tried to balance the agenda by working both on these major issues and at the same time being available for smaller issues brought up by people in the organization. He found this balance challenging however.

The issues on the managerial agenda varied over time and varied from major issues running over a long period of time, like for instance tendering processes and a TQM-project, to issues that are limited in scope and time. As MD organized many activities in the form of projects, the number of projects increased considerably and thereby also the number of projects on the agenda. MD's personal assistant described the number of issues on the agenda:

"There are incredibly many things going on right now. There are many different projects running and everyone is busy." (PA, H-100)

The other members of the management team also expressed concerns about the number of activities that went on at the same time, ER at the Eastern Region said:

"It is hard to find the resources for the projects. There is hardly any time left. Another question is also about the right competence—is it available? There were already a number of projects from the beginning, now we are close to the maximum." (ER, H-100)

As the number of items on the agenda increased and the number of projects increased people in the organization started to complain in various ways. One of the members of the management team, PM1, commented on the number of projects:

"People are enormously tired of projects. "One more project and we'll throw up' is a common reaction in the organization. It was a tight situation from the beginning and now there is a risk that the entire organization is choked." (PM1, H-101)

Why were there so many issues included on the agenda? One answer is that MD had ambitious goals that he wanted to achieve. Another answer is that there were built-in driving-forces for including more issues on the agenda, but no forces to remove issues, as least none that were strong enough. PM2 in the management team offered the following explanation:

"MD is stubborn and works hard to reach the goals, which is good, but it is tiring.' [She turns to him and says:] 'You are like a terrier.'" (PM2, H-106)

In other words, the managing director was perceived to be demanding as there were many different activities running at the same time. Some of these activities were concluded within a limited time period, while other issues were on the agenda for a long time. One example of the latter was the TQM-project, which was an important issue at every meeting of the management team for a long period of time and much time was devoted to this project which was delayed a number of times. It is also relevant that the TQM-project had a consultant working on the project with an explicit driving force to include the project on the agenda.

Besides the issues on the managerial agenda concerning activities in Omega, MD also had external issues on his own agenda in the form of external board assignments. His personal assistant sometimes questioned whether he had the time to spend on these assignments. MD commented on this in the following way:

"PA has asked me if I've got the time to spend on this. And I said yes. This is about a driving force to conclude things – first to lay down the broad outlines for something and then to conclude the deal." (MD, H-58)

Another reason for the external assignments mentioned by MD was that the external board assignments helped him to catch external signals and added an external perspective to his own work.

In the next sections I will discuss two types of issues on the agenda in more detail: first tendering processes and then IT-issues.

6.2.2 Tendering Processes

Tendering processes were major issues on the managerial agenda and given special attention in the organization. These were chosen as examples of distinct major strategic issues on the managerial agenda and the outcomes of these tendering processes were crucial for the business activities.

The first major tendering process in the organization during the period studied concerned a major contract in the Southern Region. The process began in early 1994 and was *the* major issue on the managerial agenda during the fall of 1994. Most of the work was carried out in a task force where MD involved himself. Afterwards he said that he did so for two reasons, both to contribute to the work and to show everybody the importance of the tendering process. So, he

spent time on this issue not only because of the issue per se, but also because of the signalling effect that he saw in his involvement in the issue.

During several months late in 1994 a great deal of time was spent on this issue. MD commented on this in the following way:

"The tendering process has taken all our time and then almost some more." (MD, H-52)

The tendering processes ended with the loss of the important contract, which was a huge disappointment for people in the organization in general, and for MD as the managing director in particular. The outcome of the contract proved to be an alarm-clock for the organization. Members of the organization had the following comments:

"Now there is a change. A good thing happened in the Southern Region. It turned out to be an alarm-clock. [...] Now many projects are started. Things have to work now." (PLA, H-63)

"Now after the loss in the Southern Region there is another focus, which there ought to have been earlier too. There should not have need to be such a great difference in focus in developing the business after the loss, but the long term effects were not in focus until now. This means that I have more to do now than before." (BD, H-60)

The outcome of this issue changed the focus on often pending issues on the agenda. Now there was a perceived need that something had to be done in the organization. Earlier attempts by MD to create a climate for change had been more or less fruitless, but now in this respect the management team changed almost immediately. This became apparent at the very first management meeting after the loss of the contract, i.e. the first meeting in 1995, when the management team jointly put together a list of items that could be done in order to compensate for the loss in the Southern Region. The list of activities was publicized within the organization and was appreciated by people within the organization. One person at the Finance and IS department said:

"It is important to bring the list of activities in the Southern Region down to earth and establish priorities in it. The list in itself is positive." (FDB, H-82)

There was another major tendering processes taking place in the Western Region which began early 1996 and lasted until late 1997. During the fall of 1997 this issue took a considerable amount of time and attention of a number of members of the management team. This tendering process could be characterized as a do-or-die situation for the organization as it was vital to win the

contract. When the outcome of this process was announced in January 1998 Omega was the winner of the contract.

6.2.3 IT-issues on the Agenda

During the time period included in the study, 1993-1998, the number of IT-related issues on the managerial agenda in Omega increased. The increase began in 1995 with the activities to compensate for the loss in the Southern Region. When these IT-related issues were presented to the board there was a shift in the presentation of the IT-related issues. Now the issues were mostly presented with the frame of helping to developing the business activities and to improve profitability through exploration of new business opportunities etc. Earlier IT-issues were mostly reports on projects that were often either behind schedule and/or over budget, with limited links to business activities.

Not only had the number of IT-issues increased, the attention paid to these issues also increased. When a project for a new information system for the regions was presented at a board meeting in September 1996, a huge number of questions were asked by the board members who showed great interest in the issue. During the later part of the period 1993-1998 IT-related projects became more offensive.

But there were also some perceived problems concerning IT-issues on the managerial agenda. They were perceived to be difficult to handle and MD characterized the IT-issues as follows:

"They are very tricky. Often these issues start as very small issues, then they suddenly grow to very large issues by connecting to this and that and everyone wants to be involved. Then things grow too big and one has to reduce the issue into something small again and then it starts growing again and so on." (MD, H-108)

Given the perceived difficulties in handling these kinds of issues on the agenda, one can ask what was the driving force for including them? One was a general perceived need to update the information systems used in the organization. Another reason for the increased number of IT-issues on the agenda was the general IT-development in society, with IT playing a more important role in many business activities. One example of this was the growing interest in Internet during this period in time.

In order to increase the general competence of the members of the management team they arranged a seminar for IT-training. MD said:

"It is not good enough to get behind with IT." (MD, H-108)

There were different indicators of the perceived importance of IT-issues on the managerial agenda at Omega. Nevertheless, it was difficult to pay attention to the issues, as MD described it:

'The IT-issues may have been neglected lately. There is not time enough to give priority to everything." (MD, H-76)

In several ways MD expressed the difficulties in handling the issues and also the uncertainty related to the issues. He was concerned about the IT-projects and about how to keep track on these projects:

"Projects are delayed and people do not report on the delays until very late. This is not good." (MD, H-105)

There was some sort of contradiction here: on one hand the issues were perceived as very important, and on the other hand they were perceived as difficult and also easy to neglect on the agenda. At one point in time MD stressed the importance of regional managers holding separate meetings in their regions to keep better track of their IT-projects (cf. MD, H-41). (At that time IT-issues were handled differently in the different regions.)

6.2.4 A Board Perspective on the Agenda

From the perspective of the board there were at times concerns that the management team of Omega did not focus on the right agenda items. The board members were concerned that different projects took too much time from core business. One of the board members said:

"Projects are more fun. A lot of money is spent on projects with limited results. [...] They waste their ammo. Things have become better lately though.". (BMA, H-29)

The latter part of the comment about things having become better indicates that the focus on projects may had been a problem before MD took office as managing director and may have been associated with prior unsuccessful investments. Nevertheless, some of the board members held the view that "projects are more fun" and were given higher priority for that.

6.2.5 Meeting Processes

I will continue by looking at one particular context of the execution of the managerial agenda, meetings in the management team. These meetings were held on a monthly basis, usually lunch-to-lunch with work late into the evening. As described above a fixed agenda was introduced for the meetings when the managerial information platform was developed, which gave a general

structure for the meetings. Included on the agenda along with the monthly report, was an item called "topic of the month". This was an attempt to build flexibility into the agenda and the report, i.e. to pay special attention to a particular topic. The fixed agenda was introduced without any particular problems.

One view among the members of the management team was that the meetings worked quite well, for example PL:

"The management team works well now. We spend a lot of time on the work in the group (twenty-four hours a month). Now we need to achieve a way of working on the next level. We have spent much time together [in the management team]." (PL, H-87)

This comment identify another challenge: to find suitable forms for handling the agenda on the next level. There were however different perspectives on the work in the management team. Another member of the management team, BD, thought the focus in the discussion was too internal:

"At the meetings in the management team we use to start talking about how well the business is doing. Then I usually tell them about how good our competitors are." (BD, H-89)

During the time period covered in the case study the organization did very well financially, which may help explaining the comment made by BD. In the management team there was a shift in focus during the meetings when they had lost the important contract in the Southern Region. In the beginning of 1995 when they had received the news that they had lost the contract there was less of a discussion on what happened and why, but instead intense work with lists of concrete suggestions of what to do now. It was as though there had been an awakening. It was like a surprise to the members of the management team that the contract was lost as they had been fairly confident of winning it.

The alarm-clock effect was illustrated not only by the focus in the discussion, but also in the written minutes from the meetings. Now there was a sort of a fighting spirit after the lost contract. Many concrete activities to compensate for the loss were presented and discussed, and there was also a sense of urgency in the minutes. The minutes even had a new layout.

Over time the number of issues on the agenda for the management meetings increased, and sometimes there was not enough time to deal with them all. PM2 described the feeling that after a meeting there were issues that had not been discussed enough in the group. PA described this as a frustration over issues on the agenda that "never" disappear.

From an external perspective of people outside the management team another view of this situation was expressed by FDA in the following terms:

"The members of the management team cannot do everything themselves." (FDA, H-86)

There was a view that the members of the management team could delegate more of the work. This gap between the management team and the rest of the organization was also illustrated by a comment that the management team was seen as an "administrative forum for controllers". That is, some people held the view that the management team was too far from the business activities and focused too much on control issues.

6.2.6 Execution of a Managerial Agenda

Here I will discuss some aspects of the execution of the personal agenda in the managing director's work. I will therefore take a closer look at MD's own working conditions and how different issues on the agenda were executed.

First of all there were, over time, very many issues on the agenda of the managing director. Second, the time for doing his own work was very limited as there were short intervals where he could work on his own. Usually MD was focusing on a few major issues at the time and keeping all other issues in the background. The issues he focused on were usually decided by his own interests and/or by external demands of different kinds.

He sometimes tried to find ways for work without breaks, like staying an extra day when he had been to a meeting in one of the regions, just to sit there and work on his own. Sometimes he spent a day, of half a day, at home in order to work without interruptions in the form of phone-calls or people knocking at the open door. He commented on one of those days:

"I really got a lot of work done during that day as I could finish what I started to do. At the end of the day I was very pleased with myself, even though there was a small pile with loose ends waiting at my office when I came back there the next day." (MD, H-47)

MD's own comment on the flow of issues was:

"You never know what the next thing will be, only that there will be a next thing." (MD, H-59)

The number of issues on MD's agenda was huge, and his way of working illustrates different ways of finding suitable working styles to deal with the large number of issues. He said:

"The problem with working at my office is that there are such short intervals. There are interruptions all the time. One reason for this is that I meet with very many people and I want my subordinates to know that they can come to me with the questions they want to discuss. They should not have to make an appointment through a secretary to meet their superior." (MD, H-48)

Instead of working on his own, another strategy could have been trying to reduce the number of issues on the agenda. Here MD said:

"There are extremely many activities running. Many things have been started and need to be continued now. [...] In many of these major issues one gets a bit alone in the sense that I am the last resort. The issues have to pass me and I have to state my opinion." (MD, H-105)

MD found it difficult to reduce the number of issues and he perceived that a large number of issues actually had to pass the managing director. PL suggested the following explanation to the large number of issues:

"MD easily gets in a situation with many projects as he is interested in a lot of things and wants to do as much as possible." (PL, H-77)

This explanation suggests that at least to some extent personal preferences govern the degree of involvement in different issues.

MD spent a great deal of his time at different meetings, or in his own words:

"I go from one meeting to another meeting all day long." (MD, H-47)

MD generally found meetings as efficient ways to achieve action. He commented on all follow-up meetings that consume a considerable amount of his time:

"Still it is important to spend time on those meetings." (MD, H-54)

MD was of the opinion that these meetings were valuable for the business activities in the different units and they create a forum to bring up various matters with MD. He also explained that he also attended a number of meetings partly to signal to the other people involved that he thought the matters were important.

6.2.7 Decision-Processes

In the final part of this section I will discuss decision-processes and more specifically something which turned out to be a problem in Omega: a perceived inertia in decision-processes. When MD had been in office for about two years, he had introduced new models for decisions in the sense that he had

placed new demands on analyses to be carried out before decisions were to be made. There were different interpretations of this, and discussions on the decision-processes were sometimes animated.

One of the members of the management team, PM1, described the situation like this:

"The last two years have been characterized by vagueness. Instead there has been a focus on: cost control, reports to and fro and decision processes that are time-consuming — there is decision inertia, like a wet blanket on top of everything." (PM1, H-84)

Another member expressed it in the following terms:

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"We never reach decisions." (NR, H-84)
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These comments illustrate that several people in the management team, and some outside this group too, perceived a problem concerning the decision-processes in the organization. There was a frustration that decision-making took too long. Seen from some perspectives the analyses took too long, and there were also tougher demands on the preparation for decisions. FD at the Finance and IS department summarized the problem in the following way:

'It is a strength that we have learnt how to investigate matters. It is a weakness that the analysis some times is too extensive." (FD, H-84)

So, while there were people who saw the need to investigate matters more thoroughly, there where also some who saw this additional investigation as inertia. When this perceived decision inertia emerged, it was the first time explicit comparisons between MD and his predecessor were heard. There were comments like the following made by SR at the Southern Region, who offers insecurity in decision-making as a possible explanation:

"The former managing director was not serious enough. MD is too serious. [...] Sometimes MD does not dare to take risks." (SR, H-78)

Another member of the management team, BD, expressed the situation in terms of the following:

"We have to analyze and analyze. I do not understand where the inability to make decision comes from. Uncertainty? The underlying documentation? If it was the latter, one has to specify exactly what is needed to get useful documentation. The inability to make decisions goes for both major and minor decisions." (BD, H-85)

Here the underlying documentation is mentioned as one possible reason. No matter what the main problem was, there were different ways of handling the

situation with the perceived decision inertia. One way was to find ways around the demands of information, like when BD described an example from a project in one of the regions:

"I exceeded my authorities four times to be exact. Both the regional manager and I thought it was a good deal. We also agreed on not telling MD or FD because that would only slow down the process. One cannot do business that slowly. FD still had some questions regarding some calculations. One has to dare to make decision and one has to dare to take risks. It is not possible to investigate every risk. This was a good deal, although rather small. [...] Without risks one cannot make good deals." (BD, H-88)

This solution was to find an independent way and to "break" the rules. In most cases though there were attempts to follow the rules, or demands, although that entailed a certain amount of frustration. The frustration was often expressed in terms of a brake. PM1 said:

"The former managing director was totally different: more intuitive and much quicker. MD is more analytical. We run out of steam when there is a need for 40-50 pages of analysis. The creativity is strangled. MD is more for analysis and it is like an administrative brake. There has been a culture shock in the organization." (PM1, H-78)

But there were different views about where the brake actually was situated. Another view was expressed by a person outside the management team, ERC:

"I do not think it's MD that puts on the handbrake, it's the next level [down]." (ERC, H-85)

The metaphor with the brake was also used to illustrate the need for balance, expressed by ERA:

"It is important to be able both to step on the gas and to put on the brake at the same time. It is easy to just slam the brakes." (ERA, H-3)

What about MD, was he aware of the irritation among the management team regarding the perceived lack of speed in the decision processes? Yes, he realized that this was a problem, and he could see two main reasons for slow decision processes. First, with hindsight he saw prior investments had been made outside of the core business, and had been unprofitable. Therefore he wanted to be cautious. Second, the preparation documents for decisions were often of very poor quality. In MD's opinion the slow decision processes were also a result of insufficient communication in the management team.

6.2.8 Interpretations

When the board more or less forced the managing director to focus on certain issues in the beginning of his tenure, some issues became easier to spend time and effort on, while that became more difficult for other issues. The external driving force varies across issues and thereby also the likelihood to spend time on different issues.

There are also examples of internal driving forces for including issues on the managerial agenda. The external board assignments could be seen as such an example. One reason given by the managing director for spending time on these assignments was to catch external signals. Another possible interpretation is related to personal preferences. In other words, the external board assignments were (perhaps) interesting and fun, and thereby easy to find time for.

Board members expressed a concern that personal preferences and what is fun were influencing the formation of the agenda. It may be easier to allocate time and attention to issues that are more fun, like for example projects (if as in this case these are perceived as fun).

Concerning issues on the agenda, special attention was paid to tendering processes and IT-issues in the empirical description. The tendering processes were major issues on the agenda and the outcome of the first and unsuccessful process changed the climate for change in the organization. One interpretation of this is that a profound external force was required to achieve a sense of urgency in the organization. Adding a large number of issues to the agenda and even changing the layout of the minutes could be interpreted as a perceived need to show both the members of the management team and people in the organization that there would be different types of actions to compensate for the loss. Another possible interpretation is that the management team was to some extent desperate to show an ability to take action.

The other type of issue in focus was IT-issues. Here people felt that there was not always time enough for these issues at meetings. One possible interpretation of this pattern that there was "not time enough" for these issues is that MD and the other members of the management team found it difficult to know how to deal with the IT-issues. Given this interpretation, one can ask what the consequences were for neglecting difficult issues, like IT-issues (or at least not have "time enough" for them). One step taken by the managing director was to ask the regional managers to have separate meetings for IT-issues, yet this could, from one perspective, be interpreted as a sort of abdica-

tion concerning the IT-issues. From another perspective it could be seen as an attempt to get the regional managers to focus more on the IT-issues on the agenda. Or perhaps it was a combination of the two.

As described above, the managerial agenda became crowded. Why was this the case? One possible answer is that there were many issues that actually had to pass the managing director in his view. Another possible interpretation is that the managing director found it difficult to delegate. A third, and maybe most reasonable, interpretation is somewhere in between, i.e. there are many issues that did have to pass the managing director and that to some extent and for some reasons it may have been difficult to delegate.

The number of meetings on the managing director's agenda was huge. There are several possible interpretations of this. One, suggested by the managing director, is that he had found the meetings to be an efficient way of executing the agenda and achieving action. Another possible interpretation is that the time spent in meetings was based on less deliberate decisions and instead more ruled by notices to attend meetings.

Speaking against the latter interpretation is the comment by the managing director that he attended some meetings in order to signal the importance of those matters. This means that the time spent on some meetings were ruled by the meta-purpose of sending certain signals to other people in the organization. In other words, meetings were used, in part, for purposes of meta-communication.

Regarding decision-processes, there were several different views on reasons why these were slow. One view was that MD had introduced new demands on the informational basis for decisions. These demands were not met, which in turn delayed the decision-processes. Here one could either argue that MD was delaying the decisions with his new demands, or that other people were delaying the decisions by not meeting his demands. More interesting than discussing who was to "blame" is to look for possible reasons for the delays in the decision processes. Given the amount of frustration generated within the organization, it seems that there was a need to solve the "problem". MD tried to solve it by placing demands on information and not lowering these demands when the information was not up to standard. Either the producers of the information did not know what to do, or they knew but did not agree that it was necessary.

One possible interpretation of the problems in the decision-processes could be found in the communication between MD and the other members of the management team regarding the expected quality of the analyses for decisions. If this was the reason, how could it be explained? One reason could be that there had not been any explicit decision on the expected quality of the information for decision-making. Another reason could be that some members did not agree about the expected quality of information for decisions, but chose not to express this explicitly.

The strategy chosen caused a considerable amount of frustration, but the information for decisions was eventually improved. In discussions on the perceived slow decision-processes information factors were often identified as the cause. The problems that at first seem to be information-related problems may just have been symptoms of problems on other levels. Information could sometimes be regarded as a politically safe factor in comparison to more sensitive core issues. The real issues may for instance have had to do with views on risks in the business activities, or views on shared responsibilities in a management team etc. When PM1 talked about a culture shock in the organization, this may have been what was taking place: the move from a situation with very little cost control and a great amount of creativity to a situation with increased cost control and a great deal of analysis before decisions were made.

6.3 Person Focus

When discussing person-focused processes for performing I will concentrate on communication processes in managerial work. The communication processes will be discussed from four perspectives: the managing director's perspective, the perspective of other management-team members, the perspective of other people in the organization and finally from a board perspective.

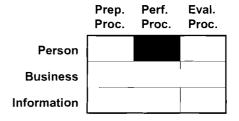


Figure 24 Person Focus on Processes for Performing

6.3.1 The Managing Director's Perspective

MD stressed the importance of communication processes. When he listed important issues on his agenda at different points in time (see e.g. H-43 and H-93) there were issues like communication of strategies to the entire organization and improving the internal communication on his agenda. He held the view that management is largely about interpretation of reactions and that it takes place in communication processes. In these communication processes MD stressed the importance of openness:

"Openness is very important. One should not deny the fact that information means an advantage." (MD, H-104)

One specific example of how this view was expressed is that the minutes from meetings in the management team became public for everyone in the organization. Another example of openness is that MD wanted to be available to his subordinates, and accordingly he tried to keep his door open as often as possible when he was in his office. As he traveled extensively, he did not want to close his door, but be available instead. MD wanted to establish suitable conditions for vertical communication processes and he wanted his subordinates to feel an openness.

From MD's point of view he found it difficult to reach the entire organization with messages, he said:

"It is hard to reach the entire organization. One cannot be at meetings out in the organization as the calender quickly gets full." (MD, H-10)

He emphasized the difficulties encountered by a sender of messages. He found it easier to catch signals, illustrated by the following comment:

"It is easier to catch signals than to send them out in the organization." (MD, H-10)

From his point of view everyone made their own interpretations and what was obvious for the person sending a message was not always obvious for the receivers of the message. He stressed that one needs to get a receipt that the recipients really have understood (cf. MD, H-103). This in turn led to his view of the importance of informing people directly:

'It is important to inform directly and to tell everyone myself. It is not enough just to send a message by e-mail. One has to communicate and not only pass on information. PM2 has very properly pointed this out to me." (MD, H-104)

Worth noting here is that MD distinguished between to "communicate" and to "pass on information". He perceived the receipts of the receivers' understanding as important. MD wanted to know that his message was not only received, but also understood by the receiver.

The managing director perceived some problems or challenges in relation to communication processes. He perceived the first problem when he had to spend time on matters which were strictly confidential. Here he pointed out complexities when he could not openly describe to his subordinates what he was doing. He felt uncomfortable when he could not be open and honest about what he was doing, and there was a risk of different interpretation about what he was doing, i.e. a risk of unintended messages.

Another problem perceived by MD was that he was not entirely happy with the way all members of the management team acted in communication processes to the rest of the organization. He therefore wanted to modify how other members of the management team communicated.

One challenge perceived by MD was to achieve change in the organization. Here he was of the opinion that one has to modify the way people think in order to achieve any change in the organization. Therefore, his plan was to spend a considerable amount of time on the communication process in order to reach the entire organization. This was illustrated by the example of communication to people in the organization described above. He included this work on the communication process as an important agenda issue but nevertheless found it challenging to allocate time on to these communication processes. This could be seen in terms of how different agenda issues are executed. For instance, communication process about how to change people's thinking may not have been perceived as urgent in the short term, even though it may be so in a longer perspective.

In the following I will present a few examples from different situations in MD's work illustrating different types of communication processes. The first type is about one-to-one communication with members of the management team. The second type illustrates one-to-many communication processes where MD communicated to the entire management team. The third type is about one-to-many communication to a wider group of people in the organization. The fourth type illustrates communication processes on a meta-level.

Type 1: One-to-one with members of the management team

As a consequence of his view of the importance of communication processes he tried to find suitable ways to communicate with each individual in the management team. He gave the following example of a communication process between himself and one of the members of the management team:

"This morning I was sitting and preparing for a board meeting when PM2 came to my office and said that she needed some time with me, and not just five minutes. She said: I know you have a board meeting soon but I don't give a damn about that. I want us to sit down a while now and I want you to listen to me. We have rescheduled our meetings too many times now.' What can one do in such a situation? I put my papers aside and took ten minutes with her. She is good at expressing herself clearly. This is a clear signal in communication!" (MD, H-104)

This example could be seen as an illustration of an open communication between MD and one of the members of the management team. It could also be seen as an illustration that communication had not worked well. Perhaps PM2 had reached a certain point of frustration because of a rescheduled meeting and was therefore forced into this direct communicative approach.

MD commented generally on the dialogue between leaders and subordinates:

"There is a danger when the dialogue between a leader and his/her subordinates is reduced both in its extent and its content, when the dialogue does not include matters of real value." (MD, H-49)

He stressed the importance of the vertical communication between himself and his subordinates. One can note that he talked both about the extent and the content. The example about the dialogue with PM2 above illustrates the difficulties in keeping up the extent of dialogue. In this case the meeting between them had been rescheduled a number of times, and at some point PM2 felt that the extent of dialogue had fallen below a critical point.

Another example of this type of communication processes was then when BD was presenting a project and MD interrupted and said that he wanted BD to present the project in more detail in accordance with the project plan, not only give a summary of the project. MD's comment on this situation was:

"It was not popular but important and efficient." (MD, H-101)

This situation took place in front of the other members of the management team, which means that it was also an example of the next type of communication processes (and of meta-level communication).

Type 2: One-to-many with the entire management team

An illustration of the second type of communication processes was when MD tried to improve the work in the management team at an early stage (after about 10 months in office). It was when the new managerial platform was developed and a new monthly report was introduced, as described above. MD wrote a letter the management team where he explicitly asked for better discipline at meetings and in the preparation of issues for the monthly meetings. Among other things he wrote:

'There is a need of good conditions in order to meet our high ambition regarding quality, volume and time for ideas, creativity and the future." (MD in a letter to the management team, H-32)

A month or two later he initiated work to introduce fixed agendas for these meetings (as has been discussed earlier). The letter, then, did not have the intended effect and work in the management team did not change, at least not to the extent that the managing director had intended. At a much later stage in the process MD made a comment on his own way of communicating with his staff:

"I hardly ever write formal messages to my staff, but try to deal with the communication more flexibly." (MD, H-103)

Either the letter at an early stage was an exception to the normal practice, or MD had changed his way of communicating to his staff over time, given the (lack of) effect from the letter mentioned above.

Type 3: One-to-many with a wider group of people in the organization

An example of the third type of communication processes was when MD gathered a large group of people in the organization to describe the present situation in Omega and to share his view on where the organization was heading. He commented on this in the following way:

'It was a success to gather so many key people at the same time and give them all the same information. It is very important to establish a certain amount of calmness and security in the organization." (MD, H-104)

Here the underlying intention with communication was explicit: "to establish a certain amount of calmness and security in the organization". Given the setting of the communication process this situation strongly resembled "passing on information", and it was taking place in a setting where there hardly could have been receipts about how messages were received. This could

be seen in the light of the distinguishing between "communicate" and to "pass on information".

Another way of informing people in the organization which MD used occasionally was to write in the monthly internal magazine. When the contract had been lost in the Southern Region an article appeared in which MD tried to reduce anxiety in the organization. Among other things the article said:

"The disappointment has passed. Our target is already new projects and ventures, and the focus at Omega is on the next Century. [...] To learn from a lost deal is also important, and to make use of the lessons learnt for purposes of developing." (from Omega Internal Magazine, February 1995, H-72)

This can be seen as an attempt to signal to the people in the organization not to worry too much. The effect of the article was difficult to judge as the level of anxiety varied considerably among different people in the organization.

Another example of communicating to a wide group of people within the organization is illustrated by an attempt to increase cost control in the organization. MD and FD decided to put detailed restrictions on different types of account. MD wanted to see how different specific accounts actually looked, like the travel account for instance. He could see some tendencies to use different accounts slightly creatively in parts of the organization and he therefore wanted to take a closer look at these matters. MD described the situation:

"We sent a letter, signed by FD, and now there has been a queue of people outside FD's room... It stirred up had blood as the interpretation was that we want to manage on a very detailed level and do not trust the people in the organization." (MD, H-56)

This message illustrates that a message can be interpreted in different ways. MD and FD wanted to send the message that different accounts should be handled properly and the interpreted message was in some cases that they wanted to interfere with the activities on a very detailed level. In some cases the interpretation was more literally that MD was interested in the accounts per se and "extremely detail-oriented". There were different interpretations made by different people though, illustrated by the comments by FDB and FDA respectively, both at the Finance and IS department:

"When MD and FD went down to specific accounts in the work with the forecasts it was a source of irritation. But if this is the way he wants things he should make it clear and the entire organization has to follow it." (FDB, H-69)

"MD wants to keep better track of details. This is not to keep track of the details per se, but to make sure that the details are kept in order. Not everybody has

understood this, but some people think that he wants to control things on a very detailed level. This has a signal effect which has been noticed in the work with the forecasts." (FDA, H-69)

Type 4: Communicating on a meta-level

The fourth type of communication process was illustrated for example in the latter part of the tendering process for the major contract in the Southern Region. MD involved himself heavily and participated in the work to produce the final tender. He made the following comment on his participation:

"I wanted to be part of the process and I wanted to show everyone how important this work is." (MD, H-51)

He involved himself more than was actually necessary for the tendering process itself, but instead he used the involvement to communicate the importance of the tender. Communication took place on two levels: both in the actual tendering process where MD communicated his view on matters at hand and also on a meta-level where MD communicated the importance of the tendering process through his participation.

In the same tendering process there was another example of meta-communication. At a very final stage of the process MD explicitly stopped the process and said that before the decision was made he wanted to hear the opinion of FD and asked him if he thought this was the level they should go for. Later MD made the following comment on this situation:

"I did this for two reasons. First, I wanted to have the final opinion of FD who is very experienced and has been with Omega for a long time. Second, I wanted to show FD that he is important and that he does not have to fear any competition between him and BC [the business controller] as he feared when BC was recruited." (MD, H-51)

This occurred quite some time after the recruitment of the new business controller. MD used this very special occasion to reduce any possible anxiety that could still have existed.

6.3.2 The Perspective of Other Management-Team Members

Generally, members of the management team saw an improvement in communication processes, as illustrated by comments like the following one made by WR in the Western Region:

"There is a better openness now when MD is here." (WR, H-27)

What was bothering several members of the management team was that they perceived a lack of direction in the organization, expressed by WR as:

'We need to have clear goals that are expressed in plain terms. We need to be more specific. Maybe we should cooperate more with business partners." (WR, H-67)

There was a need, at least among some of the member of the management team, to increase the knowledge about the overall direction for the organization. There was a perceived communication problem, a lack of clarity in communication. It could also be seen as a problem that goes beyond communication in the sense that there were questions about whether the vision was perceived as weak and perhaps even whether there was a clear vision to communicate. BD made a comment supporting this interpretation:

"We do not know much about what the Alpha Group wants to do with us. We receive no feedback. I do not think that MD knows about the future either." (BD, H-91)

Different people had different levels of knowledge concerning the context, which could explain the different views about how clearly the vision was communicated. Some people were more aware of the contextual situation than others and thereby knew more about how to interpret messages.

Concerning the openness in communication there was a view, at least among some management-team members, that people did not dare to express their opinion. SR in the Southern Region said:

"People do not dare to express their opinions in the management team. But I do. [...] There are human beings in the management team: what are the expectations on them? Do they pay each other too much respect? Do they dare to put their foot down? There are things going on now, but there are perceived needs for analyses. Just do it! We cannot spend months informing ourselves. [...] We miss artists in the management team — we only have analysts. That is my personal analysis." (SR, H-83)

So there were some perceived problems in the communication within the management team. Worth noting in relation to this discussion is that MD himself had made observations about communication in the management team regarding people' lack of willingness to express their opinions:

"You can notice that no one has ever raised their hand to ask the question: 'Damn it MD, what are we missing for making a decision, why can't we make a decision right now?' [...] Management-team members have to be willing to ask questions—and to stand firm, and I too have to be more clear on what is unclear or missing." (MD, H-85)

The need to be clearer was summarized by WR when he said:

"We need to be clearer in our communication in order to survive in the long run." (WR, H-88)

Here he dramatically put the need for clearer communication in terms of survival. This may sound drastic but it could be seen as a sign of a perceived desperate need to change the communication situation. If one starts asking about why the situation was perceived in this way, ER at the Eastern Region offered one possible explanation:

"Omega has developed considerably. Earlier everyone knew everyone within the organization. Now there is a sense of not knowing what is going on. I get signals from my team of managers in the Eastern Region that they want to be more involved. But the time should be available." (ER, H-72)

The organization has grown, and the time available for communicating was perceived as limited. As a consequence, several people talked about different types of gaps within the organization and especially the perceived gap between the management team and the rest of the organization. NR said:

"There is a huge gap between the management team and everyone else. On the next level we do not spend as much time together as we do in the management team." (NR, H-87)

Because the management team spent lunch-to-lunch together once a month, they had plenty of time for both formal and informal communication processes between themselves. Then on the next level the amount of time spent on meetings was more limited, which may have influenced the perceived feeling of a gap – a gap which the members of the management team in general were well aware of. They were not only aware of the gap, but also saw some consequences of it, as expressed by NR in the Northern Region:

"It is important to communicate to the organization that there are changes in progress. MD has taught us the importance of this, and now it is important that we practice what we preach." (NR, H-88)

This comment illustrates that MD had reached a certain level of understanding of the importance of communication in his management team. A slightly more pragmatic view of the need to communicate and inform was offered by the business controller BC:

"You cannot get too much information. It 's a healthy sign when people ask for more information. It is impossible to fulfill everyone's needs." (BC, H-88)

It is worth noting in this context that FD, as head of the Finance and IS department, used to provide all other members of the management team with a copy of a manuscript for a presentation of the results (including overhead transparencies) which could be used when the members presented results and other major events in their part of the organization. Still information was perceived as a problem, as one person in the Business Development department put it:

"We receive incredibly little information. There is hardly any information from the management team. We have managers that are invisible. The boss sits 50 meters away and I see him once a month. [...] Often the ball is with the management team and does not move any further." (BDA, H-86)

There were not only perceived gaps between the management team and the rest of the organization. There were also perceived gaps in a horizontal dimension between different regions and departments. BD at the Business Development department gave the following example:

'I have written letters to the Finance and IS department for a year, but nothing has happened." (BD, H-71)

On one hand this could be seen as an example of a horizontal communication process that did not work well. On the other hand, it raises the question of whether the problem concerned the communication process or other underlying problems. These could concern for instance the organization of the business activities, or the people involved and their relations or values. Another comment by BD suggested the latter:

"I left some papers on projects in the Southern Region with FD [at the Finance and IS department] and BC [the business controller] about a month ago. I have not received any feedback from them yet. I think it would be valuable if some people left the figures and their financial papers for one day a week and did something else." (BD, H-61)

This formulations indicates that there are differences on a personal level concerning values etc, which might influence the communication processes. Another example of the tension between different units was illustrated by BD:

"I called to get the figures for the sales in the Southern Region. A while later SR [head of the region] called back and asked what I needed the figures for." (BD, H-24)

The communication processes between different members of the management team did not work entirely without friction.

6.3.3 The Perspective of Other People in the Organization

One aspect of communication processes from the perspective of other people in the organization, i.e. not members of the management team, was that there was a lack of guidelines. FDB at the Finance and IS department expressed this absence in this way:

'It is important to make the purpose and overall goals clear. [...] The uncertainty is the toughest thing." (FDB, H-72)

This illustrates the perceived uncertainty in the organization, at least, outside the management team. The comments made by FDB were expressed after the loss of the contract in the Southern Region and there was a general high level of anxiety in the organization. One explanation for this is that there was little time spent on the communication processes between members of the management team and their subordinates in the different regions or departments.

A number of communication processes between members of the management team and the rest of the organization were taking place unintentionally. There were signals sent to the organization which were not planned and sometimes not desired either. FDB at the Finance and IS department gave one example concerning a situation when MD had chosen to include the business controller BC in a particular project:

"There is nothing wrong with BC, but there are several other people with different experience than he has regarding the issues in the project. MD has to be over-explicit on why he chooses BC in such a situation. There is a risk that a number of people feel as if they are being incapable because they have got the time to lead the project. This is about a form of honesty to the personnel. The system of signals is not good." (FDB, H-63)

This illustrates the possibility of making different interpretations of managerial actions. FDB pointed to the risk that people may be offended if MD is not explicit enough about his actions. In order to reduce anxiety and to signal that management's work was not secret, MD and the other members of the management team decided that the minutes from the meetings of the management team should be public. Every person in the organization had the right to come and read the minutes, but they could not make their own copies of them. From the perspective of people in the organization this was perceived as positive, but there were some other negative effects that were not anticipated.

As the minutes from the meetings in the management team became public, some details from the minutes were screened as they were confidential. This

attempt to increase openness to people outside the management team had the unintended effect of reducing clarity among the members of the team as some details were omitted. To some extent the problem was handled by using confidential enclosures. This illustrates how an intention to be more open to the organization reduced the quality of the work in the management team. As they started to place confidential items in hidden enclosures the positive effect of openness was reduced as the work in the management team once again was perceived as "secret". In spite of this unintended effect the minutes were kept public.

In terms of vertical communication processes, several people complained that they often were not invited to present their own projects to the management team. Those who complained did so in order to reduce filters. One person from the Eastern Region expressed this like:

"We who work ought to present our projects to the management team directly. There is a danger if there is a filter between the management team and the operative business activities. Important information is lost on the way." (ERB, H-28)

Interestingly, members of the management team expressed the same type of complaint, although they were complaining that they were not invited to present their own projects to the board. The desire to present one's own issues to the next level in the hierarchy seems to have been important to a number of people on different levels. The most commonly used argument was that this would reduce the risk of misunderstanding or omission of important details. Also interesting to note is that the perspectives seem to have differed from level to level. Unfiltered presentations to the next level up were perceived as important; those from the next level down were not perceived as important.

6.3.4 The Perspective of Board Members

This section on communication processes will end with a few comments from the perspective of board members. One of the board members stressed the importance of communication in a broad sense when he said:

"It is important to behave. Leaders talk to people. [...] An organization bears the stamp of its leader." (BMB, H-26)

In this short comment BMB summarized that leader talk to people and "behave", which from a communicational point of view could be seen as communication through different types of action. He explored his view on the links between a leader and the organization in the following:

"As a leader of an organization one has to be very close to the business activities and to show an interest in the business. The systems for control have to be in harmony with this. [...] One has to be grounded in the business activities and to have the gutfeeling for it — to know the business." (BMB, H-26)

If one links this comment to the previous one about the importance of behavior, we see BMB stressing the importance of being close to the activities and by being close to them influence the activities via behavior. Or put differently, this could be seen as an example of a close link between learning about the business activities and influencing those activities. In line with this view, BMB also expressed that:

"One must dare to ask questions! Sometimes it causes laughter." (BMB, H-24)

This could be seen as an argument for an open communication, where there sometimes could be questions which from some perspectives could seem comic.

The board members lacked presentations from members of the management team other than MD and FD at the beginning of the process. This was expressed by BMC:

'There is seldom anyone from the different units at the meetings, which means that it is hard to express opinions to people out in the organization." (BMC, H-30)

As mentioned earlier members of the management team themselves wanted to present their own projects in order to include all relevant information. The same wish was now also expressed from the board perspective, the board's argument was the need to express opinions to people out in the organization.

Given the driving forces for presenting their own projects, MD changed the situation into more frequent visits by other members of the management team at board meetings, which was appreciated by all involved parties. This was expressed by NR in the Northern Region who described with delight a presentation she held at a board meeting:

"The nearness to the board has increased with MD as the managing director. I had a presentation for the board which was planned to take 20 minutes but was expanded to more than one hour." (NR, H-30)

The introduction of more presentations by management-team members at board meetings increased the direct communication between the board members and the different meetings of the management team. In that sense this change could be seen as a part of changing the preconditions for communica-

tion by opening a new direct dialogue between the board and different members of the management team.

6.3.5 Interpretations

The example of communication processes about the dialogue between PM2 and MD was a situation where PM2 demanded an immediate meeting with MD as she was frustrated that their prior meetings had been postponed. Given that the frustration reached a certain level in this situation, the question is how other members of the management team reacted. One alternative is that all of them acted like PM2. Another is that some people kept their frustration and did not "force" themselves to meetings with MD, like PM2 did in this case. In other words, there may have been frustration under the surface, which in turn may have influenced other situations.

When MD communicated to the wide group of people in the organization, it was more to "pass on information". Here one can raise a question about the efficiency in the communication process. MD stressed the need to receive a receipt in a communication process, but still used a form of communication where this was difficult. One interpretation is that he preferred informing as many people as possible at the same time for the sake of consistency and that the situation was more of informing, than building a dialogue.

There were some perceived problems concerning the communication processes in the management team as described above. Here one can raise the question of what the perceived problems really were about: respect? courage? uncertainty? or something else? Another question to raise is that if it was a problem that people did not "dare" to express their opinions in the management team, why was this problem not discussed per se? In other words, why were there no discussions on a meta-level? One possible answer is that it was not an important problem enough. Another possible explanation is that there were no traditions of discussions on a meta-level in the management team. Yet another possible answer is that there were some obstacles preventing this kind of discussion.

Another aspect of communication processes concerned the communication from members of the management team to the rest of the organization. Here one view was that people cannot get too much information and it is impossible to fulfill all information needs. This view could be seen in the light of an interpretation that all requests for information cannot be fulfilled with more information. Or in other words, there may be questions on an information

level, where the real issue is rather on another level, concerning vision and direction of the organization, or perceived anxiety in a change process etc.

In the discussions on horizontal communication processes among members in the management team one can note that several of the examples involved BD at the Business Development department. There could be several reasons for this. One possible interpretation is that BD was involved in many horizontal communication processes where there was some sort of tension. Another interpretation is that BD talked more explicitly about this type of problem in communication processes than his colleagues. A third possible explanation is that it was the nature of the activities at the Business Development department which made its communication processes somehow more complicated.

From the perspective of persons outside the management team, team members did not communicate enough. There could be several reasons for this. One is that the members of the management team simply did not see the point in spending the time communicating strategies etc to the rest of the organization. There were arguments against this interpretation as several members of the management expressed difficulties in finding the time, although they found the communication important. To what extent they really found the need to communicate to the rest of the organization important is of course difficult to judge. Another reason for the perceived lack of communication to the wider group is that there may have been difficulties in knowing what to communicate. That is, the vision or strategies may not have been so clear to the members of the management team themselves.

One way of communicating, or at least improving the openness, to the group of persons outside the management team was the introduction of public minutes, which turned out to have a negative effect as well. Things were interpreted as even more secret when there were confidential enclosures added to the minutes. One interpretation of this process was that the intention to open up the management team's work was positive. There might had been other ways to achieve the intended openness however, like written summaries of the main point from the meetings or information meetings with opportunities to ask questions for example. It is interesting to note that the management team continued to keep their minutes public in spite of the weakness of the solution.

The board, in turn, highlighted the link between learning about business activities and influencing business activities. One interpretation of this emphasis, is that there are communication processes running with reciprocal influences. When learning about business activities one also influences the business

activities. And vice versa, when influencing business activities one also learns about them.

Regarding the driving forces for people to present their own projects etc, members of both the board and the management team expressed a desire to reduce filters in order to *send* their messages. There were no arguments mentioned about *receiving* messages without filters. One interpretation of this is that both groups were more concerned about sending than receiving, or in other words they wanted to influence rather than be influenced. Another is that both groups were cautious not to be misinterpreted and wanted to make sure the other party understood the messages. Still it was perceived as more important to make sure that other parties understood the messages that one had sent, than trying to understand the messages one received.

6.4 Patterns in Performing Processes

Here I will look at findings on processes for performing concerning information, business and person and present some patterns from the discussion of the empirical findings presented above.

The patterns are interpretations which may not be apparent when investigating the different dimensions separately. These patterns follow directly from the empirical material. Interpretations in light of previous work will be discussed later (see chapter 8).

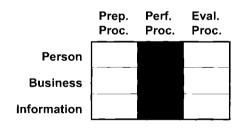


Figure 25 Patterns in Processes for Performing

6.4.1 A Perceived Need for an Information Overview

Over time and in different contexts the managing director asked for an information overview. He perceived a need for information on a more general level in order to get an overall picture of the situation in the organization. It is interesting to note that although he asked for such an overview a number of times he never actually introduced one.

Pattern: In different contexts the managing director asked for information on a metalevel, to put the information he received in its larger context and to get a better overview of the present situation and reduce uncertainties.

6.4.2 Information Needs and Sources

There are several examples of "delays" in information needs, i.e. situations at one point in time that create information needs at a later stage. One example is the information needs of the board members. They wanted more details because they had "got their fingers burnt" earlier. In other words, the information they asked for was a reflection on previous events. Another example of the variations in information needs over time was the managing director's increased demands on analyses carried out in advance of decisions. He had not been happy with the documentation he received prior to making decisions and asked for a higher standard of information. Both these events illustrate how the information needs varied over time. There was a dynamic process where previous events on a business level influenced information needs at a later stage. This means that in order to understand present information needs, there seemed to be a need to investigate previous events on a business level.

Pattern: Information needs were influenced by previous events on a business level.

When using information over time, different information sources were combined by the managing director. There were written reports, oral presentations of projects etc, attendance at meetings on different levels in the organization, and last but not least he found "management by wandering around" to be a useful information source. There is no obvious pattern saying that one or the other source should be superior to the others, but the pattern is rather that different sources were combined in differently in different situations.

Pattern: Different types of information sources were combined differently depending on the situation.

6.4.3 Difficulties in Information Processes

In the performing processes on an information level there were close links to the person level. The dialogue between the local finance departments and the central finance department was somewhat problematic. From the local perspective the senders of the information were frustrated as they did not feel that they had enough time for analyzing the figures they reported. From a central perspective the receivers of the information were unhappy with the comments and the analyses in the material. The final users of the information were not happy either as they lacked analyses.

Several people stressed the importance of a dialogue between the involved parties and emphasized the importance of feedback on reported information. Nevertheless, this was expressed solely in words, rarely actions, and people reporting from a local perspective did not feel they received enough feedback.

There seemed to have been a difference between a belief in the importance of a dialogue and feedback on reported information on one hand, and the actual establishment of such a dialogue and feedback on the other hand. This communication process was difficult to include on the managerial agenda.

Given that people who reported felt a lack of understanding of the context of the information and a lack of feedback, the perceived distance between the units increased. The perceived quality of the information was influenced and there were complaints concerning the number of and quality of written comments on the financial results reported.

Pattern: There was a difference between the belief in the importance of feedback to reporting units and the action taken to achieve such a dialogue.

Pattern: The quality of the information was influenced by this lack of dialogue.

6.4.4 Factors Influencing the Managerial Agenda

There were a huge number of different issues on the managerial agenda. There were also different factors influencing the formation of the agenda. Some issues were included on the agenda for obvious reasons, being crucial for the business activities, e.g. tendering processes. Other issues were included because of external forces from the board, like the issue about prior investment for instance. Then there were issues included for other reasons. One pattern over time was that there seem to be a "fun-factor", i.e. personal preferences, influencing the formation of the agenda. In contrast, there was perceived difficulties in finding time to deal with issues perceived as difficult. This illustrates the links between the personal level, including personal preferences, and the business level, including what issues that are included on the agenda.

Pattern: One type of factor influencing the formation of the agenda was a shared view of the importance of the issue for the business activities. Another factor was an external force from the board. A third type of factor was an internal personal preference, or a "fun-factor", the inclusion of issues perceived as more fun and interesting.

6.4.5 Changing the Framing of IT-Issues on the Agenda

One type of issue on the agenda was issues related to information technology, IT-issues. The number of these issues increased over the period 1993-1998, which may not be surprising given the general IT-development in society during the period. More surprising perhaps was the framing of the issues over time. In the beginning of the period these issues most often were framed in terms of project delays, and budget overdrafts etc. Then there was a shift in the middle of the period and IT-issues were framed more in terms of business development and business opportunities. There may have been different reasons for this shift, for example a changing view in society in general, an increased knowledge about IT-issues in the management team, the real breakthrough in use of Internet etc. No matter what the underlying reason was, there was a pattern in the changing framing of the issues, and the framing of the issues influenced how they were handled. At the board level more attention was paid to issues at a later stage (cf. a fun-factor?).

Pattern: The framing of IT-issues changed from primarily in problematic terms (delays and overdrafts) into framings in more offensive terms (business development and opportunities).

Pattern: The framing of the issues influenced how the issues were dealt with.

6.4.6 Asymmetry in Vertical Communication Processes

Examples of vertical communication processes taking place between different parties in the organization were between the board and the management team, between the managing director and other members of the management team, and between the members of the management team and their subordinates.

In vertical communication processes people wanted to present their projects upward themselves. The main argument used was that they wanted to make sure that details were included and correct and a filter in form of another person presenting the issue may distort or omit important parts. The upper-level recipients in vertical communication also wanted people from lower levels in the organization to present their own projects. The main argument used here was that this way they could respond and send messages. Both parties argued in terms of clearly *sent* messages.

Pattern: In vertical communication processes there were driving forces for reducing filters in the communication. Both the superior and subordinate parties in the vertical communication emphasized sending aspects as the main argument for reducing filters.

6.4.7 Communication and Meta-communication

Communication processes were taking place on different levels. The managing director spent a considerable amount of time and effort communicating through different channels. One of these channels was supplementing communication with words. He sometimes attended meetings primarily to signal that the issues at hand were important, to ask the opinion of someone not only because he wanted to hear the person's opinion, but partly because he wanted to communicate the importance of the person. This type of communication could be seen as a form of meta-communication as there was communication taking place of two levels. There was both the actual communication taking place at the meeting or in the dialogue with a person, and there was the meta-communication in form of the message sent by the very fact of this communication taking place. There were also examples of unintended meta-communication in the sense that some actions were interpreted by other people in a way that was not intended by the managing director.

Pattern: The managing director consciously combined communication on an actual level with meta-communication when he wanted to send messages.

6.4.8 Problems Moving Between Levels

When looking for patterns in performing processes across different levels there seemed to be one pattern that problems sometimes occurred first at one level and then the underlying problems were to be found on other levels. In the perceived problem concerning slow decision-processes for example, the focus was first on inappropriate information in advance of decisions. The underlying problem concerned the increased demands on information as a part of the increased cost control in the organization, i.e. on a business level. One reason for the slow decision-processes was that the communication between the involved parties did not work satisfactorily. As there were different pictures of what the real problem actually was, different people acted on different levels in order to solve the problem. There were attempts to improve information, but without a genuine understanding of the underlying reasons, these attempts did not work out well.

Pattern: What first seemed to be a problem on an information level proved to be difficult to solve without a genuine understanding of underlying problems on business and person levels.

Pattern: There were very few discussions with the explicit purpose to clarify underlying problems.

6.4.9 The Change Challenge

As the organization did well financially, it was difficult for the managing director to achieve a climate for change. Even if he tried to improve cost control, it was difficult, because people in the organization put the increased demands in the context of the organization which did very well financially. It was not until there was a major external event that there was a sense of urgency, i.e. it was not enough for the managing director to communicate the message of importance of change. The climate for change was pervasive, and it was very difficult to change it from an internal perspective.

It was not until the organization faced major challenges that comparisons between MD and the former managing director started to appear in discussions. In the beginning of the process there were very few comparisons between the (then) newly appointed managing director and his predecessor.

Pattern: The resistance to change was pervasive and it was difficult for the managing director to change the climate for change.

7 Empirical Discussion III: Processes Focused on Evaluating

In this chapter empirical findings on management processes focused on evaluating will be described and discussed. There will be sections related to information, business and person levels. Each section will end with some immediate interpretations. The purpose is here to illuminate some aspects from the empirical findings, but at the same time differentiate these interpretations from the empirical descriptions. The chapter closes with interpretations of some patterns in the evaluating processes (see section 7.4 on page 245).

7.1 Information Focus

In the following discussions on information-focused processes for evaluating I will focus on different aspects of evaluation of information for managerial use. First I will discuss the role of evaluating information over time including a situation when the information platform was perceived to be inadequate. Then I will discuss aspects of evaluating

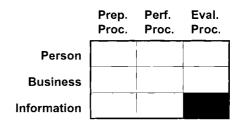


Figure 26 Information Focus on Processes for Evaluating

information in relation to information sources, information use and information quality.

7.1.1 Information Evaluating Over Time

The first and most important evaluative process concerning information took place at a very early stage, when MD had been in office for a few months. As there were many complaints about the information for managerial use both from board members and from members of the management team, MD made the decision to start changing the managerial platform. He felt a need to improve the control in the organization. In this evaluating process there were discussions within the board and the management team about the urgent need to improve the information.

Once the new monthly report was introduced, MD's own evaluation was that the information had been improved. Now he felt a need to change the contexts where the information was used. This led to the introduction of the fixed agendas for meetings, which has been described earlier. In this evaluation process MD felt that change on the information level was not enough.

This resulted in the process to develop fixed agendas. In the development of the fixed agenda, where MD took an active part, the situation was evaluated and the need to increase the focus on business control was found. This led to the need for a new business controller. The evaluating processes were closely related to previous development processes. When something was changed there were also evaluative discussions about need for further changes.

When the business controller was established there was a phase when there were few evaluating processes concerning information for managerial use. It was not until the organization met a major challenge, after MD had been in office for about two years, that there was a perceived need to evaluate the information. At this point in time the managing director felt that there was a need to supplement the ordinary information platform because of an extraordinary situation.

7.1.2 When the Information Platform Was Not Enough

Immediately after the loss of the contract in the Southern Region the organization faced a major challenge. In this situation MD perceived a need for a better picture of different people's views of the situation Omega now was facing. In order to get this picture MD initiated an investigation in form of an interview survey where different points of view from different perspectives were mapped and described.

MD commented on the situation and the perceived need to get a better picture of it:

"Some people say that they see every problem as an opportunity. That is not right. Sometimes a problem is a threat and there is no use trying to ignore that fact." (MD, H-59)

He saw a major problem and wanted to get a better picture than the ordinary managerial platform could provide. The situation was perceived as extraordinary and instead of changing the managerial information platform he sought a temporary solution. He chose to keep his managerial information platform intact and added a component to the platform for a special occasion.

7.1.3 More about Evaluating Information Over Time

After the event in 1995 when the information platform was perceived to provide insufficient support there were few evaluative processes concerning information. The managing director had been in office for a few of years, and the managerial information platform had taken form. There were some complaints concerning the information processes and the lack of sufficient feedback to the reporting units. Here the only evaluating processes taking place were informal conversations pointing out that the dialogue with reporting units was important, rather than taking action and changing the situation.

The evaluating processes on an information level came to play a limited role in the latter part of the time period studied.

7.1.4 Evaluating Information Sources

Although there were no "formal" evaluation processes concerning the use of different information sources, there were comments over time evaluating sources. As described, MD found "management by wandering around" to be a useful information source.

When MD informally evaluated the monthly reports and found that these did not include enough written comments, he introduced a "CEO-letter" from his reporting managers. MD himself had to write a monthly letter to the CEO of the Alpha Group and now he introduced a similar letter from his reporting manager. One intention with these letters, which followed a given structure, was to force the reporting units to comment on the results themselves. MD wanted them to be more alert and not only passively pass on information.

One source that MD was missing, and he expressed this a number of times over the years, was an overview of various types, as mentioned earlier. He wanted to get a better overview of all activities that were taking place or were planned. He said:

"We need a clear structure and an obvious plan for our work." (MD, H-70)

He was looking for a plan for the work, an overview. The question is whether someone other than himself could provide this? On a more specific level an information overview could have been provided, like for instance concerning projects. This was also done to some extent when all projects were reported according to a specific structure on monthly meetings in the management team. At one point in time there were as many as 77 projects running, which meant that it was quite a challenge to get an overview.

7.1.5 Evaluating One's Own Use of Information

One perspective on information use emerged when MD was invited to give a presentation for the board members of the Alpha Group. He prepared himself carefully and made the following comment about the preparation:

"95% of all overhead transparencies are never used, but it is just that much better for the 5% which you really use!" (MD, H-110)

When presenting or sending something himself, he found it useful to be prepared with information that he did not use, but merely used as backup in case it would be needed. A key question then is what the situation looked like when MD was the receiver and someone else had prepared the information? As illustrated above, MD wanted information to meet the agreed-upon requirements. One example of this was when BD reported on a project and did not include enough details and was interrupted by MD. Another example was when documentation in advance of decisions failed to meet requirements.

MD placed certain demands on information and he then kept his demands, even if the senders of the information were not always up to standard. MD was aware of the difficulties in improving the situation and that he had to put time and effort into the process in order to improve the situation.

One aspect of information use which was evaluated in different situations over time was the possible meta-communicative aspect of certain information use. One example of this was when FD suggested that a questionnaire should be sent to people in the organization in order to increase their involvement, and at the same time the results of the questionnaire would provide valuable information. MD found this to be a good idea, evaluated it and decided not to use it. He thought it would have been important to take care of all material from the questionnaire and he saw a risk that the questionnaire would be perceived as a gimmick.

7.1.6 Evaluating Information Quality

When it comes to evaluating information quality MD expressed more concerns about how his reporting manager perceived the quality of the information they used than own concerns. He felt that he was not familiar enough with IT-issues himself and he raised the question of whether the reporting managers in the organization made enough use of the possibilities offered by information technology as tools to support managerial work. He said:

"How good do different managers in the organization feel that the information they receive is? There is a span from a good information system for them to a printout from a computer once a month. Where do they think that they are now?" (MD, H-76)

He thought that the kind of information they had was important. Evaluating quality of one's own information was rare. In the management team there were some discussions. WR commented on the difficulties with key ratios:

"Key ratios are really difficult. There are two reasons for this: there are different definitions of them and the business activities where they are used differ." (WR, H-19)

WR pointed to a problem of using the information for comparisons between different units if the definitions were not exactly the same.

In the beginning of the time period, before the managerial information platform was changed, one of the board members expressed the following regarding the quality of the information:

'It is scary if we as members of the board receive information like this. What do they use themselves?" (BMB, H-20)

Then the information platform was changed as described above, and the overall quality was improved.

It is worth noting that there were very few discussions on information quality. There were some discussions of definitions, but the more general aspects of quality seemed to have been taken for granted.

7.1.7 Interpretations

Evaluation of information was most significant in the early parts of the managing director's tenure. After that evaluation efforts regarding information were limited. One interpretation of this is that once the managerial information platform was established, it was not natural to add this issue on the agenda. As long as the platform in some sense was perceived as useful it could be interpreted like a "don't-fix-it-if-it-ain't-broken"-mentality. If it was not perceived as an emergent problem, like when the managing director took office, the information platform seemed to be of lower priority than many other issues.

Regarding the evaluation of information sources and the perceived lack of an overview, the question is what was the managing director really looking for? One interpretation is that he was looking for something that no one else could prepare. Maybe he was looking for something more like a plan for his own work, which is necessarily difficult for someone else to prepare? He made a

comment on the need to structure his work, which supports the latter interpretation.

The managing director introduced new demands on the information. He was then consistent that the information was up to his standards. This could be interpreted as a way of signalling the importance of the information to the other members of the management team. It could also be seen as a way of signalling that when he made demands, these demands were to be met. In other words the discussions of information could be seen in the light of a dialogue for setting some sort of "ground rules" in the organization. One can notice that he was setting *bis* ground rules on *bis* terms, which in turn could be seen in light of influencing the organization.

In several situations the managing director evaluated information issues in terms of different possible interpretations, for example the idea with the questionnaire to the organization. Here he saw the risk of a possible interpretation, i.e. a perceived gimmick, and therefore stopped the use of a possible information source. This could also be seen as an illustration of how information is intertwined in the sense that collecting certain information also at the same time sends messages.

Regarding information quality, the managing director expressed concerns about the information his reporting managers used, rather than about his own information. One interpretation of this is that he did not perceive any quality problems in the information he received himself. There are arguments against this interpretation, however, for instance the perceived problems with the documentation in advance of decisions. Another interpretation of his concerns regarding the information used by his reporting managers is that he did not think they evaluated the quality themselves. The written comments from the reporting managers gave him some indications about the quality of their own information.

One aspect of the information quality was the key ratios and their quality. There were discussions on the difficulties related to key ratios. One interpretation of this is that being a manager of one of the regions it was very important that the comparisons between the different units were made fairly, as there was a competitive atmosphere between the different regions. It is possible (or perhaps even likely) that members of the management team viewed the importance of key ratios differently depending on how their own unit measured up.

Why were few discussions on information quality? Was it taken for granted? A number of comments run counter to this interpretation. Was it difficult to

have this type of discussions? The discussions which were held did not imply any particular difficulties. One possible explanation is that there was no natural driving force for including this type of discussion on the agenda.

7.2 Business Focus

When discussing businessfocused processes for evaluating, the focus will be on monitoring processes on the agenda, including aspects of business control. First there will be discussions of business control and control in general. Then evaluative processes after a major business loss will be discussed and finally some benchmarking efforts will be described and discussed.

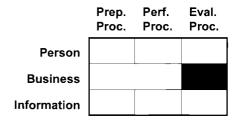


Figure 27 Business Focus on Processes for Evaluating

7.2.1 Business Control on the Agenda

In the work to introduce the fixed agendas MD became aware of the need to improve the focus on "Business Control". In his opinion there had been too much focus on "Accounting Control". He wanted to include more analyses in the control processes and wanted to view the control processes more broadly. This work to change the structures for the meetings led to an evaluating process of the control processes in the organization. When changing one aspect (fixed agendas) of supporting structures and processes, needs to change other aspects (business control) were revealed.

There were evaluating discussions on control aspects of the business activities in the management team over time. Most of these discussions stressed the importance of including broad measures in control processes, here illustrated by two comments by PM1:

"It is important to view the dice from different perspectives." (PM1, H-25)

'It is all about getting people and business to walk hand in hand and to monitor soft issues too and not only financial ratios. [...] Financial information cannot measure everything, like development, well-being, creativity, dissatisfaction, and wishes. Measures for softer issues may be blunt, but are still important." (PM1, H-9)

It is not a coincidence that the discussions are illustrated by comments by PM1 as he as the personnel manager was the strongest advocate of "softer" issues in control processes. In this matter there were different views among the members of the management team. When a draft of a new report was discussed, one of the members uttered the following regarding a suggestion of a new key ratio:

"What is this? Absence due to illness? It stinks! PM1 [the personnel manager] should not influence what is included in the report. He does not do anything with the information anyway." (H-31)

As illustrated there were obvious differences within the management team.

From MD's point of view targets in both "hard" and "soft" terms were important to include, with the following explanation:

'There is a danger in focusing entirely on those issues that are easily measured in monetary units. Even if some soft measures are difficult to measure, or maybe are entirely subjective estimations, they are better than nothing. One has to improve the measures over time. These soft issues are most difficult to handle as a newly appointed manager." (MD, H-17)

In line with this view a number of "softer" issues were included in the monthly report and then subject to some revisions at later stages.

7.2.2 Control Processes in Practice

One part of the control processes in practice was that MD attended monthly meetings in the different regions. One underlying purpose for this was to get a better picture of how the managers in the regions worked and to get to know them and their organizations better, and at the same time there were aspects of control and evaluation. His attendance at these meetings was most important when MD was new in office, but he continued to attend the meetings at later stages too, as he found them useful. He wanted to meet with the people in the different regions and not only control the organization through different written reports. His attendance at these meetings was not uncontroversial. PM1 made the following comment:

"At present MD, FD and BC all go to the monthly meetings in the different regions. That is waste of manpower. It was ok when MD was learning about the organization, but now he wants to be involved everywhere and have 100 percent control of everything." (PM1, H-78)

From MD's point of view, attendance at the meetings was useful. From other perspectives it was a source for irritation and a sign of that MD wanted to "have 100 percent control of everything". There were different perspectives on and interpretations of his managerial actions. MD attended the meetings with certain intentions, and other persons interpreted the actions differently.

Evaluative processes in the different regions varied to some extent according to the different regional managers. In the Western Region, for example, the local financial manager spent quite some time feeding all data into their own system for analysis. By using their own information system they had found a way of keeping track of development in the different parts of their region. The regional manager, WR, said:

"The managers for the different areas know that we keep track of them. This signals that it is important." (WR, H-4)

The control processes throughout the organization were made more difficult due to the profitability in the organization. As Omega was profitable, people in the organization were generally not very concerned about control processes. The financial director even talked about the profitability as a weakness:

'The profitability is a weakness — we are not efficient enough, too many people are involved in different projects and decisions." (FD, H-67)

PL referred to cost control making people sick in the organization:

"They don't see the point in it as the results are so good." (PL, H-66)

That is, the good financial results made the control processes more difficult. In the management team BD raised the following question:

"We have to ask ourselves: What results could we possibly reach? How can we constantly improve?" (BD, H-66)

Even if the members of the management team wanted to change and to improve, it was challenging to convey this message in the organization. The difficulties in achieving a sense of urgency were obvious. Hard facts in the form of very good results influenced people in general much more than management-team members expressing the need to increase cost control.

The control processes did not work perfectly smooth in practice. One example of this was that the reporting units perceived a lack of feedback. One region even tried to send fake figures in order to see if they should get any response. They did not get any feedback on the fake numbers.

7.2.3 Evaluating Business Activities After a Major Loss

Seen from one perspective the evaluation processes on the business level took place on a regular basis. The business activities were reviewed in terms of different types of reports and meetings on a monthly basis. Seen from another perspective the business activities were not reviewed frequently. Little was said about *what* business activities to carry out and *how* these should be carried out.

There was one major event when the business activities were evaluated and the different activities were challenged – after the major loss when MD had been in office for about two years. This means that there was an external event initializing the evaluation processes on the business level.

The number of activities increased considerably at this point in time and the workload became very tough in the organization in general and for the members of the management team in particular, a workload sometime described as "intolerable" (cf. NR, H-82). In accordance with MD's preferences, many activities were organized as projects. This in turn led to a need for a new form of monitoring better suited to the situation with a huge number of projects running concurrently. A model for reporting projects was introduced in order to achieve this.

The organization faced a challenge from a control point of view when the business activities were evaluated and challenged after the major loss. During his first two years in office MD had increased cost control in the organization. When the organization had to find ways to compensate for the lost contract, it was necessary to spend resources on new ideas. This called for a new mindset: first MD had to change a situation where there was a perception of low cost control, and then he had to allow for new investments and at the same time try to maintain cost control in the organization. This was perceived as a delicate balance. BD at the Business Development department said:

"MD has consolidated the business over two years and looked at the potential to save money. We have reduced costs, but not spent enough on development. We need to change now. It has probably been necessary to get a grip on the costs, but now we need to change track. Regarding development not much has happened." (BD, H-68)

Aside from the fact that a person in charge of a Business Development department will typically perceive a need for more resources for development, the comment illustrates a challenge. There was a need for a shift once again. At first when MD took office the shift could in some sense be described in terms of braking, and now it was time to step on the gas again. This led to comments

about comparisons between MD and his predecessor and MD being perceived as being too serious.

7.2.4 Benchmarking Efforts

In order to evaluate the business activities in comparison to competitors, the management team invited four main actors in the business (although not direct competitors) to present how they work. All members of the management team were present and the day was well received. The seminar gave food for thought about how Omega could, and perhaps must, improve their business activities. The lost contract was also seen as a too telling an argument for the tough competition.

This event illustrates how the members of the organization tried to catch external influences in evaluating processes on the business level. Another way of learning more about the environment was a project investigating the business environment, which resulted in a 35-page report describing different aspects on the business environment. The idea was to use the findings as a basis for the long range planning efforts in Omega.

But there were not only attempts to benchmark with an external perspective. ER at the Eastern Region pointed to the possibilities of learning from each other within the organization:

'We need to evaluate the business activities all the time. WR might have shorter time horizon than the rest of us, which may be good and put pressure on the entire organization." (ER, H-71)

Although there were attempts to benchmark, it is likely that the good profitability influenced the perceived need for this type of evaluation. BD at the Business Development department saw a potential in the organization but found it difficult to achieve necessary change. He explained:

"A little provocatively, I use to say that I could improve the results in each unit by 10% just by poking about in it." (BD, H-14)

Here one can ask questions about the willingness among the regional managers to listen to this message. Provocatively was the expression used. The benchmarking efforts that took place were attempts to illustrate the potential for improvements and alternative ways to conduct the business activities. Still, the change climate was restrictive as long as the financial results were very good. Although people seemed to understand the potential for improvements, there was a large gap between an intellectual understanding and action.

One specific aspect of benchmarking concerned MD particularly and that was how well the organization made use of IT-potential to support the business processes. He perceived it as a major problem that he could not judge how good Omega was at making use of this potential. He felt that he had no way of measuring or benchmarking if they were top or bottom, or maybe more likely somewhere in the middle of the spectrum.

7.2.5 Interpretations

There were different opinions among the members in the management team when evaluating different key ratios used in the control processes. One interpretation of this is that the discussions on key ratios were expressions for different opinions on other levels, like for example different personal values or views of how the business activities should be managed.

In the control processes there were perceived difficulties in conveying the message that cost control had to be increased, at the same time as the organization did financially very well. From one point of view this could be seen as fairly obvious. From another point of view the members of the management team tried in various ways to influence people to realize the importance of cost control. When trying to interpret these processes, the time perspectives may offer some explanations. That is, the financial results were very good *now*. The increased cost control was perceived by MD to be needed to achieve sustainable good results *tomorrow*. Here one could question whether increased cost control really would help achieving sustainable results or not, but MD believed in such a causal connection. Another possible explanation could be to found in the differences between messages through action or words. The results were through "action", while the perceived need for increased cost control was expressed through "words".

The shift from "brake" to "gas" was challenging in the organization. How come this was perceived as difficult? First one can assume that most shifts of this type may be difficult. Second the organization had only two years earlier gone through a shift from "gas" to "brake". This meant that when a number of persons finally had gotten used to the increased cost control it may be difficult to change again. Given the discussions in the organization it seems that these difficulties were underestimated.

The benchmarking efforts with competitors could be seen as attempts to include external influences in the evaluation processes. The internal benchmarking efforts could also be seen as attempts to include external influences, but this time on a region level. The use of external influences became one way

of trying to deal with the "problem" that the organization was so profitable that the climate for change was minimized.

7.3 Person Focus

In the discussions on personfocused processes for evaluating, there will be a focus on different aspects of reflection processes in managerial work. First I will describe and discuss examples of evaluating processes on a person level in the managing director's work in the form of personal reflections. Then I will focus on processes for evaluation con-

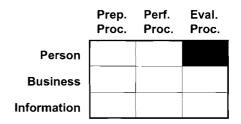


Figure 28 Person Focus on Processes for Evaluating

cerning the management team work and finally discuss some reflections made on the importance of people.

7.3.1 The General Manger Reflecting

Over time there were several occasions where the managing director reflected on his own situation and Omega's situation. MD commented explicitly at an early stage on the usefulness of actually take the time to reflect on matters:

"It is really fruitful to sit down and discuss and reflect upon what one is doing. I have not taken the time to sit down and summarize and reflect on what I have done during these first months here. It is useful to do so now and then." (MD, H-12)

He pointed to the challenge of actually take the time for reflection. Even if he expressed the usefulness of doing so "now and then" it was a challenge to find the time to do so. Here MD used a "reflective dialogue" included in the research project reported (see section 3.6.5) as a means to actually take the time for some reflection "now and then".

When MD had been in office for about 18 months he had reached a situation where the platform for the managerial activities was built and the old investments were wound up. At this point in time he reflected on having "concluded" the first phase of his assignment as managing director of Omega. By this time he had learnt about this organization as well as the Alpha Group, to which Omega belonged.

From time to time MD expressed a loneliness in his work. There were different dimensions of this perceived loneliness. One was within the organization at the time when MD lacked business control, and it concerned the need to reflect on the results Omega presented. He said:

Frankly speaking, there is no one else who reflects on the figures. This is a harsh statement but in principle I think this is the way things are." (MD, H-37)

There were most likely other opinions on the matter at the Finance and IS department, but that is not the point. The point is instead that this was how MD perceived the situation at that point in time.

Another perceived loneliness was within the Alpha Group. MD was in charge of an organization, Omega, that differed from the rest of the Alpha Group. This meant that he did not have any close colleagues in other parts of the group, and in a moment of stress he said:

"I am probably one of the most lonely managers within the Alpha Group." (MD, H-48)

The loneliness consisted of the fact that many issues ended up on MD's desk and he had to make decisions which sometimes were hard to discuss with other members of the management team as they often were parties to the matters.

Over time when MD reflected over his own work there was one type of situation he was particularly pleased with. That was when different types of management processes were settled, or "in place". He tried to establish different processes to use when dealing with various issues on his agenda and was pleased when this was achieved as he found it helpful in his daily work.

When, on the other hand, processes were not settled, it sometimes led to frustration. One example was when MD was reflecting on the lack of power to carry out decisions that had been made:

"I do not like a situation where there is no power to carry out decisions that have been made." (MD, H-37)

Another source of frustration was when he reflected on the impression persons could have of MD and his management team:

"I hate it when people get the impression that we are not competent." (MD, H-33)

The latter example was one of his own driving forces for improving the work in the management team. The former example was one underlying reason for strengthening the management team with a business controller who could help assure that decisions were carried out.

When MD reflected on and evaluated his own work there was one challenge he mentioned on several occasions over time – the challenge of time and how to plan and allocate his own time. One example of this was illustrated in the following conversation between MD and his personal assistant PA:

"This is not realistic MD" says PA about the time schedule in an arrangement. "She is aware that things may be dragging on a little bit" he answers and PA just looks tired. (H-47)

PA saw MD as a genuine "time-optimist" who often thought it was possible to get more things done in the time available than was practically possible. As they had worked together for a long time, she was well aware of the way MD worked and things usually worked very well, even though they had some arguments about time now and then. MD saw a major challenge in planning his own time.

7.3.2 Evaluating Management-Team Work

When members of the management team reflected on their work over time, their evaluation resulted in different opinions. One example was the opinion expressed by SR in the Southern Region:

"We need to focus more on the development of the whole. Many people are focusing on their own. We would need a course in psychology for how we think. [...] It really is about communication between human beings to work a little bit better in processes." (SR, H-79)

She perceived a need to work more with the whole organization in focus rather than an individual's region. One can also notice that in her opinion the "communication between human beings to work a little bit better in processes" was the key. She stressed the communicational aspects of the work in the management team.

Another reflection on the work in the management team was when WR in the Western Region reflected on the "go" in the management team:

"There is 'go' in the work in the management team now. One is looking forward to every meeting. It may have been a strength that we lost the contract in the Southern Region. Now we are all working for the future." (WR, H-82)

Here WR stressed the importance to work "for the future", to aim at a vision. One view is that he had lacked a clear vision and now perceived a "go" as the

management team together had to handle a challenging situation. He enjoyed the situation when there were many activities running concurrently:

'It is fun to work now. There are many things going on right now and a positive atmosphere in the organization. In the Western Region we are moving to new premises which is great." (WR, H-64)

He talked about a "positive atmosphere in the organization". The atmosphere, or climate, in the organization was perceived as important. As the climate for change was limited earlier due to good overall financial results, the atmosphere was now perceived as positive, although the reason for change was a huge loss.

When people evaluated the work in the management team one frequently mentioned factor concerned efficiency in their meetings. MD had introduced fixed agendas for the meetings in the management team when he had been in office for about a year. Over time discipline during the meetings deteriorated. The number of issues included on the agenda increased, and one could see a pattern in which latter parts of meetings tended to be rather "crowded". Often there were items on the agenda that were postponed to later meetings due to lack of time.

Another aspect of the efficiency in meetings concerned who should attend different meetings. ER in the Eastern Region expressed his view as follows:

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"It is not efficient to have meetings for 15 persons that fly one hour to the meeting" (ER, H-83)
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There were many man-hours spent traveling between the different regions, and there was no real discussion of these matters, but people got involved in different projects and then attended project meetings etc.

7.3.3 Reflections Made on the Importance of Persons

In evaluating processes carried out by different people in the organization over time, there was one recurrent theme: the importance of persons. One of the board members reflected on the importance of the people meeting the customers:

"It can result in a 10% difference on the bottom-line if the team meeting the customers is playing in the 5th division or in the Premiere League." (BMB, H-14)

Thus he emphasized the link between the behavior of individuals and the overall results for the organization. In other words, he summarized the importance of people in order to achieve results on a business level.

MD reflected on the importance of people in change processes and was specific about a common mistake:

"In change processes the major mistake is to underestimate the importance of people." (MD, H-65)

This comment could be seen in the context of difficulties in achieving change in the organization when the people involved did not see any point in changing. This was a challenge for the management team and PM1 at the Personnel department expressed it in the following way:

'It is highly dangerous that we make a lot of money now. What is the incentive to change?" (PM1, H-13)

The question is whether MD and the others in the management team underestimated people in the change processes? Was MD's comment perhaps a critical account of own behavior? In some sense MD could have been said to have underestimated people when he tried to change the way people worked. Remember his expression about how he felt like he worked like a beaver to get them to work differently.

From another point of view MD in many respects tried to take people into account when trying to accomplish changes. This was illustrated for example in the process of recruiting a new business controller and the introduction of this new person, especially in relation to the financial director.

One particular aspect of evaluative processes on a person level concerns the perceived anxiety in the organization at different points in time. As described earlier there was little anxiety in the beginning of the period, but then when the organization faced major challenges people started to perceive anxiety. The level of anxiety varied considerably between different people in the organization generally, as well as between different members of the management team.

7.3.4 Interpretations

There are different ways to interpret the managing director's statement that people in the management team did not reflect on the figures. One interpretation is that this was an expression for a perceived general dissatisfaction with some members of the management team. Another interpretation is that there were very few people actually reflecting on the figures, perhaps because the figures usually looked good.

The managing director expressed a perceived loneliness. Here one interpretation is that this type of loneliness is something that every managing director

has to face. The loneliness may have been emphasized by the fact that the business activities differed from the rest of the Alpha Group. On the other hand board members could have been involved in helping to support the managerial duties, although the managing director did not perceive matters this way at the particular point in time when the comments on loneliness were made.

One concern regarding efficiency in the management team's work was that people tended to spend a great deal of time traveling between the different regions to attend meetings etc. One interpretation of the traveling is that there was an underlying intention to make use of the competence available as much as possible and share experience between different regions. Another interpretation is that the traveling simply took place based on tradition without much thought about the efficiency. Yet another possibility is that people complaining about the traveling were dissatisfied with something other than the traveling, which might simply have been a symptom of other issues.

In various ways the importance of people was emphasized. The question is whether this expressed importance was translated into behavior? When the managing director said that it is easy to underestimate people in change processes, one interpretation is that he reflected on his own behavior. Even if he often reflected on how people might interpret different messages or courses of action, it is still conceivable that he found he had underestimated the importance of people in the processes.

7.4 Patterns in Evaluation Processes

Here I will look at the findings on processes for evaluating concerning information, business and person and present some patterns from the discussion of the empirical findings discussed above.

The patterns are attempts to make interpretations which may not be revealed when investigating the different dimensions separately, as above. The patterns are directly related to the empirical material in the following discussion and interpretations in

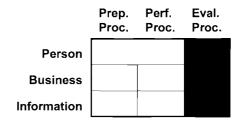


Figure 29 Patterns in Processes for Evaluating

light of previous work will be discussed later (see chapter 8).

7.4.1 First and Second-Order Evaluating

There were first-order and second-order evaluation processes in the organization. Evaluating business activities in form of control processes could be seen as first-order evaluation. Then there were processes for evaluating the control processes, which could be seen as second-order evaluation. The latter could be seen as processes evaluating how the evaluating was to take place.

The first-order evaluating processes seemed to have a natural place on the managerial agenda. The second-order evaluating processes on the other hand, when evaluating processes where questioned and challenged, seemed to be more difficult to include on the agenda.

Pattern: There were two types of evaluation process: first and second-order processes. The first type seemed to have a more natural place on the managerial agenda than the second type.

When evaluation of a second-order took place in the organization there was a specific reason. Often the triggers for evaluating processes were external. External events initiated the evaluation efforts. Examples of this type of external event were comments from board members, entrance of a new person and loss of a contract.

Pattern: When evaluation of a second-order took place, there was often a specific reason for it, typically an external event.

7.4.2 The Chain of Changes and Evaluation

When evaluation processes took place there was often a chain of events. This chain could be described as a change effort that led to evaluation efforts, which led to new change efforts, which led in turn to new evaluation efforts, and so on. So, in addition to external events as triggers for evaluation processes, one could see a pattern that relates evaluating efforts to change efforts in the organization. One example of this is change in information to the management team. This led to evaluation of management meetings, which led to change of agendas. In the process of changing the agendas, the evaluation of a need to improve business control was initiated, which led to a new change etc. Another example is the change in the amount of activity organized in projects. When this was changed, it led to evaluation efforts of the control form for different projects, which in turn led to the introduction of new forms

for reporting on projects. When this form was introduced, it influenced the dialogue between the managing director and the reporting managers etc.

Pattern: Evaluation efforts were often related to change efforts like a chain of events where a change process led to an evaluation processes which in turn led to new change efforts and so on.

7.4.3 The Challenge of Taking Time to Reflect

In the organization people in general and the managing director in particular expressed, and showed in action, the difficulty of taking time to reflect, or evaluate on a person level. The managing director found the time spent on evaluating and reflecting on his work as useful. In spite of this, it was hard to find the time to do so. It was much easier to find the time for evaluating processes on a business level, where there were more specific tasks at hand. The evaluation efforts on a business level addressed more tangible issues and easier to include on the managerial agenda. The evaluation efforts on a person level were more abstract and perceived as more difficult to find time for.

Pattern: It was perceived as more difficult to find the time for reflection and evaluation on a person level than on a business level.

7.4.4 Intertwined Information

When evaluating the use of information sources, one aspect included in the evaluation was possible interpretations of the use of the information source. In other words, the potential message influenced the use of the information source. One example is the rejection of the idea of questionnaires, where the risk of misinterpretation of the purpose led to the decision not to make use of the potential source for information. An example illustrating the opposite situation, i.e. where an information source was used primarily for sending a message, is the managing director's attendance at meetings to signal the importance of the matters under discussion.

These examples point to a pattern of intertwined information. The use of information seems to be bipartite. At the same time as information is collected, messages are sent, deliberately or not. The managing director often evaluated different possible interpretations, which in turn influenced his use of different information sources.

Pattern: When information sources were evaluated, the evaluation was influenced by the dual role of information as receiving and sending were intertwined.

Part III: Concluding Discussions

This third part consists of three chapters with various concluding discussions. First there is a chapter with a general discussion where the empirical findings are related to previous research. Here underlying theoretical perspectives described in chapter 1 will be revisited. I will discuss findings from four theoretical perspectives: an information perspective, an agenda perspective, a communication perspective and a development perspective. I then bring the perspectives together and elaborate on the framework of management processes used in previous chapters. Following from that, I will pay another visit to the case study and discuss empirical findings in light of frameworks proposed earlier in this chapter. Chapter 8 ends with a summary of the main findings of the study.

In chapter 9 there is a discussion of the study's methodological quality. The chapter includes a concluding discussion of the outcome of the research process described and discussed earlier (see chapter 3).

In chapter 10, I continue the concluding discussions by addressing the purposes of the study. Here I review the study and its results (discussed in chapter 8) in relation to the purposes of the study, and discuss the extent to which they are fulfilled. Finally, I look at the study in terms of the meanings and contexts of findings and discuss implications for practice and for further research.

8 Discussion in Light of Previous Work

In this chapter the aim is to discuss empirical findings in light of theoretical foundations and previous work. The chapter is structured by the four theoretical perspectives described earlier. First there is a discussion from an information perspective, then from an agenda perspective, a communication perspective and finally a discussion from a development perspective. Following from these sections there is a discussion on bringing the theoretical perspectives together. The chapter ends with a summary of main findings from the study (see section 8.7 on page 301).

8.1 An Information Perspective

8.1.1 Receiving and Sending Information

In the case study, the managing director asked a number of times for information because he wants to send messages, not because he has an interest in the information per se. Information for his own use was closely related to influencing others.

In previous work of managerial work different information roles have been distinguished, such as monitor, disseminator and spokesman roles suggested by Mintzberg (1973), and often referred to as fundamental roles in managerial work. Given a close relationship between receiving information (monitor role) and sending information (disseminator role), the question is to what extent these different roles are separable. When general managers are acting in monitoring roles, it is likely that they also are sending messages, intentionally or unintentionally, in disseminator roles. The possibility of distinguishing between the different roles suggested by Mintzberg (ibid) seem to be limited.

An alternative approach to information roles is to view use of information in managerial work in the context of communication processes (cf. Johansson and Östman, 1995). In this view the receiving and sending of information are seen in a communicational context and the intertwined aspects are taken into consideration, as opposed to distinguishing between different roles.

The idea of intertwined receiving and sending of information also has implications for choices of media, or rather for how to look upon choices of different media. In information-richness theory (e.g. Daft and Lengel, 1984; Daft et al,

1987) different media have been distinguished according to the "richness" of the media. Given that receiving and sending information are intertwined, the choice of media depends both on receiving aspects as well as on sending aspects. The media have to be seen in the context of communication processes, rather than be evaluated as media without regard to the context, as in Daft et al (1987) where richness of different media is discussed. To evaluate richness of a medium without including the communication context of the information seems to be an oversimplification. This is in line with prior research stressing that richness depends on the interaction of the medium and its organizational context (Lee, 1994) and the social processes surrounding the media use (Markus, 1994).

In information strategies for general managers, information for own use cannot be separated from information to influence others. There is thus a need to reflect and decide on personal information strategies. When looking closer at reasons for asking for information, one can distinguish between two fundamentally different views: asking for information based on a perceived need for the information and asking for information in order to influence other people to pay attention to certain factors.

In the case study there were examples of situations when the managing director asked for information to influence the other person to pay attention to certain factors, and not the least to make sure that the other person knew the details etc. One specific example is the managing director asking for more graphic information. Here the reason was not his own perceived needs, but a way of forcing people reporting the information to pay attention to the information, and comment on it if necessary.

It is worth noting that just as the managing director asked his reporting managers for information with the underlying intention to force them to pay attention to certain factors, the board did the same with the managing director. They asked for information in order to make sure that the managing director himself knew about the details, rather than for their own interest.

In line with previous research, the findings point to the complexity related to information where receiving and sending information can be seen as means for signals and symbols in an organization (cf. Feldman and March, 1981). Thus, the information and its underlying purposes need to be seen in its wider context. As discussed above, information can be seen as intertwined receiving and sending. Information flows are like two-way traffic. When trying to achieve action, signals are sometimes best sent by requesting information, and when for example asking for information the main purpose can be to signal

the importance of matters at hand rather than a need for the information per se (cf. Mårtensson and Mähring, 1992). The act of asking for information sends in itself important signals, and the sending of these signals can be more important than the information contents. The meaning of the information can thus be seen from various perspectives.

Information used for achieving action is more complex than information in terms of the pair sender-receiver. Information can be used with many different purposes and the use can have many different effects. From a theoretical point of view this could be seen in relation to the communication axioms suggested by Watzlawick et al (1967) (see page 78 above). The first axiom says that one cannot not communicate and the second axiom says that communication has a content and a relationship aspect where the latter classifies the former. Communication is taking place both in the form of messages and in the form of metamessages (Bateson, 1972).

When looking at information use in order to achieve action, this can be described in terms of information to inform oneself and to inform others. Another dimension of information use can be expressed in terms of influence, i.e. to influence others and to be influenced. Combining these two aspects results in the matrix presented in Figure 30.

	Influencing		
Informing	Oneself	Other Persons	
Oneself	A. Focus on requesting information to use it oneself.	C. Focus on requesting information with intention to influence other persons.	
Other Persons	D. Focus on sending information in order to influence oneself (e.g. public commitment).	B. Focus on sending information in order to influence other persons.	

Figure 30 Information in Terms of Informing and Influencing

The matrix illustrates different aspects of information for action in terms of the two dimensions informing and influencing. Cell (A) in the matrix is when one obtains information for one's own use of information. Cell (B) is the opposite, when one informs other persons in order to influence them. These two situations describe the most explicit and tangible combinations. In cell (C) one asks for information with the underlying intention of influencing the other person(s). The major issue is not information asked for, but the message sent

by asking for it. One example from the case study is the managing director asking for details about the travel accounts in different units. He was not interested in the information per se, but he wanted to send the message that it was important to keep track of details. The meta-message was different from the information asked for.

Cell (D) illustrates the situation when one informs others with the underlying intention of influencing oneself. One example of this is public commitment, when someone informs other persons and by doing so commits oneself to the message communicated. In the case study there were aspects of this type of communication for example when the managing director informed about the importance of the tendering processes and thereby committed himself to devoting a great deal of time and attention to these processes.

Receiving and sending information are intertwined and inseparable, like two-way traffic. When asking for information messages are sent. Asking for information is also asking for attention. Awareness of the complexity of information in terms of informing and influencing can help one to use information in order to achieve action.

8.1.2 Information Needs in a Context

The close connects among information and business activities and managerial work have been illustrated in the case study. This is consistent with prior research pointing to the need to learn about managerial work to understand managerial information needs (e.g. Mintzberg, 1973, p. 150) and the difficulties identifying information needs as there is so much potentially relevant information (e.g. Kotter, 1982, p. 76). The question whether the real issue really is to find the information needs or perhaps instead to make sense of the business aspects and understand the managerial world has been raised earlier (Davenport, 1997, p. 138). The study at hand points in the same direction: the issue does not seem to be to define information needs, but to focus more on the contexts of the information, such as business activities and to understand managerial work.

The body of research focused on finding or defining the information needs of general managers (e.g. Watson and Frolick, 1993) has to a large extent focused on different techniques for defining information needs, often as a part of the process of introducing computer-based information systems into managerial work. These specially designed systems have so far shown limited success among general managers and efforts have often failed (e.g. Rainer and Watson, 1995). One possible explanation that has been offered for this relates to the difficulties in defining the information needs of general managers. But perhaps

the question about information needs is a misleading question. Maybe the scope has to be wider in the sense that the focus needs to be more on increasing our understanding of managerial work in general, rather than trying to define the specific information needs.

Managers have sometimes been described in terms of information workers, like craftspersons whose raw material is information (McCall and Kaplan, 1990, p. 16). This metaphor can be useful for illustrating not only the extensive use of information in managerial work, but also the difficulties in defining information needs. It seems fairly obvious that defining what raw material a craftsman, say a cabinet-maker, needs depends on what he or she is going to produce. With a general manager, the parallel is that the information needed also depends on what she or he is going to do. This in turn means that in order to better understand the information needs of general managers the main challenge may be to increase the understanding of activities of general managers.

A narrow focus on information needs in managerial work is misleading. The scope needs to be wider, with a focus on business activities and an understanding of managerial work rather than definitions of information needs.

8.1.3 Dimensions of Information Needs

Several previous studies have been based on an underlying assumption that information is to support decision-making (e.g. Wetherbe, 1991). This means that information needs have been depicted in terms of supporting decision-making processes in managerial work. Instead, given the nature of managerial work, it seems fruitful to view information needs in terms of supporting managerial activities and managers' sensemaking processes (cf. Weick, 1995). Given this stance, it is natural to view information needs as something continual. With an underlying decision-making assumption one can view information as input to discrete events (although perhaps to a large number of events). With a view of information needs as input to a sensemaking process it is easier to see the continual need for information and changes in information needs.

This has the implication that there is limited value, over time, in attempts to map general managers' information needs, for example in development processes for computer-based information systems to support managerial work. Instead information needs have to be viewed as something constantly changing. The need for different types of information varies though. There are some information needs that may be more static to their nature (e.g. information about financial results). The findings of this study indicate a need to view

different types of information needs in managerial work differently. In order to understand these needs, it is necessary to fully understand the context, i.e. the managerial work. Instead of an underlying information-system-development approach where information needs are defined, the task ought to be viewed more from a managerial-work point of view.

Information needs in managerial work should be viewed in a larger context, as suggested by for example Davenport (1997) in terms of a holistic approach. Another way of putting information needs into a larger context is to view the needs of information from a perspective of different logical levels (cf. Bateson, 1972). In these terms information is seen as structures to support business processes. Seen from the perspective of logical levels, too narrow a focus on information needs would be to "lock" on one level without taking other levels into consideration. Theoretically this would be inadequate, which also seems to be the case from a practical point of view.

The concept of information can be elaborated on in order to reveal different dimensions. If one starts looking at the timing of information needs, i.e. when the information is needed, it is possible to distinguish between immediate and delayed needs. Some information needs are spontaneous, while other needs are known about in advance. As described earlier, some information needs may be continuous while other needs are discrete. Regarding the content dimension, needs can be for information from external or internal sources. Some information needs are anonymous while other needs are used to communicate messages. Examples of anonymous information needs could be in relation to confidential issues on the managerial agenda. In the case study this was illustrated for example by managerial activities concerning old investments during the first year. Furthermore, there is a contextual dimension in information needs concerning the intentional use of the information which can be for example either for decisions or dialogues. Yet another dimension concerns the driving force behind the information needs, which can be either one's own or external.

The seven dimensions of information needs suggested above are summarized in Table 20 below.

Dimension	Description immediate vs. delayed needs	
a timing-dimension		
a planning-dimension	spontaneous vs. planned needs	
a continuity-dimension	continuous vs. discrete needs	
a content-dimension	external vs. internal sources	
an openness-dimension	anonymous vs. communicative needs	
a contextual-dimension	decision vs. dialogue	
a trigger-dimension	own driving force vs. external driving force	

Table 20 Dimensions of Information Needs

In line with previous research where holistic approaches to information needs have been applied (e.g. Davenport, 1997) the dimensions suggested in Table 20 can help explore information needs and view the needs in larger contexts and with more nuances.

It is worth noting that information needs may not always be visible at all. There are managerial activities that are "invisible" and take place in arenas far from board rooms etc (Sjöstrand and Tyrstrup, 2001). This is worth emphasizing as a discussion on information needs otherwise may look like a rational approach where information needs easily can be defined for different tasks.

Describing information needs in different dimensions can help reveal nuances and add to a holistic view where information needs are put in wider contexts.

8.1.4 Information Sources

In the case study it was found that different information sources were combined depending on the situation. A large number of information sources were used. There was no particular pattern found regarding which information source was perceived as more useful than other sources. It was rather the combination of different sources that was evident.

Previous research has investigated major sources of management information and perceived usefulness of different information sources in managerial work (e.g. McKinnon and Bruns, 1992) and seeking styles for information (e.g. Martin and Martin, 1989). In the study at hand the main focus has been to view use of information as a part of managerial activities, not on investigating

information sources or seeking styles per se. Nevertheless, the perceived importance of combination of information sources has been significant.

One particular aspect of combined information sources has been the perceived usefulness of "management by wandering around". The managing director stressed the importance of being out to see and hear things without searching for anything particular. He found it useful to combine written reports and oral presentations with being out to see and hear things without particular aims. In terms of Aguilar's (1967) description of different types of scanning, the managing director stressed the importance of undirected viewing and informal search. In line with previous research, the scanning was determined by the situation. The perceived usefulness of "management by wandering around" highlights the importance of human sources of information, which is consistent with previous research (e.g. Keegan, 1974).

The perceived usefulness of different information sources can be described in terms of three different factors influencing the choice of sources:

- the individual
- the situation
- the information

The individual and his or her preferences influence the choice. The situation influences the choice, where the situation includes the time-factor, i.e. how much time is available. The information influences the choice in terms of both form and contents. This means that when evaluating information sources, these have to be seen in their context in terms of: who is the individual to use the information, what is the particular situation, and what kind of information is in focus. One theoretical foundation to the classification along these three dimensions is found in the infological equation by Langefors (1973), see page 74 above. The individual links to the frame of reference in the infological equation; the situation links partly to the time-component in the equation; and the information links to the data-component in the equation.

Another theoretical foundation is found in the theory of logical levels (e.g. Lundeberg, 1993). The three factors represent three fundamental levels: persons (the individual), business (the situation) and information (cf. Figure 10 on page 83).

The usefulness of an information source is related to the individual, the situation and the form and content of the information. The usefulness is also related to the combination of different sources.

8.1.5 Levels of Information

One recurrent theme in the findings from the case study was the perceived need for an information overview. The managing director was asking for information on a more general level to get an overview. He came back to this request a number of times, but never implemented a master overview.

From a theoretical point of view there are links to the distinction between syntax, semantics and pragmatics, see earlier discussion (page 80). The master overview can be seen as a means for help putting the information in its larger context and to increase the effectiveness in terms of meaning of the information, or in other words aspects of semantics. This in turn then influences the use of the information, or aspects of pragmatics.

The perceived need for an information overview can also be described in terms of reframing (e.g. Watzlawick et al, 1974; Koestler, 1964), see page 86. That is, a master overview can help reframing issues because an overview of a situation can help revealing new patterns and issues can be seen through new frames.

There are thus several different theoretical explanations for the expressed need of an overview as illustrated above. From a practical point of view in the case study the managing director asked for a master overview, but did not implement one. There could be different reasons for not implementing it: an inability to express what the plan should include, difficulties in producing the overview, insufficient priority given to the issue etc, including combinations of these possible reasons.

No matter what the reason for not implementing a master overview, this plan could be seen as information on a different level than other reports. While reports traditionally have the purpose of fulfilling more or less specific information needs, an information overview would have the purpose of fulfilling a need on an overall level, putting the other information in its context. Here there are close links to the notion of information ecology suggested by Davenport (1997), where a wider picture is included and information put in its larger context.

When McKinnon and Bruns (1992) discuss different types of information in terms of an information mosaic, this is an attempt to capture the richness of different types of information which together form a mosaic to support managers with information. Given a perceived need for a master overview on another level, there might be mosaics on different levels. One is the pattern of

different tangible pieces of information put together in a mosaic. Another is the pattern of information for overview, like patterns of different mosaics put together. In accordance with the earlier discussion of binocular vision where the differences between the different perspectives add new information and an extra dimension (a depth), (Bateson, 1979, pp. 73-74), information on an overview level is an example of such an extra dimension.

Information in managerial work can be seen as information on a specific level and an overview level. A combination of these levels can help giving a richer picture of information in managerial work. The information needs on a specific level seem to be easier to meet than those on an overview level.

8.1.6 The Usefulness of MIS, DSS, EIS...

In the case study the managing director explicitly stated that an Executive Information System (EIS) would not in his opinion be of any particular use to him. He saw a potential usefulness of such systems for managers closer to the operative business activities.

This is the opinion of one manager in one organization. But nevertheless the question is whether the nature of general managers' work influences the potential perceived usefulness of computer-based information systems. As previous research has shown (e.g. Rainer and Watson, 1995) a large percentage of EIS-efforts that fail. Difficulties related to focus on information needs offer one possible explanation.

A combination of different driving forces (technological, supporting, and pilotusing) can help explain why efforts in the form of time and money are spent on computer-based information systems to support general managers, in spite of previous discouraging experiences. In the case study at hand there were not sufficient driving forces for developing an executive information system.

There need to be sufficient driving forces in order to develop computer-based information systems to support managerial work. Given the nature of managerial work, specially designed computer-based information systems may be more suitable on lower managerial levels and not suitable for solving problems perceived by general managers.

8.1.7 The Infological Equation Revisited

Information use over time can be related to experience, which has been done for example by Isenberg (1986) in studies where information uses have been compared between experienced managers and students. In terms of the infological equation (Langefors, 1973, described above on page 74) *information*

is a function of an interpretation process where a person with a *frame of reference* interprets some *data* and has some *time* available. This means that a person's frame of reference heavily influences the interpretation process in information use. In the following paragraphs the components of the infological equation will be discussed in light of findings from the case study.

The *data* aspects of the infological equation can be seen as different types of information sources used. Besides the types of sources described above (written reports, "wandering around", and attending meetings in regions) the managing director also saw his external board assignments as useful information sources. In the beginning of his tenure he changed the form and contents of written reports, and they then became more consistent. As described above, he continued to attend meetings in the regions once the behavior was established. A common pattern between these two sources was that there were changes taking place in the beginning of the managing director's tenure, while the information sources (or data sources according to Langefors' terminology) became more stable once they were established.

Regarding time aspects of the infological equation, structures of reports in the case study were described as important to help minimize the time and effort requested to read reports. Recognizing the structure of reports was perceived as important to help reducing the time needed to engage their content. Early in his time in the organization, it was natural for the managing director to spend a lot of time on interpreting data in order to learn about the activities. Later it became more important to minimize the time needed to learn from reports etc. Still, interpretive processes can be time-consuming. One specific example was when the financial director sat down at the kitchen table to analyze the information, in order to see what the report really said. In terms of the infological equation he increased the time spent on the interpretation process in order to improve the value of the report. Another aspect of time spent on interpreting processes was that the managing director wanted his reporting managers to spend more time on their interpreting processes before sending information through written reports.

The *frame of reference* of persons interpreting data is the third aspect of the infological equation. This means that persons' pre-knowledge and world views play important roles when interpreting data into information. The influences on managers' choices of information sources from their background in terms of education etc has been described in previous research (McKinnon and Bruns, 1992, pp. 206-208). The infological equation highlights the importance of taking people's frames of reference into account when discussing informa-

tion. This has been discussed in terms of information as a relative concept in earlier research (Lundeberg el al, 1995) which follows from the infological equation. That is, information as a result of interpretation processes depends on people's frames of references, which in turn means that some pieces of data result in different information for different persons depending on their frames of references.

In the case study a new managing director enters the organization with his frame of reference. When he starts interpreting data in the form of various reports in the organization, he does so through his own frame of reference. What information he gets from these interpreting processes depends not only on the data and time available, but also on his frame of reference, in accordance with the infological equation.

A fundamental implication from this view on information is that when the managing director builds a picture of the organization, his own frame of reference plays a significant role. This means that his background, prior experiences etc influence his picture of the organization. As there are links over time, one can raise questions about implications from the managing director's frame of reference, when highlighting the longitudinal dimension.

One specific example concerns the perceived need for increased cost control in the organization. When the new managing director entered the organization one of his first activities concerned efforts to improve cost control. At this point in time he had received an assignment from the board when he accepted the position and through board members received an initial picture of the organization. This means that his frame of reference included some pre-knowledge about an organization in need of increased cost control.

In some respect the managing director, intentionally or unintentionally, aligned the organization, at least to some extent, with his frame of reference. A question to ask, but difficult to answer, is in what ways and to what extent did the managing director's frame of reference change over time? Written reports, different types of management meetings, and informal meetings with people through "wandering around" are all examples of sources that most likely influenced his frame of reference. Major external events also seemed to have played significant roles for the evolution of the frame of reference. But still the question is to what extent did the frame of reference really change? In some respect one can see a managing director entering an organization with a world view and taking on an assignment given this frame of reference, which influences managerial activities and thereby the organization. Then, over time, the

frame of reference may change, although it may be difficult to tell to what extent this occurs.

When investigating the infological equation in a longitudinal dimension, arguments for the relativity of information are supported (cf. Lundeberg et al, 1995). Managerial activities influence an organization, and information also does so indirectly as it influences managerial activities. The infological equation highlights the importance of the frame of reference used when data (e.g. reports) are interpreted into information. One consequence of this is that the frame of reference of a managing director plays a significant role. It influences the interpretive processes resulting in information, which in turn influences managerial activities, which in turn have organizational consequences. Given a relativist view of information (ibid), the people interpreting written reports etc play significant roles.

If one adds the dimension that a management team consists of different people with different frames of reference, the situation becomes more complex. The frames of references can be seen to be inter-subjective. That is, to a certain extent the different frames of references are shared, and to some extent they are unique. In the case study at hand the influences from the managing director have been discussed. One can raise questions about how the dynamics of different frames of references in the management team evolved over time, but these aspects are beyond the scope of this study.

In line with the infological equation and prior research the study supports the idea of information as a relative concept. The case study illustrates how the frame of reference of a managing director directly or indirectly influences the organization. The study highlights the importance of taking frames of references into consideration when discussing information in managerial work.

8.2 An Agenda Perspective

8.2.1 Factors Influencing Agenda Formation

In previous work on agenda formation (see section 4.2.4) a number of different factors influencing the formation of an agenda have been identified (e.g. Dutton, 1986). One type of factor concerns the characteristics of an issue ("issue salience") such as for example the size and perceived urgency of an issue. A second type of factor concerns the sponsorship for issues, i.e. the political foundation of issues. A third type of factor influencing the formation of an agenda is linked to the size and variety of the agenda per se. The differ-

ent factors are then combined into what is expressed as issue force in terms of issue exposure and issue interest.

The managerial agenda depicted in the case study illustrated how a large number of different issues were combined on a managerial agenda. Some forces to include an issue on the agenda were based on internal driving forces, while other were based on external driving forces. Furthermore, the findings from the case study highlight the importance of personal interests. This factor can be derived from factors concerning issue sponsorship. The personal interests in different issues seem to play significant roles in the formation of agenda and need to be included explicitly in theories on agenda formation.

The dimension describing personal and business-driven forces can also be described in terms of subjective and objective. Personal-driven forces are strongly linked to personal preferences. Business-driven forces on the other hand are more related to business events influencing agenda formation. Worth noting here is that business events are interpreted by persons before they influence agenda formation, and in that sense one can argue that all types of influences are personal. The dimension describing internal and external driving forces highlights the origins of driving forces. Internal forces have their origins in the organization and the work in the management team. External forces come from outside the operative organization, such as the board of directors or the market. There are for example often strong external forces for focusing on activities resulting in short-term results (cf. Brodin et al, 2000) which makes the situation challenging for the general manager. The different dimensions are illustrated in Figure 31 below.

Driving Forces		
	Internal	External
Personal- Driven	Internal Personal Driving Forces (e.g. an individual's interests including a "fun-factor")	External Personal Driving Forces (e.g. interests among board members)
Business- Driven	Internal Business Driving Forces (e.g. outcomes of business activities)	External Business Driving Forces (e.g. competitors' actions, changes in markets)

Figure 31 Factors Influencing Agenda Formation

Among internal personal driving forces one can distinguish a force which can be called a "fun-factor". This was illustrated in the case study as it sometimes was easier to find time and attention for issues perceived as more interesting and fun. The board members, for example, were at some points concerned that the management team spent too much time and attention on different projects as these were perceived as fun and interesting.

Issues partly driven by personal motives are in line with some prior research (e.g. Holmberg, 1986) but these personal motives are not always highlighted in the literature. One reason can be that they are more subjective and do not always fit into more rational models of agenda formation. Given the duality of managerial work with both objective and subjective aspects (Sjöstrand, 1997) these subjective aspects are worth including in the explicit descriptions of agenda formation.

Contrary to factors influencing an issue to be *included* on the managerial agenda, there are also factors influencing an issue to be *excluded*. These can be described in terms of "barrier-factors" for agenda formation. In the case study one example of this situation concerned IT-issues. At some points IT-issues were described in terms of being tricky and that it was not time enough to give priority to everything. A perceived limited knowledge about how to deal with these issues became one type of a "barrier-factor". The limited knowledge can concern the issues per se or how to handle the issues.

Identifying the factors preventing issues' inclusion on managerial agendas can be seen as a supplement to identifying the factors working for issue's inclusion. As the number of issues competing to be included on the agenda is large, the understanding of factors underlying the evolution of managerial agendas can help increase the understanding of managerial work and the allocation of time by managers. This in turn can help when supporting managerial work with information and other supportive structures and processes.

Factors influencing the formation of the managerial agenda can be seen in two dimensions: internal or external origin of the driving force, and personal or business-driven force. Among internal personal-driven forces a "fun-factor" can be identified. Besides identifying factors' inclusion on the managerial agenda, explicit identification of "barrier-factors" preventing an issue's inclusion on the managerial agenda can increase the understanding of the formation process.

8.2.2 Framing of Issues on the Agenda

The framing of issues on the agenda varied in the case study. One significant example concerned the framing of IT-issues on the managerial agenda. In the beginning of the period studied, IT-issues were mostly framed in problematic terms (like delays and overruns). At later stages IT-issues were often framed

in more offensive terms (like business development and opportunities). The framing of the issues influenced how the issues were dealt with as there were more constructive and positive discussions in the later stages.

Theoretically it has been shown that reframing, i.e. to place a situation in another frame which fits with the "facts", can help change the meaning of the situation (Watzlawick et al, 1974; Koestler, 1964). Applied to issues on a managerial agenda, framing and reframing can change the perceived meaning, including the importance, of issues to be included on the agenda. Linked to factors described by Dutton (1986), the perceived magnitude, abstractness, simplicity and immediacy of an issue can be changed by the framing of the issue.

The managerial agenda is constantly changing as new information is received and new opportunities arise (Carroll and Gillen, 1987). In this context it is not only important to understand the formation of the agenda in terms of what issues are included. It is also important to understand the framing of issues, as the framing of issues will influence how the issues are dealt with.

Another example of framing of issues from the case study, besides the reframing aspect of IT-issues, was the loss of an important contract. First the issue was generally framed more or less in terms of a disaster. Then it was reframed in terms of a wake-up call for the organization. The reframing of an initially very negative situation helped the organization to view the event in a more favourable light. A wake-up call can be perceived as painful at first, but at a later stage it is seen as something helpful and useful. In the context of the lost contract, there were members of the organization who after a while saw the event as both helpful and useful, in spite of being painful.

The example of reframing can be illustrated like Figure 32.

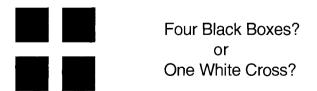


Figure 32 Reframing: Four Black Boxes or One White Cross?

The reframing dimension can also be expressed in terms of *managerial mindshifts*. When shifting from the view of four black boxes (e.g. lost contract = disaster) to one white cross (e.g. lost contract = wake-up call) there is a shift in mindset, and an issue on an agenda might be seen in new light. These types of manage-

rial mindshifts help in understanding the formation of managerial agendas, as well as helping to further the understanding of the issues per se.

The framing of issues on the managerial agenda influences how the issues are dealt with. Reframing of issues help reveal new aspects of issues. The reframing can be expressed as managerial mindshifts.

8.2.3 Evaluation Efforts on the Agenda

In the case study there were evaluating processes of both a first and a second-order taking place. Evaluation of a first order can be seen as evaluating business activities, while evaluation of a second order can be seen as evaluating the evaluation of business activities. The first type of evaluation effort had a more natural place on the managerial agenda than second-order evaluation processes. The latter type of evaluating process took place when there was a specific reason to do so, often an external event, for example comments from the board, the entrance of a new person or the loss of a contract.²⁶

When the managing director in the case study was newly appointed, he spent time and effort on second-order evaluating processes and changed reporting routines, structures for meetings, etc. Then, in later phases when these changes were accomplished, there were no natural mechanisms evaluating the needs for further improvements. Infrastructure building for managerial activities was included on the managerial agenda in the beginning of his tenure. Once established by the new managing director, there was no natural driving force for including this type of second-order evaluation on the agenda, except when there were external triggers to do so, like directives from board members or a lost contract. Strong external triggers were required if second-order evaluation activities were to appear on the agenda.

One possible reason for the less natural place of second-order evaluation processes on the agenda can be found in the abstractness of the issue. Second-order processes are more abstract and thereby more difficult to find the force to include on the agenda. The triggers to evaluate on a second-order level were often external. They helped put the issues on the agenda by increasing their perceived immediacy.

²⁶ In prior research one can find examples of areas where there seems to be a need for external triggers for first-order evaluation too. One example concerns corporate acquisitions where evaluation of merger effects has shown to be more frequent when there are external triggers in the form of demands for evaluation from board of directors (Bild, 1998).

With no external triggers there is a risk that second-order issues, not short-term emergent but long-term important, are excluded from the agenda. From a systems perspective (cf. discussion on page 83) this can be seen as an example of the importance of long-term open systems, i.e. systems open to external impulses.

The concepts of first and second order evaluating processes can be compared to single and double-loop learning (Argyris and Schön, 1974), see section 4.2.5. That is, first-order evaluation can be compared to single-loop learning, or learning within existing frames, while second-order evaluation can be compared to double-loop learning, or learning beyond existing frames. The distinction between the two types of learning has also been expressed in terms of mental model maintenance and mental model building (Vandenbosch and Higgins, 1996). This distinction between "maintenance" and "building" can be used as a metaphor for evaluating processes. There are both processes to maintain evaluation processes (first-order) and there are processes to build evaluation processes (second-order).

Evaluation efforts of a first-order have a natural place on the managerial agenda, while evaluation efforts of a second-order do not. External triggers help place second-order evaluation activities on the managerial agenda.

8.2.4 Reflection on the Agenda

Reflection on the agenda can be seen as one particular case of evaluation on the agenda. This example focuses on person-related aspects of evaluation (e.g. reflection and learning) and will be elaborated upon in the following paragraphs.

The managing director in the case study found it valuable to take time for reflection in combination with action in his work. He still found it difficult to find the time for reflection. In terms of agenda formation, issues concerning reflection were not emergent and were difficult to include on the agenda.

Issues on the managerial agenda in general, and not only evaluation issues, can be seen in terms of single and double-loop issues (Argyris and Schön, 1974). That is, there are some issues to be dealt with, and there are other issues concerning how issues could be dealt with. In the case study there were usually a few major issues in focus on the agenda, what can be called *knock-out issues*. More seldom double-loop issues were included on the agenda. It was perceived as difficult to find time to reflect on one's own work, which is in line with prior research on managerial work (e.g. Carlson, 1951). It is worth noting that

difficulty of finding time for reflection in managerial work was discussed long before today's IT-development, as illustrated by Carlson's work from half a century ago. Given the possibilities for communication offered by new technology, the time for reflection may be even more difficult to find.

Difficulties in finding time for reflection on the managerial agenda is also in line with previous research on agenda formation (see section 4.2.4). Reflection issues can be seen as abstract, as well as less urgent in a short-term perspective, which means that there are likely to be other issues more pressing to include on the agenda.

This means that previous research both on managerial work and agenda formation points to the difficulties in including reflection in managerial work. Still including reflection on the agenda is perceived as important from a learning perspective (e.g. Schön, 1983). There are theoretical arguments for combining action with reflection in terms of *reflection-in-action* (ibid), i.e. to find ways to reflect in managerial action. One example of how the managing director in the case study tried to find more time for reflection was to spend time working at home in order to find time free from disturbance. This can be seen as combining managerial action with managerial reflection. One can regard it as reflection-*on*-action rather than reflection-*in*-action, as the managing director found time to reflection while not in action.

From a learning perspective the combination of action and reflection is important for a general manager. The ability to combine the two components is important. According to theories on agenda formation, reflection aspects are more difficult to include on the agenda. Reflection skills often start with moves between different levels of abstraction (Senge, 1990). This ability to move between levels of abstraction is a more generally important skill for understanding a complex situation (cf. Lundeberg, 1993).

Concerning driving forces for different person-related issues in managerial work, there are stronger forces for issues on a "single-loop level" than for issues on a "double-loop level", where the latter can be regarded more as reflective issues. Expressed differently, there are stronger forces to make sure that one does things right than there are to reflect upon whether one does the right things.

One possible way to include more reflective issues on the managerial agenda is to reframe these issues (in accordance with the discussion on reframing above). Issues that at first look abstract and less urgent can be expressed in more familiar managerial terms, like for example investment of time in order

to gain time later. Through reframing, issues can be perceived as more actionoriented and thereby easier to include on the managerial agenda.

Reflection-related issues are difficult to include on the managerial agenda. From a learning perspective the combination of action and reflection is important. One possible way of increasing reflection aspects is to reframe these issues in more action-oriented terms.

8.3 A Communication Perspective

8.3.1 Roles of Communication

Trying to address roles of communication in managerial work is quite a challenge. Here I will start by linking back to the discussion of information as being intertwined (see section 8.1.1). Given that sending and receiving information are seen as interlinked concepts, there are communication aspects of information use. The information and communication perspectives are closely related. One distinction between the perspectives is the starting-point. In an information perspective, I took a starting-point in information needs, sources, and systems etc. In a communication perspective on the other hand, my starting-point is rather on communicational factors such as dimensions of communication processes and vertical communication processes. Even if information plays significant roles in these processes there is another starting-point here.

Previous research has pointed out that conversation with other persons is an important task for managers (e.g. Carlson, 1951; Mintzberg, 1973; Hales, 1986). It has even been suggested that the effective use of language to get things done is the essence of management (Eccles et al, 1992). Communication is taking place constantly both intentionally or unintentionally, in accordance with the first communication axiom by Watzlawick et al (1967, p. 51) which says that "one cannot not communicate". Communication about intangible objects and nonstandardized objects has been shown to be especially difficult (March and Simon, 1958, p. 164).

In the case study there were examples when the managing director communicated both intentionally and unintentionally. Some examples illustrate desirable effects and some illustrate undesirable effects (cf. Schön, 1983, p. 153). These two dimensions: intentional and unintentional communication vs. desirable and undesirable effects are combined into a framework for analyzing communication acts and their effects in Figure 33.

Communication Act Analysis		
	Desirable Effects	Undesirable Effects
Intentional Communication Act	"Bingo" Intentional communication act with desirable effects	"Nope" Intentional communication act with undesirable effects
Unintentional Communication Act	"Nice surprise" Unintentional comm. act with desirable effects	"Oops" Unintentional comm. act with undesirable effects

Figure 33 Communication Act Analysis

Intentional communication can result in either desirable effects ("Bingo") or undesirable effects ("Nope"). Unintentional communication can also result in desirable effects ("Nice surprise") or undesirable effects ("Oops"). The following examples from the case study illustrate the different situations.

Intentional communication acts led to:

- *desirable effects* when the managing director attended meetings with the intention to show the importance of a tendering process (the effect was a strong focus on the tendering process).
- undesirable effects when the managing director and the other members of the
 management team decided to make the minutes from management meetings public in the organization (the most confidential parts were placed in
 enclosures which were not public, with the effect that the quality of the
 minutes decreased and the members of the organization did not perceive
 the desired openness).

Unintentional communication acts led to:

- desirable effects when the managing director asked members of the management team to present their own issues to the board (the effect was that members felt much more openness).
- undesirable effects when the managing director spent much time taking care of
 old investments during his first year in office (the effect was that his absence raised questions about invisible leadership and lack of interest in the
 organization).

There were also examples of communication which led to both desirable and undesirable effects, like for example when the managing director asked for detailed information about travel accounts. The desirable effect was that reporting managers became more aware of how different accounts were used, and the undesirable effect was confusion and irritation among some members of the organization. (This effect may be seen as desirable in a long-term perspective, as it may lead to changes at later stages.)

The proposed framework described in Figure 33 can be used for depicting and analysing signals in managerial communication processes. As a manager is communicating constantly the framework offers a tangible tool for analyzing different types of effects of communication processes, and thereby helping to further the understanding of the roles of communication acts in managerial work.

It is important to take differences in frames of reference into account when trying to interpret roles of communication in managerial work (cf. the infological equation, see page 74). Persons interpret intentional and unintentional communication with their own frames of reference, which means that effects vary between different persons and situations. Given the intertwined receiving and sending of information, there are constantly different interpretations among persons, in line with the first communication axiom which says that it is not possible to not communicate. Communication is taking place constantly.

Communication plays fundamental roles in managerial work as it takes place constantly both intentionally and unintentionally. An increased knowledge of different interpretations of communication acts can increase our understanding of the roles of communication in managerial work. Intentional and unintentional communication can be seen in relation to desirable and undesirable effects. A framework is suggested to help analyze communication acts in managerial communication.

8.3.2 Communication and Meta-Communication

In the case study communication processes in managerial work were taking place on different levels and through different channels. One channel was to communicate through actions instead of words. Specific examples of this were when the managing director attended meetings with the intention of showing the importance of the matters at hand, or when he asked for people's opinions not only to hear their views but also quite intentionally to show that person's importance. The managing director combined communication on an actual level with meta-communication when he wanted to send messages. Sometimes

there was a delay between his decision to communicate something and a suitable situation to do so through meta-communication.

Different levels in communication are nothing new, and different types of communicative levels have been discussed in section 4.1 above. A fundamental distinction between two levels can be described in terms of a *message* and a *meta-message* (Bateson, 1972), as illustrated in Figure 34 below.

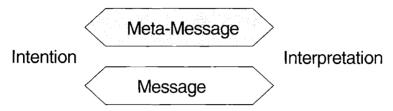


Figure 34 An Illustration of Message and Meta-Message

Between the intention with a communication act and the interpretation by another person there are at least two messages: the actual message and a metamessage. In terms of the communication axioms (see page 78) this is in line with the second axiom which says that "every communication has a content and a relationship aspect such that the latter classifies the former and is therefore a metacommunication" (Watzlawick et al, 1967, p. 54; cf. Dippo and Sundgren, 2000). There are both messages and meta-messages, and managers communicate on different levels – just like dogs or dolphins (cf. Bateson, 1972).

In the case study intentional use of meta-messages was effective for achieving action. Furthermore, the timing for the intentional use of meta-messages was important. One specific example was in the process of recruiting a new business controller and there was some tension in relation to the financial director. Here the managing director waited for several months to find a suitable situation im order to communicate that the financial director still was very important when the new business controller was recruited. The effect of the intentional use of a meta-message was profound in this situation.

As communication is taking place both in the form of messages and metamessages, a recognition of meta-messages can contribute to communication processes in managerial work. This can also help analyzing signals as discussed in section 8.3.1, as meta-messages may more often be unintentional parts of communication processes.

The use of meta-messages can also be seen in the light of trying to influence other persons. A change of level in communication processes can increase the chances of achieving intended actions. In the case study there was one situation when the managing director expressed great difficulties in changing the way of working in the management team (he talked about working like a beaver without any change). One possible explanation is that he did not move between different levels of communication, but kept communicating on one level with limited effects.

A combination of communication and meta-communication takes place in managerial work. Recognizing meta-messages sent intentionally or unintentionally can contribute to communication processes in managerial work and help achieve action.

8.3.3 Dimensions in Vertical Communication Processes

It is possible to distinguish several different dimensions in vertical communication processes. One dimension concerns initiators of processes. There are demands for information in two directions: superiors make demands on subordinates and subordinates require dialogue about demands (Johansson and Östman, 1995). Another dimension concerns information content of communication processes. Content in communication from superior to subordinates has been described in terms of five basic types (Katz and Kahn, 1978), see section 4.3.8. A spatial dimension can also be distinguished describing where the communication is taking place. The vertical dialogue can take place on the superior's "home ground", the subordinate's "home ground", or on "neutral ground". Yet another dimension is a time-related dimension of vertical communication processes. Demands for information can be expressed in relation to expectations (before), to interventions (during), and to outcome control (after), as discussed above. Furthermore, there is an information medium dimension. Different media can be described in terms of their richness (e.g. Daft and Lengel, 1984) and the choice of medium and its richness is one dimension in vertical communication processes.

In Table 21 below the different dimensions are summarized in a first attempt towards a framework for vertical communication processes. The framework is based on the fundamental questions: who, what, where, when, and how.

Dimension	Explanation	
Initiator	Who is the initiator?	
	(Superior makes demand on subordinate or subordinate requires dialogue about demands)	
Content	What is the communication about?	
	(Communication about job instructions, job rationale, procedures, feedback on performance, or values)	
Spatial	Where is the communication taking place?	
	(Communication taking place on superior's or subordinate's "home ground", or on "neutral ground")	
Timing	When is the communication taking place?	
	(Communication in relation to expectations (before), interventions (during), or outcome control (after))	
Medium	How is the communication mediated?	
	(Communication face-to-face, by telephone, written personal, written formal, numeric formal)	

Table 21 Dimensions in Vertical Communication Processes

The different dimensions suggested above can help describing vertical communication processes. This in turn would help in explaining and exploring the dyad between a managing director and his reporting managers, i.e. superior and subordinates. One specific example from the case study can be used to illustrate the applicability of the different dimensions. The situation when the personnel manager demanded an instant meeting with the managing director (see description on page 210) can be described as the following:

- Initiator: the personnel manager (subordinate) demanded a dialogue
- Content: a specific personnel situation (instructions and procedures)
- Spatial: at the managing director's office (superior's "home ground")
- Timing: while a personnel situation was taking place ("during")
- Medium: a face-to-face discussion (face-to-face)

By using a framework like the one presented above, different vertical communication processes can be analyzed with a terminology which can help revealing underlying patterns in vertical communication processes.

The following five dimensions are suggested to be fundamental for depicting vertical communication processes: initiator (who), contents (what), spatial (where), timing (when), and medium (how) dimensions.

8.3.4 Asymmetry in Vertical Communication

One particular aspect of information use in vertical communication processes shown in the case study was the information sharing norm. A specific example was the interest of members of the management team in presenting their own items to the board and their difficulties in finding time to inform their own subordinates.

A frequent argument for having managers presenting their own issues to the next level up was to reduce the risk of misinterpretations. There were driving forces for reducing filters in the vertical communication, emphasizing sending aspects of communication as primary arguments for reducing filters. This perceived need to reduce a risk of misinterpretations in vertical communication processes was asymmetrical. There was an asymmetrical information sharing norm in the form of a desire to present issues in person upwards, but less interest in presenting issues to subordinates.

Another aspect of asymmetry in vertical communication processes in the case study was difficulties in establishing a dialogue between management-team members and reporting staff. In practice it proved to be difficult to find the time to establish such a dialogue. These findings point to the difficulties in establishing a constructive and living dialogue between managers and subordinates (cf. Johansson and Östman, 1995). Even if there were comments indicating the importance of such a dialogue, it was difficult to achieve it in practice. There was a difference between the espoused need for a dialogue which said it was important with a dialogue between managers and subordinates, and on the other hand the theory-in-use which showed there was seldom time to establish such a dialogue (cf. espoused theories of action and theories-in-use, Argyris and Schön, 1974; and reconstructed logic and logic-in-use, Kaplan, 1964).

Given the difficulties in establishing a dialogue between superiors and subordinates, one can start looking for driving forces for such a dialogue. One driving force derives from a perceived problem, for example the situation referred to above when the personnel manager insisted on a dialogue to discuss a problem. Here the driving force for the dialogue came from the subordinate.

In accordance with the discussions on agenda formation, establishing a dialogue between superior and subordinates seems to be an issue that does not easily find its way onto the managerial agenda. Possible reasons for this are that the need for this dialogue is not urgent in the short-term, and it may be per-

ceived as a rather abstract issue. The nature of the issue, to establish a dialogue, makes it difficult to include it on the agenda.

There seems to be an asymmetric information sharing norm in vertical communication processes. People tend to show an interest in presenting issues upwards in person. Establishing a dialogue with subordinates attracts less interest. Regarding the vertical dialogue differences are found between espoused theory and theory-in-use.

8.3.5 Factors Influencing Vertical Communication

One fundamental factor influencing vertical communication is a willingness for a vertical dialogue. Otherwise, there will be very little vertical communication. Willingness may vary between superior and subordinates, but there needs to be sufficient willingness among both parties.

Both perspectives that have been discussed earlier in this chapter (information and agenda perspectives) can contribute to the understanding of factors influencing vertical communication. From an information perspective there needs to be information available for the dialogue between superior and subordinates. From an agenda perspective there need to be sufficient driving forces to include the vertical communication processes on the managerial agenda, i.e. to take the time required to establish a vertical dialogue.

In the case study the managing director spent much time on meetings with his reporting managers. At first this was an attempt to learn more about both the people and the business activities, and he then continued traveling to the monthly meetings in the different regions. He did so both for monitoring purposes and for a direct channel to each region where he could learn more about their activities, and he could share his views in a wider sense.

Information used in dialogues in the case study was to some extent determined by the information specified for monthly management meetings, and to some extent a result of "undirected viewing", i.e. general exposure with no specific purpose (Aguilar, 1967). The managing director was "continually seeking, receiving, processing, and sending information", which is consistent with prior research (McKinnon and Bruns, 1992, p. 105).

The explanation for this issue being included on the agenda is found in the first phase of the managing director's office in the organization. At that point in time attendance at the meetings was an efficient way of learning about new business activities. Then in later phases the managing director had become familiar with the working style and found it useful, which meant that he

wanted to continue with the efforts. In other words he gave strong sponsorship to the issue himself (cf. Dutton, 1986).

Given the described "fun-factor" in the discussion on agenda formation, one can ask to what extent there was a "fun-factor" involved in this setting? To some extent the answer is probably yes. The managing director enjoyed meeting with the people in the different regions, and not only with the regional managers. To meet and talk to people can be explained in terms of a senior executive culture with an oral tradition (cf. Zuboff, 1988). But even if there may have been a "fun-factor" involved, the main reason for regular attendance in the regions was that it was perceived as a useful source for learning about the business activities and then influencing those activities.

A vehicle for vertical communication is, most often, a language. In the case study the language was mostly Swedish/Scandinavian. In line with previous research conversations played significant roles in the case study. As described in the discussion on speech acts (see page 87) it is important to listen to the background and try to understand the context in a conversation in order make interpretations (Winograd and Flores, 1986; Athos and Gabarro, 1978). When the managing director spent time meeting with persons in the regions, this was a way of listening to the background. By learning more about the business activities he learnt about the context, which helped him interpret both the written information from the regions, as well as conversations with the regional managers. In terms of the infological equation (see page 74) he built his frame of reference in order to improve the interpretation processes.

Another way of fostering vertical communication used in the case study was the use of metaphors. The following are some example of metaphors used:

- wet blanket on top of things as an expression for a decision inertia
- handbrake as an expression for indecisiveness among managers
- wake-up call as an expression for an external event influencing the organization

Metaphors were used as vehicles for communication and helped both superiors and subordinates talking about difficult matters. The use of metaphors was perceived as a useful tool in the organization, which is consistent with previous research (e.g. Morgan, 1986; Kendall and Kendall, 1993). One possible reason for the perceived usefulness is the richness in interpretation processes, where persons with their different frames of reference can find both efficient and less sensitive ways for discussing matters that may be both complex and sensitive.

Prerequisite/Factors	Explanation	
Willingness	a willingness to communicate is a first prerequisite for a vertical dialogue	
given a willingness the fo	ollowing factors foster the communication:	
Suitable Information	to have suitable information available for the vertical dialogue	
Sufficient Time	to have included the dialogue on the managerial agenda to allocate enough time and attention to it	
Shared Language	to have a shared language which could be used for the dialogue (metaphors may be useful)	

Table 22 Prerequisite/Factors Fostering Vertical Communication

In Table 22 the discussion above is summarized. The first prerequisite is a willingness. Given a willingness for a vertical dialogue three factors have been identified as significant to foster vertical communication: information, time and language, as described above. From a theoretical point of view one can note that the factors identified can be linked to the infological equation (Langefors, 1973). There is information (data) in a communication (interpretation) process during a certain amount of time (time) where a common language is used (shared frames of reference). This link illustrates general aspects of the vertical communication in the sense that many factors influencing vertical communication are common for all kinds of communication processes. There is some complexity added by the dyad superior and subordinates though.

One can also find factors *not* fostering vertical communication, or at least aspects illuminating the complexity involved in the vertical communication processes. The dyad superior-subordinates can be viewed from many different perspectives, as illustrated above. But there are not always positive and constructive reasons for establishing vertical dialogues. There are also other factors, for example the fact that information is a source of power and thus there may be political reasons to pass it on, or not pass it on, information (cf. Pettigrew, 1973; Davenport et al, 1992). In the case study one specific example of political aspects of vertical communication was the discussion when the new business controller was recruited and took office. At that point in time a number of people at the financial department perceived a potential threat that they would lose the most interesting parts of their jobs. Different arguments were used to show that no new person was needed. The managing director on

the other hand had made up his mind and let the process continue; he dealt with the political issues over time.

Three fundamental factors influencing vertical communication processes have been identified: suitable information, sufficient time, and shared language. Use of metaphors can help fostering a dialogue on sensitive and difficult matters. A fundamental prerequisite for vertical communication is a willingness to communicate.

8.4 A Development Perspective

8.4.1 Developing Information and Business and Persons

In the case study development processes focused on information were followed by processes focused more on business and later on people. When the information first was improved, this was still considered to be insufficient, which resulted in other processes focused on business and person aspects (cf. different types of development processes, Nilsson, A. G., 1999).

From a theoretical point of view, theories on development of information systems have stressed the importance of viewing information systems in their wider contexts in order to develop useful systems (e.g. Lundeberg et al, 1981). Regarding information in managerial work, there have been similar arguments in the literature, e.g. concerning the need to focus on people in support structures (Davenport, 1997).

Previous work has also talked about a "techno-utopia" (Davenport, 1997, p. 77) pointing to a confusion between IT-based solutions and usefulness in information behavior, for example in managerial work. Findings in the case study at hand support this idea that solutions on an information level do not automatically result in a changes on a person level. Instead the case study has illustrated that it may not be enough to change solely on the information level. One can start on an information level and then move to business and person levels. If new reports are introduced, the situation can be better, but if the contexts of the reports are still the same, the effects of the new reports are likely to be limited; "It is not only about a report", to quote from the case study.

When developing information platforms for managerial work, information has to be seen in its wider context of business structures and processes, and people. It seems to be an oversimplification to focus entirely on information needs and media. There are close links between the information and the people involved, as well as the business activities, and all these aspects need to be

included in the development process of managerial information platforms. Task and person-related issues are tied together in establishing an information-related infrastructure for managerial work, as suggested by previous research (e.g. Lundeberg, 1993).

A narrow scope from the beginning has negative effects on the results and can prolong the development process. Results may not meet demands, which can be compared to previous research on development of information systems. The holistic metaphor "information ecology" suggested by Davenport (1997) seems to be fruitful for the context of this study. The total information environment is taken into consideration.

Information, Business and Persons are aspects closely intertwined and development efforts for Information need to take Business and Persons into account. This means that the development of information for managerial use cannot be limited to information and information systems. Business activities as well as people have to be included in the development processes.

8.4.2 Change on Different Levels

What first seemed to be a problem on one level in the case study was difficult to solve without considering other levels, in accordance with the discussion above. When a problem for example at first concerned information, it turned out to be difficult to solve without an understanding of problems concerning business aspects and the people involved too. One specific example was the problem concerning slow decision-making processes in the organization. The first focus for solving the problem was information, like inappropriate information in advance of decisions. Then an underlying problem was revealed in terms of changes in cost control and the focus for the problem moved to business-related aspects. Furthermore, the problem turned out to be related to insufficient communication between involved parties, i.e. the problem also concerned the persons involved.

Beyond the fact that problems with slow decision-making processes are not uncommon (Davenport, 1993) the point here is how to deal with change processes. This topic has attracted a considerable amount of interest from researchers, both from a theoretical point of view (e.g. Watzlawick et al, 1974; Lundeberg, 1993) and from a more practical or normative point of view (e.g. Kotter, 1996; Keen, 1997). Many authors define their own ways of describing or prescribing change processes, although in various combinations of concrete and abstract terminologies.

A pattern revealed in the case study over time was that problems slowly moved between different logical levels (cf. discussion of logical types and levels of abstraction in section 4.1.3). First a problem occurred on one level and then the core of the problem turned out to concern another level. After time the core of the problem had moved to yet another level. The problem about slow decision-making processes described above, illustrates how the time-factor helped reveal new aspects of problems. Change processes that run over longer periods of time may shift foci between different levels over time. A pattern from the case study was that the core of problems tended to be identified first on lower logical levels and then to move upwards. Figure 35 illustrates how problems can move between logical levels (cf. Lundeberg, 1993).

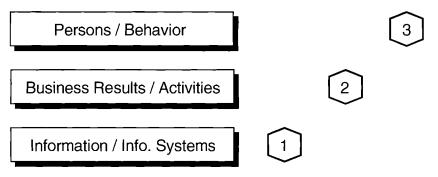


Figure 35 Problems Moving Between Levels

At first (1) the core of a problem may occur on an information level and then to move to a business level (2) and to a person level (3). Given that cores of problems tend to move between levels, one aspect on how to handle change processes is to include a rich picture of the situation where the change process is taking place. In terms of logical levels this means investigating more levels than the one in focus, or if the problem definition at first focuses on one level (e.g. information) to have the openness to broaden the definition of the change process, as illustrated in Figure 36.

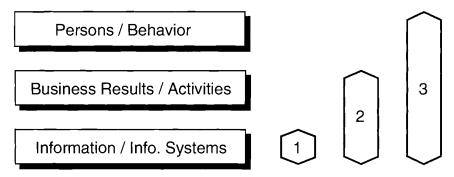


Figure 36 Problem Definitions including Several Levels

In the beginning of a change process the definition of a problem may be limited to an information level (1), but during the process the definition may be expanded to include a business level (2) and a person level too (3). An argument against this line of reasoning is that the problem definition has to be limited in order to achieve any results, and that the change process cannot be expanded to include everything. Certainly the change process has to be limited, but the approach suggested here is to avoid defining the problem too narrowly at the outset of the change process. This is in line with previous research on handling change processes (Lundeberg, 1993).

Findings stress the importance of having an open mind for changes on different levels during change processes, and to include several levels in initial analyses. One alternative is explicitly not to know what to change at the outset.

8.4.3 Changing Management Processes: Timing and Triggers

In the case study driving forces for changing management processes changed over time. As discussed in relation to agenda formation (see section 8.2.3) the managing director spent time developing management processes when he was new in office. There was a natural trigger for changing management processes when the managing director was appointed. He then had to balance the desire to change management processes as early as possible and the caution to wait until he knew more about the organization and its persons.

The driving force to change management processes diminished over time in the case study. At first there were strong external driving forces from board members to start changing management processes. The managing director in the case study chose to start changing on an information level with the intention to continue these changes later, if necessary. He then continued to make changes on business and person levels. There were several reasons for doing so. First, there was an emergent need for changes on an information level, which made it easy to include this issue on the agenda (in accordance with the discussion on agenda formation above). Second, there was a strong driving force from board members emphasizing the need to change the information.

As has been shown in previous research, managers face a challenge when developing supporting structures and processes for managerial work in terms of the balance between building information structures that last and structures that can easily be modified (cf. Davenport, 1997). In the case study, structures and processes once changed were rarely modified to any major extent again.

There may be a natural space for changing management processes when a new general manager takes office (cf. discussion on managerial succession, Holmberg, 1986). The delicate balance facing a newly appointed manager is between changing while there is a natural mandate for changes on one hand, and waiting until he or she has developed better knowledge about the organization and its people, as illustrated in Figure 37.

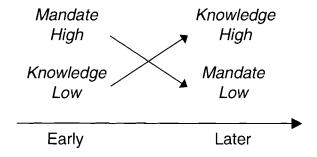


Figure 37 Mandate and Knowledge at Different Stages

As illustrated, one can describe the situation for changing management processes in terms of a trade-off between mandate, which is high at an early stage, and knowledge, which is higher at a later stage. In the case study the managing director began with some changes at an early stage and continued later.

When addressing the question about when to change management processes, there is first a *timing aspect*, as addressed above. But there is also a *trigger aspect* in the sense of exploring triggers for changing management processes.

In the case study change processes led to evaluative processes, which in turn led to new change efforts etc. This means that evaluative efforts were triggers for changing management processes, which often led to new evaluating efforts, in a chain-like pattern. This chain of evaluating-changing-evaluating-etc

parallels previous research on change processes describing interactions between change and evaluation (cf. Lundeberg, 1993).

It is a challenge to include evaluation issues on the agenda, given the discussion on agenda formation. When a general manager is appointed there is a natural place for evaluation. But how to include evaluation at later stages? In the case study evaluation mainly took place during the managing director's first year and when major external events occurred (e.g. loss of a contract).

Evaluation on the agenda can be seen in light of theories about single and double-loop learning (e.g. Argyris and Schön, 1974). Including the evaluation of management processes on the agenda can be seen as a parallel to double-loop learning. The evaluation of management processes can challenge the entire status quo with the aim of improving the situation.

Two central aspects of changing management processes are timing and triggers. The timing-aspect says that there is a balance between changing management processes at an early stage when the mandate is high and knowledge low, and at a later stage when the mandate is lower but knowledge is higher. The trigger-aspect points to an interrelationship between evaluation and change.

8.4.4 Dual Roles in Development of Management Processes

When the managing director in the case study at an early stage in his tenure initiated processes to change his managerial information platform, he was influenced by board members (as described above). The financial director played a significant role as he was responsible for changing the monthly reports and the processes of producing the information.

Several persons at the financial department were involved in the change process. They played double roles as they both developed new structures and processes and at the same time produced information monthly. This situation was perceived as challenging as it was perceived as difficult to find the time necessary for the development efforts. The managing director also had dual roles in the development of new processes and structures for managerial information. He was both part of the development efforts and also one of the key users of the results of the development efforts.

As established in previous work on change processes the persons involved have significant influence on the outcome in general (Lundeberg, 1993) and leaders have an impact in particular (Kotter, 1996). General managers thus need to involve themselves in change processes concerning management processes. But at the same time the managers have dual roles.

In the development of management processes the general manager is both a user and a developer. The dual roles, being both part of the development processes and a key user, make this type of development processes different from many other processes where the manager plays only in a supportive role. Mixing the two roles can cause problems and confusion and result in inadequate outcomes.

Development processes aiming at developing support for managerial work are complex processes for at least two reasons. First, the general manager has dual roles in the process. Second, the activities being supported (i.e. managerial work) include a considerable amount of tacit knowledge, which may make it more difficult to know how to support (cf. Polanyi, 1966).

Difficulties in development processes of information support to managerial work have often been addressed in relation to the development of IT-based solutions (see literature on the development of MIS, DSS and EIS, discussed on page 130). The importance of managerial involvement is often stressed in the literature (as discussed below). The complexity captured in the combination of the nature of managerial work *and* the dual roles of general manager in this type of development processes is worth highlighting and taking into consideration when investigating development processes for support of managerial work.

General managers have dual roles in the development of management processes: both as part of the change processes and as user of the outcome. An awareness of the roles can help in dealing with the complexity involved in changing management processes.

8.4.5 Reasons Behind Managerial Involvement

In the case study the managing director's involvement varied significantly among change processes in different types of management processes. Regarding processes with an information focus (which were the ones changed initially, as described above) he played a limited role, primarily a passive supportive role. As change moved to processes with more business aspects, he involved himself to a larger extent, for example in the development of processes for meetings. When the change processes concerned people, the managing director was heavily involved, for example when strengthening the management with a new business controller and the managing director himself led the recruitment process.

Expressed differently, the managing director's involvement increased as the change processes moved from an information focus, via a business focus, to

a person focus. In some processes he played primarily a supportive role, while he was highly involved in other processes. There were shifts in the degree of involvement.

Previous research has investigated several aspects of managerial involvement, especially in relation to managerial strategies for handling information technology (e.g. Earl, 1989; Jarvenpaa and Ives, 1991). Involvement in management of IT has been described in terms of reflecting the degree of importance places on the issues (Jarvenpaa and Ives, 1991). Often literature on managerial involvement has an underlying tonality that elicits managerial support for IT-related issues and endeavours to convince top managers of the potential offered by IT-based solutions (cf. Lederer and Mendelow, 1988).

Even if management processes are more closely related to managerial work than most IT-related change processes, one can notice the same tendency. Other people involved in the change processes wanted to involve the managing director to a larger degree in the processes. Possible reasons for this are for example: managerial involvement would help improve the process (the manager as potential user of information); managerial involvement would help secure sufficient resources for the change efforts (the manager as top management sponsor); managerial involvement would increase the prestige in working in the process (manager as top management supporter).

When addressing reasons for a general manager's involvement in changes of management processes, one can reflect on what makes these situations different from other situations for involvement? Reasons for managerial involvement, or uninvolvement, can be described in terms of internal and external factors, as well as personal and business-related factors. The general discussion on driving forces for including issues on the managerial agenda (see Figure 31, page 262) seems to be applicable to this situation too. The discussion on driving forces and the managerial agenda is applicable to studies of managerial involvement in IT-related change processes too.

In the case study managerial involvement varied with different change processes. There were different types of driving forces for involvement, both internal and external, as well as personal and business-related. The differences between involvement can be described in terms of logical levels (cf. Bateson, 1972, 1979; Lundeberg, 1993), see discussion in section 4.1.3. The degree of involvement in the case study increased when the change processes came closer to personal levels, such as strengthening the management team with a new business controller. Examples from the case study indicate that logical

levels on lower levels of abstraction tend to attract lower degrees of managerial involvement.

Managerial involvement in change processes can be seen as a special case of driving forces for including issues on the managerial agenda. This allows for new explanations of managerial involvement in change processes. Logical levels can offer another dimension of explanation for managerial involvement in change processes, where changes on lower levels of abstraction tend to attract lower degrees of managerial involvement.

8.5 Bringing Theoretical Perspectives Together

In this section I will bring the different theoretical perspectives together. I will do so by first giving some examples of how the different perspectives have contributed to one another. Following from that I discuss the framework for management processes used in the empirical discussions. This discussion is then extended when I elaborate on two layers of management processes. The section concludes with a discussion of different levels of information and communication.

8.5.1 Complementary Perspectives

The aim with the different theoretical perspectives applied in the study has been to illuminate the topic from different points of view. An underlying idea has been that the perspectives would complement each other and at the same time help build a rich picture of the phenomena studied.

One example of complementary perspectives concerns the use of information. In the case study the managing director's use of information could often be seen in a communicational context. Even if the information was for his own use, for example reading a report, the managing director regarded the information use as part of a communication process, or a potential communication process. A specific example is that he often used a pen to highlight what he found important in a text when he read it. He did so to add value to the information and if he then passed on the information, he would also be sending signals about his views regarding the importance of different matters.

Previous research has shown how managers are often anxious to get the information they capture into the hands of as many people as possible who might have use of it (McKinnon and Bruns, 1992, p. 125). The findings at hand support this, and one way of explaining this is to see information as part

of communication processes. A communication perspective can help explain information use, which as described above has been shown by Johansson and Östman (1995).

Another example of complementary perspectives concerns agenda formation and development efforts. As discussed above, managerial involvement can be understood through an agenda perspective. That is, if one views managerial involvement as an issue on the managerial agenda, theories on agenda formation can reveal reasons for (or against) involvement.

Different theoretical perspectives are complementary and can help furthering an understanding of phenomena studied. Two examples from the study at hand illustrate the point: a communication perspective can contribute to an understanding of information use in managerial work, and an agenda perspective can contribute to an understanding of managerial involvement in development efforts.

8.5.2 A Framework for Management Processes

In the study managerial work is seen through a process lens. The process view was first elaborated in a theoretical discussion (see section 4.2.3), where a general framework for management processes was suggested (see Figure 12 on page 110). The framework was derived from previous research on managerial work as well as theories on processes and logical levels.

The underlying purpose of the framework is to capture a holistic picture of managerial work expressed in terms of management processes. In the framework three basic types of management processes are suggested: management processes focused on preparing, performing, and evaluating efforts. For each of these process types person and task-oriented processes are further distinguished (see Figure 12 on page 110). Given the special focus on information in this study, task-oriented processes comprise both business and information-oriented processes (see Figure 14 on page 113). The framework has been used to structure the empirical presentation and discussion of the case study (see chapters 5-7).

One point of using the framework has been to capture a holistic overview where different perspectives of managerial work have been included. Mapping activities in relation to the different management processes has revealed patterns in how time and effort are spent on various processes, etc. The use of the framework has contributed to rich pictures of situations at hand.

The presentation and discussion of the case study have also pointed to some possible challenges when using the framework. When task-oriented processes

were subdivided into a business focus and an information focus to adjust the framework to this study, a difficulty with the framework was revealed. Processes focused on evaluating on a business level became difficult to distinguish from processes focused on performing on an information level. A report used by the managing director to evaluate business activities was both evaluating (from a business point of view) and performing (from an information point of view) at the same time.

One reason for this "dilemma" can be found in theory of logical levels and the nature of the framework. When evaluation is taking place on a business level, the vehicle for these activities is use of information, which in turn means performing on another logical level. This means that the same specific activity can be seen both from a business point of view and an information point of view. When examining the applicability of the framework, it turns out to be particularly valuable as the intention has been to highlight information aspects of managerial work.

Regarding the perspectives of management processes included in the framework, processes for evaluating on a person level were less in focus than other processes in the case study. This illustrates how a conceptual tool, like the framework, can help identifying and including both person-oriented and task-oriented processes. As discussed above, task-oriented processes often receive more attention than person-oriented processes in the literature on management processes. The suggested framework can contribute to a more balanced view where different management processes are included. The framework can also help identifying imbalances between efforts spent on different processes.

The study proposes a framework for capturing a holistic picture of managerial work in terms of management processes. Three basic types of management processes are suggested: processes for preparing, performing and evaluating. For each type of process distinctions are made between person-oriented and task-oriented processes, where the latter can be seen from both business and information points of view. The suggested framework can help capture a rich picture of management processes and contribute to an understanding of balances (and imbalances) between different processes in managerial work.

8.5.3 Two Layers of Management Processes

In the study one aim has been to view managerial work in terms of management processes from different perspectives in order to reveal patterns. One pattern is a possible distinction between two layers of management processes.

When bringing the different perspectives together, it is possible to distinguish a pattern between the two levels. The first level can be described as dealing with specific situations, e.g. using specific information, executing specific issues on a managerial agenda, performing communication acts and executing change efforts. This level can be characterized as being concrete, often urgent and resulting in more or less immediate return. The level can be described as an execution-level.

The other level can be described as dealing with changing information platforms, executing second-order issues on an agenda, reflecting on communication acts and reflecting on how to define the scope of change efforts. This level can be characterized as being more abstract, seldom urgent and broadly comparable to investments for return at a later stage. This level can be described as a *development-level*.

The two layers of processes are illustrated in Figure 38.

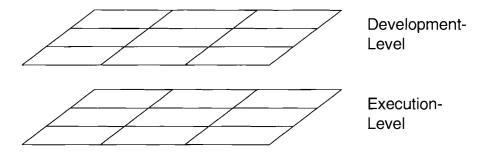


Figure 38 Two Layers of Management Processes

A parallel to the two layers of management processes illustrated in Figure 38 can be seen in single and double-loop learning (Argyris and Schön, 1974, see above in section 4.2.5) and first and second-order changes (Watzlawick et al, 1974, see above section 4.4.3). There is one execution-level (cf. single-loop, first-order) where different types of concrete processes are executed. There is also a layer on a development-level (cf. double-loop, second-order) where the different types of processes themselves are changed. The two layers can also be seen in light of mental model maintenance and mental model building respectively (Vandenbosch and Higgins, 1996, see section 4.2.5). One difference though is that the two layers discussed here not only focus on mental models, but aim at capturing a holistic picture of managerial work seen as management processes.

Consistent with discussions on agenda formation, there are strong driving forces to focus on the execution-level. These driving forces can be found both among internal and external forces (cf. Figure 31 on page 262). What follows from these driving forces is a strong focus on short-term efforts, which in turn leads to less focus on long-term issues on a development-level. There may, for example, be external forces emphasizing short-term results which may lead to a focus on execution at the expense of efforts spent on more long-term development efforts, which has been described in previous research. One specific example is the case of shareholders placing demands on general managers that compel them to focus on short-term execution activities at the expense of important long-term development activities (Brodin et al, 2000).

This study points to a need to combine the two levels in order to develop management processes and improve conditions for managerial activities. The distinction between the two layers of management processes can help describing the balance between spending efforts on processes focused on short-term or long-term effects in managerial work. The risk of an overwhelming focus on execution-level activities can be called an *execution trap*.

The distinction between the two layers is also an attempt to contribute to the understanding of managerial work in relation to needs for information. The study suggests that information can play a role in helping to combine the layers of management processes by supporting managerial activities on both levels, an execution-level and a development-level.

Findings from the study support the claim that an awareness of this distinction between two layers of management processes can contribute to an understanding of managerial activities. The distinction offers a way of framing that can include the development of one's own work. Another argument supported is that both levels are essential and necessary in managerial activities. Furthermore, the study suggests that the flexibility to shift between the execution-level and the development-level contributes to a general manager's work.

Triggers for shifting between an execution-level and a development level were found both internally and externally. Examples of triggers to shift to a development level in the case study included the entrance of new people into the management team and external events influencing the organization. Examples of forces to focus on an execution-level included good financial results indirectly suggesting "more of the same" and tight schedules with limited time for anything other than short-term emergent issues. As these examples indicate, there were often external triggers for shifting to a development-level. This

indication could be seen in light of systems theory emphasizing the importance of systems open for external impulses.

Here in the discussions on management processes two layers of processes have been described. From a theoretical perspective one can find arguments for distinguishing between more layers (cf. discussion on Learning I, II, III and IV, Bateson, 1972, p. 293). That is, a third level would mean processes for developing the development-level, etc. For the purposes of this study, however, the distinction between two layers are judged to be enough.

This study suggests a distinction between two layers of management processes: (1) an execution-level where specific processes are executed, and (2) a development-level where the processes themselves are changed. Findings highlight the importance of triggers for shifting between these two different layers of management processes. External triggers seem to be more frequent than internal triggers for shifts to a development-level. A distinction between the two layers of management processes can help in describing managerial activities and further the understanding of the challenge of balancing short-term vs. long-term efforts in managerial work, and thus avoiding an "execution trap". Information can help combine the layers by supporting managerial activities both on an execution-level and a development-level.

8.5.4 Levels of Information and Communication

Some patterns among dualities found from information and communication perspectives can be understood through the different layers of management processes discussed above. Other patterns can instead be understood through logical level theory (see section 4.1.3). These patterns point to information and communication on different levels: specific levels and meta-levels, where the latter are interpretations and help define the former.

Regarding *information*, one distinction shown to be significant is between specific information and meta-information, i.e. information about the information. In a managerial context meta-information seems to be significant for a further understanding and interpretation of specific information. These findings are in line with previous work on information and information systems development, where meta-information is established as an important concept. Applied in a managerial context a distinction between a specific information level and a meta-information level may help further the understanding of this particular informational context.

Empirically the study points to a perceived need for information on a metalevel. An underlying reason for this need was a perceived need to improve the overview of situations. Empirically the study also points at difficulties in fulfilling this perceived meta-information need. There may be several explanations for difficulties that accompany meta-information, as discussed in earlier chapters. One possible explanation can be the level of abstraction. Even needs for specific information are difficult to define, as discussed above, and metainformation on a higher level of abstraction may be even more difficult to define. Furthermore the issue may be difficult to include on a managerial agenda due to its level of abstraction.

From a *communication* perspective a pattern discussed in the study is a distinction between different levels of communication. One level of communication is described as taking place around specific matters. Another level, metacommunication, includes messages sent, intentionally or unintentionally, in relation to communication on the specific level (cf. Figure 34 on page 271). Empirically the case study illustrates how an intentional use of meta-communication can be perceived as useful in managerial work.

The use of information and communication on different levels can be linked to the previous discussion on layers of management processes. As described above, there are strong driving forces for focusing on an execution-level and a risk for an *execution trap*, i.e. to focus attention and efforts on an execution-level, at the expense of the development-level. Here use of information and communication on different levels can help facilitating shifts between the two layers of management processes.

Information can support tasks both on an execution-level and on a development-level. The study suggests that information can help combine the levels by supporting both internal information processing (reflection) and external information processing (communication/action). Information can play a significant role because there are driving forces for a focus on the specific and action-oriented level, in accordance with agenda-formation theory. Furthermore, the distinction between two levels of management processes can increase the understanding of processes in managerial work. The distinction offers a way of framing that includes the development of one's own work.

Communication on a meta-level can also help avoid an execution trap. This means for example that communication defining and describing communication used for dealing with specific issues can be explicitly included. In the case study this was illustrated by explicit communication acts by the managing director to change ways of working the in the management team. Different stakeholders' interpretations of specific issues can be objects for explicit communication in order to improve the understanding of the issues at hand, and the ways of dealing with the issues. Different persons involved make their

own interpretations of matters (cf. infological equation discussed in section 4.1.1) and by explicitly including different interpretations, one can increase the understanding of how to handle matters at hand. This means for example communicating not only about how to accomplish action, but also communicating about the communication, i.e. on a meta-level.

Previous work has often focused on the specific levels of information and communication. This study suggests that an inclusion of meta-levels in descriptions of use of information and communication in managerial work can give richer pictures and improve the understanding of the phenomena. One implication of this is the importance of the capacity to deal with different levels of information and communication in managerial work.

The study emphasizes the potential in intentional use of communication on different levels. The case study illustrates difficulties in communicating for accomplishing changes, for example when the managing director tried to change working style in the management team and when he attempted to improve control without any perceived need for increased control. The study points to the power in using communication on different levels and underscores the fundamental importance of communication acts (intentional and unintentional) in managerial work. This is consistent with prior research on communication as attempts to create an understanding of the meaning and intentions among other persons (e.g. Grice, 1957). A framework for explicitly revealing and describing communication acts has been suggested, as described above (see Figure 33 on page 269).

The study suggests that the distinction between specific levels and meta-levels can contribute to the understanding of how information and communication are used in managerial work. Use of information and communication on different levels is suggested to help facilitate shifts between the different layers of management processes, and thereby to avoid an "execution trap". It is suggested that communication acts, both intentional and unintentional, are significant for an understanding of accomplishing action in managerial work.

8.6 The Longitudinal Dimension

8.6.1 Assembling Pieces into a Picture

In the empirical discussions in chapters 5-7 the starting-points were in different types of management processes, according to the suggested framework. In previous sections in this chapter, different theoretical perspectives have been in focus. In this section, on the other hand, I will illustrate how the longitudinal case study can be understood in light of findings from the study. That is, I will return to the empirical setting, this time looking upon events in light of findings discussed earlier. The narrative below assembles illustrative episodes (most of them familiar from earlier discussions) into a longitudinal picture.

The aim of the section is thus to combine theoretical frameworks with the empirical findings from the case study, and thereby illustrate some of the theoretical findings empirically. This should not be seen as an attempt to "prove" findings in any way. First, that would not be in line with the overall research approach applied in the study. Second, new empirical material would be more suitable, in the event that someone chose to make such an attempt.

The description below will include several examples of shifts between the two layers of management processes (see section 8.5.3). I will point to illustrations of the different layers and shifts between them and make brief comments on them. These remarks are displayed in another typeface. It should also be noted that the description below is an illustration and has no ambition to cover the entire case study (found in Appendix H).

8.6.2 Another Visit to the Case Study

In the description there are references to frameworks and discussions presented and described earlier in the chapter.

The Entry

When the new managing director (MD) came to the organization Omega, he requested information in order to learn more about the business activities. MD did not have prior knowledge of Omega's business activities and therefore perceived a huge need to learn more about them. He met with a lot of people in the organization and asked for different types of information (CF. FIGURE 30 ON PAGE 251: CELL A, INFORMING ONESELF AND INFLUENCING ONESELF).

One of the assignments the board gave MD when he entered Omega was to improve the cost control in the organization. Board members felt that they had burnt their fingers on previous unsuccessful investments. Now they wanted to influence the new managing director to ensure that this would not happen again. This could also be seen as the board influencing MD's frame of reference because from the very beginning they made clear to him that there was a need to improve cost control in the organization (CF. FIGURE 31 ON PAGE 262: EXTERNAL PERSONAL DRIVING FORCES; SECTION 8.1.7, PAGES 258-261: IMPORTANCE OF FRAME OF REFERENCE).

They therefore asked for information with the purpose of influencing the new managing director to avoid the type of investments made earlier (CF. FIGURE 30 ON PAGE 251: CELL C, INFORMING ONESELF AND INFLUENCING OTHER PERSONS).

Another assignment given to MD by the board was to wind up some previous investments. During his first year in the organization the managing director therefore spent much of his time winding up these unprofitable investments. Many of these wind-up activities were confidential, such as meeting with potential partners, etc. As a result of this, many people in the organization perceived MD as absent and secretive. MD had not anticipated this and had to deliberately try to change this perception later (CF. FIGURE 33 ON PAGE 269: "OOPS").

INITIALLY THE (THEN) NEWLY APPOINTED MANAGING DIRECTOR MET STRONG DRIVING FORCES FOR FOCUSING ON ACTIVITIES ON THE EXECUTION-LEVEL, HERE ILLUSTRATED BY THE ASSIGNMENT TO WIND UP OLD INVESTMENTS.

Building a Platform

Based on his own perceived information needs and the assignment he was given by the board, the managing director initiated changes in his information platform. The monthly report to the management team and board was redesigned regarding both form and content. The redesigned information platform turned out to be inadequate. MD perceived a need to change the context where the reports were used. He therefore changed the structure of management meetings, and he introduced fixed agendas for these meetings. This change was not sufficient either. The managing director perceived a need to strengthen the management team, which led to the recruitment of a new business controller. In other words, the change process that began with a perceived need to change the information platform, gradually changed and

expanded to include business aspects and persons involved (CF. Figure 35 on PAGE 280: PROBLEMS MOVING BETWEEN LEVELS).

AFTER A WHILE THE MANAGING DIRECTOR WAS ABLE TO SPEND TIME AND EFFORT ON DEVELOPMENT ACTIVITIES. HE CHANGED DIFFERENT MANAGEMENT PROCESSES AND BUILT A FOUNDATION FOR FUTURE MANAGERIAL ACTIVITIES. EFFORTS ON THE DEVELOPMENT-LEVEL OF ONE TYPE LED TO OTHER TYPES.

The managing director's decision to strengthen the management team with a new business-controller function was met with suspicion from members of the organization. Some people perceived uncertainties about what role the new function should play. MD tried to reduce the scepticism by explaining the role of the function when the business controller was recruited. This was not enough and there were still doubts. MD then used an occasion at a later point to demonstrate via his actions that the financial director did not have to worry. At a crucial point in a tendering process, MD communicated the importance of the financial director through his actions instead of word. Here, the specific message was not the only point but the meta-message sent through his actions was as important. His communication strategy led to desired effects (CF. FIGURE 34 ON PAGE 271: MESSAGE AND META-MESSAGE).

The managing director improved cost control in Omega by changing both structures and processes. After a while people in the organization began to complain about the balance "the gas" and "the brake". They felt that the emphasis on cost control had become too dominant, and they emphasized the need for "gas" too. MD still perceived a need for improved control. His frame of reference had not changed in this respect. He expressed the need for improved control through for example requests for an information overview. The need for increased control perceived by the managing director had an impact on the organization over time (CF. SECTION 8.1.7, PAGES 258-261: IMPORTANCE OF FRAME OF REFERENCE).

MD tried to point to the need to improve cost control as a means for preparing for the future. Good financial results made this difficult, as the results did not provide a driving force for change. There was no sense of urgency. The culture of financial security was strong and the climate for change was pervasive and difficult to influence from an internal perspective (CF. FIGURE 31 ON PAGE 262: INTERNAL BUSINESS-DRIVEN FORCES).

THE ATTEMPTS TO SHIFT TO A DEVELOPMENT-LEVEL AND CHANGE MANAGEMENT PROCESSES FOR COST CONTROL WERE DIFFICULT. THE ORGANIZATION WAS DOING WELL FINANCIALLY, AND THE MANAGING DIRECTOR MET DIFFICULTIES WHEN TRYING TO CHANGE PROCESSES FOR

CONTROL. IT WAS EVEN MORE DIFFICULT FOR THE MANAGING DIRECTOR TO ACHIEVE A SENSE OF URGENCY.

Changing Vertical Communication Processes

When MD had been in office for a while he began to change the routines for presentations at board meetings. Now other members of the management team were invited to present "their" issues to the boards. One reason for doing so was to reduce the risk for misinterpretations and another reason was to reduce the distance between the board and people in the organization. It turned out that members of both the management team and the board appreciated this initiative very much. The positive communicative effects of the change were greater than expected (CF. FIGURE 33 ON PAGE 269: "NICE SURPRISE").

ONE SHIFT TO THE DEVELOPMENT-LEVEL TOOK PLACE WHEN THE MANAGING DIRECTOR DECIDED TO CHANGE THE VERTICAL COMMUNICATION PROCESS IN THE FORM OF PRESENTATIONS TO THE BOARD. THE TRIGGER TO THIS SHIFT WAS A PERCEIVED GAP BETWEEN THE BOARD AND PEOPLE IN THE ORGANIZATION.

Members of the management team were very satisfied with the new policy of presenting their own issues to board. The other direction in vertical communication, that is communication to their subordinates, was another situation altogether. People expressed in words that it was important to spend time communicating with their subordinates, but in several cases it turned out that it was much easier said than done. In action it proved to be less important. The perceived need to reduce the risk for misinterpretation was different for upward and downward communication (CF. SECTION 8.3.4, PAGES 274-275: ASYMMETRY IN VERTICAL COMMUNICATION).

The communication to subordinates was also illustrated by a letter sent by the managing director and the financial director. As a part of the efforts to improve the cost control, they sent a letter asking for detailed information about travel accounts. Their request for information met irritation as people thought that they interfered in insignificant details. The intention of the letter was to change behavior rather than any real interest in the particular accounts per se. In spite of a certain level of irritation, the initiative eventually had the effect that people paid closer attention to different accounts (CF. FIGURE 30 ON PAGE 251: CELL C, INFORMING ONESELF AND INFLUENCING OTHER PERSONS; FIGURE 33 ON PAGE 269: "BINGO").

A Tendering Process

One major issue on the managerial agenda was a tendering process in the Southern Region. At an early stage of this process, the managing director declared that he thought that the process was very important and that he intended to participate himself in the project group that would prepare the bid. With this public announcement he committed himself to doing so (CF. FIGURE 30 ON PAGE 251: CELL D, INFORMING OTHER PERSONS AND INFLUENCING ONESELF).

When MD actively took part in the tendering process and attended project meetings both on weekdays and Sundays, it had an obvious effect in the organization. This meta-message helped people realize the importance of the contract and much attention was paid to the tendering process (CF. FIGURE 33 ON PAGE 269: "BINGO"; FIGURE 34 ON PAGE 271: MESSAGE AND META-MESSAGE).

DURING THE TENDERING PROCESS THERE WAS A TOTAL FOCUS ON EXECUTION-LEVEL ACTIVITIES.

The outcome of the tendering process was that Omega, contrary to expectation, lost the contract. For many people in the organization this loss was an awakening – a competitor had won "Omega's" contract. This goes for the managing director too. He had been rather confident of winning the contract. The outcome thus influenced the frame of reference that he brought to similar situations in the future. The task of keeping track of competitors became more interesting even for those who had not thought so earlier (CF. FIGURE 31 ON PAGE 262: EXTERNAL BUSINESS DRIVING FORCES; SECTION 8.1.7 ON PAGES 258-261, IMPORTANCE OF FRAME OF REFERENCE).

When the management team began analyzing the outcome of the lost contract, it was first regarded as a disaster. After a while, though, some members of the management team started to find some positive aspects of the loss. They now saw, for example, new possibilities for finding forces for changes in the organization. The framing of the lost contract issue changed (CF. FIGURE 32 ON PAGE 264: REFRAMING).

THE LOSS OF THE CONTRACT LED TO A SHIFT. IT OPENED FOR CHANGES: OLD ASSUMPTIONS WERE CHALLENGED, ACTIVITIES WERE QUESTIONED AND NEW IDEAS WERE GENERATED. THE DRIVING FORCE FOR THIS SHIFT TO THE DEVELOPMENT-LEVEL CAME FROM AN EXTERNAL EVENT AND WAS SUDDEN AND UNEXPECTED.

The anxiety among people in the organization after the lost contract was huge. The management team's attempts to reduce this anxiety included among other things, an article in the in-house magazine. There the managing director tried

to reduce the anxiety with his message on leaving the disappointment behind and instead looking forward to new opportunities (CF. FIGURE 30 ON PAGE 251: CELLB, INFORMING OTHER PERSONS AND INFLUENCING OTHER PERSONS; FIGURE 18 ON PAGE 111: MESSAGE AND META-MESSAGE).

Hard Work

The lost contract turned out to be like a wake-up call, and after the loss a number of activities were started in Omega. Many of these were organized in the form of projects, which was consistent with the managing director's preference for organizing activities in this way. The number of projects in the organization increased and at one point in time there were 77 projects running. The managing director's preference for projects thus had a major impact on the organization over time. The managing director sought solutions that were in line with his preferences and way of working, his frame of reference (CF. SECTION 8.1.7 ON PAGES 258-261, IMPORTANCE OF FRAME OF REFERENCE).

THE MAIN FORCE TO FOCUS ON THE EXECUTION-LEVEL WAS STRONG. THE AGENDAS FOR MEETINGS IN THE MANAGEMENT TEAM WERE CROWDED, INCLUDING, FOR EXAMPLE, THE HUGE NUMBER OF PROJECTS TO MONITOR. FOLLOWING FROM THIS, THERE WAS LITTLE ROOM FOR DISCUSSION OF THE WAY THE WORK IN ITSELF WAS CARRIED OUT.

In spite of the awakening after the loss, it was difficult to accomplish changes. One reason was Omega's financial results. The good news was that the business was still doing well. The bad news was that MD perceived great difficulties when trying to generate change. The perceived security that followed from the financial results simply reduced the force for change (CF. FIGURE 31 ON PAGE 262: INTERNAL BUSINESS DRIVING FORCES).

This was evident when the managing director tried to change the working style in the management team. He asked for improved discipline in preparation for meetings, and he tried to encourage members of the team to take greater responsibility. In spite of much time and energy spent on trying to change the way the management team worked, MD perceived difficulties. He was frustrated that he repeatedly tried to tell the members to change, but with little effect. He sent the same specific message repeatedly but did not change his communication strategy, unlike his shift to meta-message usage referred to above (CF. FIGURE 34 ON PAGE 271: MESSAGE AND META-MESSAGE).

WHEN THE MANAGING DIRECTOR PERCEIVED A NEED TO CHANGE THE WORK IN THE MANAGEMENT TEAM, IT PROVED TO BE VERY DIFFICULT. THERE WERE STRONG FORCES FOR BUSINESS AS USUAL AND LITTLE INTEREST IN CHANGING THEIR OWN WAY OF WORKING. IN OTHER WORDS IT

WAS DIFFICULT FOR THE MANAGING DIRECTOR TO SHIFT THE FOCUS FROM THE EXECUTION-LEVEL TO THE DEVELOPMENT-LEVEL IN SPITE OF HIS INTENTION TO DO SO.

Issues on the Agenda

Over time the number of issues related to IT that entered the managerial agenda increased. This was the case both for the management team and for the board. Minutes from meetings in these groups witnessed an increased attention to these issues and also a shift in views. At earlier stages issues related to IT were mostly discussed in relation to problematic situations. Now there was a more positive view and business-related aspects of IT became more focused. Discussions included more ideas about how the business could be developed by means of IT. There was a shift in the framing of the issues (CF. FIGURE 32 ON PAGE 264: REFRAMING).

The members of the management team had plenty of time to discuss matters at their monthly lunch-to-lunch meetings. As an attempt to deepen their discussions on certain topics they had tried to introduce an item called "topic of the month" onto the agenda. Some people outside the team were concerned that they needed to know more about the work in the management team. As a response to this, the management team decided to make the minutes of their meetings public. As result of this, confidential information was put into secret enclosures. Consequently, people outside the group felt even more outside. Despite good intentions, the initiative turned out to have undesired effects (CF. FIGURE 33 ON PAGE 269: "NOPE").

INFORMATION USED IN THE MANAGEMENT TEAM WAS MOSTLY FOCUSED ON THE EXECUTION-LEVEL, FOR EXAMPLE IN FORM OF REPORTS ABOUT BUSINESS ACTIVITIES. THERE WERE FEW EXAMPLES OF INFORMATION FOCUSED ON QUESTIONING THE CURRENT SITUATION AND SHIFTING FOCUS TO THE DEVELOPMENT-LEVEL. ONE EXCEPTION WAS INFORMATION IN PREPARATION TO THE "TOPICS OF THE MONTH".

In addition to meetings in his own organization, MD had a number of external board assignments. In spite of a heavy working load and a perceived lack of time, he decided to keep his external board assignments. One reason was that these assignments were perceived as useful information sources. The decision may also have been influenced by his own perception that the external assignments were fun and interesting (CF. FIGURE 31 ON PAGE 262: INTERNAL PERSONAL DRIVING FORCES).

8.6.3 Shifting Between Layers of Management Processes

As illustrated above there was a strong focus on execution in various ways. Nevertheless, a number of shifts took place between the two layers of management processes.

There driving forces for keeping a focus on the execution-level were persistent. The organization did well financially, which influenced the force for change, and there were consequently forces to maintain the status quo without changes in management processes.

Shifting from the execution-level to the development-level was influenced by the climate for change in the organization. Over time, there were examples illustrating the differences between conducting changes when there were driving forces for (or against) change. It was relatively easy to shift to a development-level when there was a sense of urgency, but very difficult when change was not perceived as necessary. These findings are hardly surprising, but have consequences for the development of management processes.

Furthermore, it was shown to be difficult to change the driving force for (or against) change itself. That is, if there was no willingness to change, it was difficult to achieve such a willingness.

8.7 Summary of Main Findings

8.7.1 Concluding the Information Perspective

Findings from the information perspective (see section 8.1) emphasize the close links between managerial work and information, which is consistent with previous research. These close links point to the importance of understanding managerial work in order to understand information needs and information use in a managerial setting.

The study points to a supplementary perspective in work on development of computer-based information support to general managers. Defining the information needs of general managers has been identified earlier as a critical success factor. Studies have found that information needs of general managers are not easily defined, and different techniques have been suggested. This study suggests that the scope of inquiring needs to be broadened. Improved understanding of managerial work can help further the understanding of necessary informational conditions for a general manager's work. Such an

understanding is difficult to capture through information-needs techniques. Instead of an underlying information-system-development approach the task ought to be approached from the point of view of managerial work.

In line with the view of seeing information needs in their context, findings from the study support previous work where information is seen as input to sensemaking processes rather than input to decision-making processes. Such a view implies a continual need for information and continual changes in information needs. With an underlying decision-making assumption on the other hand, information is seen as input to discrete events (even if the number of events may be large). An underlying, perhaps implicit, assumption of information for decision-making can offer possible explanations for the difficulties experienced in determining information needs when developing computer-based information support to general managers. A shift in the underlying view of information can contribute to an understanding of the dynamics in information needs.

One implication of the continual changes in information needs is that systems developed to support managers with information (computer-based or not) need to be flexible over time. If they are not, they are likely to be of limited value. Some information needs may be more static in their nature (e.g. information about financial results), while others are not.

This study emphasizes the importance of viewing receiving and sending information as intertwined and inseparable concepts. Information flows are like two-way traffic. These dual roles of information mean for example that asking for information is at the same time also sending messages, intentionally or unintentionally. Requesting information or sending information serves intentional purposes for influencing both oneself and others (see Figure 30 on page 251). An understanding of the dual information roles improves conditions for managerial activities. The dual roles can deliberately be used in managerial work, which has been illustrated empirically in the study, where combinations of receiving and sending information was shown to be useful.

Theoretically these findings point to the need to see the exchange of information in a social context, in line with previous research. The complexity involved in information exchange, as suggested in this study, supports earlier research emphasizing the fruitfulness of viewing information flows as something wider then simply the transmission of messages from sender to receiver. The dual roles of information illustrate the relevance of including social factors when investigating information flows in managerial work, as there are intentional or unintentional messages involved in requests for information.

Findings from the study emphasize the relativity of information, which is consistent with some prior research. The relativity of information is discussed in relation to the infological equation and the importance of the individual frame of reference is highlighted.

8.7.2 Concluding the Agenda Perspective

As discussed in the section on the agenda perspective (see section 8.2), prior research on managerial work has investigated, for example, time spent on various issues on an agenda. One pattern from previous studies is that time is perceived as a scarce resource in a general manager's work. This points to the importance of understanding agenda formation processes, which also can help furthering the understanding of the managerial context of information.

Research has pointed to various factors influencing agenda formation, as discussed earlier. Findings from this study support factors identified in prior work. By extension, the study suggests a framework with two dimensions for describing driving forces influencing agenda formation (see Figure 31 on page 262). One dimension depicts the origin of driving forces for including an issue on the agenda, which can be either internal or external. The other dimension captures driving forces in terms of person-driven or business-driven forces.

The proposed framework aims at facilitating an improved understanding of driving forces in agenda formation, and thereby an understanding of how time is spent on various issues on an agenda. From an information point of view, an improved understanding of agenda formation can in turn contribute to an understanding of the managerial context, in accordance with the discussion above.

One particular driving force highlighted in the study is a factor which reflects personal interests among persons involved, a "fun-factor". Findings from the study points to the relevance of explicitly including such a factor when trying to understand managerial agenda formation. An explicit inclusion of such a factor can contribute to a richer picture of agenda formation mechanisms.

The importance of framing of issues has long been recognized, as discussed above. This study points not only to the importance of issue framing, but also to the importance of *re*-framing issues. By actively changing how issues are framed, new aspects of issues can be revealed and the understanding for how to deal with the issues can be improved. Such reframing processes help revealing new aspects and perspectives of issues and contribute to managerial mindshifts (cf. Figure 32 on page 264). Information to support managerial work can

here serve purposes of helping to reframe issues and to offer alternative ways of framing issues.

One particular type of issue where framing can play a significant role is IT-issues. Empirically the study illustrated how the number of IT-issues increased over time and how the framing of these issues changed over time. At early stages IT-issues on the managerial agenda were mostly framed in terms of problems like delayed projects and budget overdrafts. At later stages IT-issues where more often framed in terms of business opportunities. Knowledge of the people involved influences framing. When IT-issues were framed as "tricky" they were often not given priority and rarely included on the agenda. This implies an importance of identifying areas where the knowledge is limited and actively trying to reframe these issues, i.e. to look for "tricky" issues and reframe them.

8.7.3 Concluding the Communication Perspective

From a communication perspective (see section 8.3) the study supports previous research which states that "one cannot not communicate". That is, communication is taking place constantly, both intentionally and unintentionally, and is carried out through words and actions. Concerning communication in managerial work, this study has primarily focused on vertical communication processes.

Findings suggest five central dimensions for depicting vertical communication processes (see Table 21 on page 273): (1) who is initiating the communication process, (2) what is the content, (3) where is the process taking place, (4) when is it taking place and (5) how is the communication mediated. The study proposes that the understanding of vertical communication processes in managerial work can be furthered by exploring the dimensions suggested above. As part of the dimension of how communication is mediated, the study points to the importance of a shared language for communication processes and the usefulness of metaphors.

In the study of vertical communication dyads in managerial work, findings point to an asymmetrical information sharing norm. This norm can be described as a desire to present issues upwards in person, and less interest in presenting or sharing issues downwards in person. The main argument used for presenting one's own issues to next level up was to reduce a risk for misinterpretation. This argumentation emphasizes *sending* aspects of communication processes. Findings from the study suggest that sending aspects are

perceived as more important than receiving aspects for reducing risks of misinterpretation in vertical communication processes.

In the study a discrepancy was found between an overt advocacy of the importance of dialogue and feedback on information on one hand and minimal time and effort spent on establishing such a dialogue and feedback on the other hand. There was a difference between espoused theory and theory-in-use concerning vertical communication processes, i.e. one opinion is expressed in words, and another in actions.

The study points to the importance of viewing vertical communication processes in their social contexts. Vertical communication processes are said to be more complex processes than simply passing information in a vertical dimension. Consistent with previous research, these findings highlight the need to address the social context in stark contrast to traditional information theory with its roots in signal transmission theory.

A framework is suggested for analyzing communication acts in communication processes. The proposed framework describes intentional and unintentional communication acts in relation to desired and undesired effects (see Figure 33 on page 269). The motive for the framework is to suggest a way of capturing different perspectives of vertical communication processes to offer a rich picture of the processes.

8.7.4 Concluding the Development Perspective

From a development perspective (see section 8.4), the study indicates a trade-off between mandate for change and knowledge about conditions when developing management processes (see Figure 37 on page 282). On one hand, management processes can be changed at an early stage when a general manager takes office. The mandate for change seems to be high at this point in time, while the knowledge about the organization and persons involved is limited. On the other hand management processes can be changed at a later stage when a general manager has been in office for a period. In this case the mandate for change seems to be lower, while the knowledge about conditions has increased. Findings from the study suggest that an awareness of this trade-off can contribute to an understanding of priorities among change efforts concerning management processes, where timing seems to be of vital importance.

When development efforts concern management processes, the study points to difficulties in limiting the scope of change efforts. Empirically the study

indicates that a problem first framed as for example an information problem later can turn out to concern business or person-related factors (cf. Figure 35 on page 280). This means that there is a delicate balance to handle in development efforts concerning management processes: on one hand to have a wide scope and include several levels, and on the other hand to limit the scope due to feasibility. In line with previous research on development processes, these findings point to the importance of putting development efforts in a wider context to reveal problems on other levels (cf. Figure 36 on page 281).

Findings from the study point to the dual roles general managers have in the development of management processes. They are both part of the change processes and users of the outcome. The study emphasizes the importance of an awareness of the different roles.

8.7.5 Perspectives Brought Together

The use of different theoretical perspectives in the study illustrates how complementary perspectives can add to a rich picture of phenomena studied (see section 8.5). In the study a framework for management processes is proposed with the aim of capturing a holistic picture of managerial work seen from a process view. The framework includes three types of management processes focused on preparing, performing, and evaluating efforts. For each type, distinctions are made between person-oriented and task-oriented processes, where the latter can seen as business or information-oriented processes (see Figure 14 on page 113). The framework offers a tool for capturing managerial processes and thereby contributes to an understanding of activities in managerial work.

The study builds on the framework and suggests a distinction between two layers of management processes: an execution-level where specific processes are executed, and a development-level where the processes themselves are changed (see Figure 38 on page 289). This distinction can be seen as a parallel to previous research on single and double-loop learning and first and second-order changes, as discussed above.

Also described are strong driving forces for focusing on the execution-level, which in turn can help further an understanding of the challenge between balancing short-term and long-term efforts in managerial work. An "execution trap" is described as the risk of focusing on the execution-level at the expense of development-level activities. Findings from the study argue that shifts between the two layers of management processes are essential in managerial work. The study also suggests that information can help managers to combine

the two layers by supporting activities on both levels, and not only activities on an execution-level.

Findings from the study emphasize the importance of the capacity to deal with different levels of information and communication in managerial work (cf. Figure 34 on page 271). It is suggested that the use of information and communication on different levels helps to facilitate shifts between the different layers of management processes and thereby to avoid an "execution trap".

9 Methodological Approach Revisited

In this chapter I will present retrospective reflections on the methodological approach, that is, the interpretive approach, the clinical approach, the longitudinal case study, the use of the reflective dialogue, and the research process. Following from this, I will discuss different possible methodological alternatives. I will then give some brief comments on concepts like validity, reliability and different types of generalizations. The section will be concluded with some remarks on contributions and how to evaluate the study.

9.1 Retrospective Reflections

Even if it is not possible to find "the best" research approach, it is possible to evaluate the quality of the chosen approach from different points of view, and to discuss possible alternatives. In this section I will make an attempt to evaluate my methodological decisions. I have argued that research is something personal and highly influenced by the person conducting the research (see section 3.2). It is thus important to include a personal evaluation of the work (Stake, 1995, p. 135) or a self-reflection about the research perspective (Orlikowski and Baroudi, 1991, p. 24). The question is how to do this? There is no generally accepted set of guidelines for assessing case-study research (Eisenhardt, 1989, p. 548), and I will do the assessment in the form of reflections on different methodological factors, including discussions on possible strengths and weaknesses in my research approach.

9.1.1 On Using an Interpretive Approach

I will start my reflections on using an interpretive approach (see section 3.3) by looking at my study in the light of deficiencies which are identified for the interpretive perspective (Fay, 1987), see Table 23.

An Interpretive Perspective...

- does not examine the conditions, often external, which give rise to certain meanings and experiences
- 2 omits to explain the unintended consequences of action
- 3 does not address structural conflicts within society and organizations
- 4 neglects to explain historical change

Table 23 Deficiencies with an Interpretive Perspective (based on Fay, 1987, pp. 92-95)

In my study I have tried to include some of the environment in order to better understand the phenomena in a larger context (1). By including several different perspectives I have had the ambition to explain some of the unintended consequences of actions (2), as the consequences may be easier to understand by combining different perspectives. Regarding structural conflicts (3) I cannot say that I have dealt with this possible deficiency in any explicit way. Given my longitudinal approach I can on the other hand argue that I have included historical change (4) in my interpretive approach as I have followed a process over a period of time. For purposes of practical limitation, I have not included the prior history, i.e. before 1993.

The interpretive approach to case studies has attracted an increasing interest within the area of information systems research in recent years (Walsham, 1995b; Nandhakumar and Jones, 1997). As a response to this, discussions on principles for conducting and evaluating interpretive field studies in information systems have emerged (e.g. Klein and Myers, 1999). In summary I make the following reflections on my use of the interpretive approach: I have tried to give a comprehensive picture of the context of the study, and I have applied multiple possible interpretations.

9.1.2 On Using a Clinical Approach

The use of the clinical research approach (see section 3.4) has meant that from time to time I have worked closely with people in the organization. I see a number of advantages with the clinical approach. One advantage has been that as people in the organization have known that I am there to help them and not only to collect my own empirical material, they have been willing to spend time on interviews and to share their views with me. In other words the clinical approach has improved the quality of the empirical material (cf. Nandhakumar

and Jones, 1997, p. 128). Another advantage has been that the close relationship with the people in the organization has been a helpful mechanism to ensure that I have focused on issues perceived as relevant to them (cf. Robey and Markus, 1998, p. 9).

When I started the study, I saw three possible disadvantages. I will here present them and give brief comments on what happened. First, I saw the risk that there might be political considerations such that people answer in order to influence political processes rather than to present their own opinions on matters at hand. I have dealt with this possible disadvantage by first trying to identify these types of answers and second trying to find different explanations and interpretations of those answers. This has not been a major problem. I have noticed these kinds of political driving forces on only a few occasions. At least to my knowledge it did not turn out to be a problem.

Second, I realized that the collection of empirical material would not be tailor-made for this study. There would be parts of the collected material that were not the focus of this study but merely of interest for the organization. In retrospect I see this as an efficiency problem rather than a quality problem for the study. I have spent some of my time on issues that have not been the focus for the study, which in turn have helped me in my understanding of the larger context. It turned out to be a time-consuming approach and the amount of empirical material became very large. This in turn has made the analyzing and writing processes quite time-consuming. The good thing, though, is that it has been helpful for the interpreting process as I have "worked" with the empirical material over a longer period of time and documented my own reflections over time.

Third, I saw the risk that my helping role might result in a situation where I would have become dependent upon, for example, financial compensation from the organization for the work. I deliberately chose to limit the extent of this role so that it never became a problem. As I regard the independence of the researcher as one of the cornerstones of research, I have always made sure to be independent of the organization.

Another possible risk with the approach which is very hard to evaluate is the risk that I have been "too involved" in the case and that I have become a friend of the managing director in the organization. —Yes, we have become friends. —No, I do not think this has become a problem in the research process. I have been aware of this risk all time, and I have actively sought for different interpretations and tried to challenge my own view of issues. I have also tried to combine the closeness with distance by altering between periods

when I have been highly involved and periods when I have been more distant to the organization (cf. Repstad, 1993).

9.1.3 On Using a Longitudinal Case Study

Not only has the clinical research approach meant that the case study has been time-consuming, the longitudinal approach has also meant that it has taken some time. In section 3.5 above I argued for a longitudinal case study approach; here I will make some retrospective reflections on the approach.

When I started the case study, I did not know that everything would work out with the organization, but after a while I realized that things worked well and that the organization could be a suitable site for a longitudinal case study. Seen in retrospect I think it has been enough to handle one case study, but on the other hand a multiple case study approach would have given me opportunities for interesting comparisons (cf. Pettigrew, 1990). These are two different approaches, and the research output is influenced by any of the approaches (cf. ibid, pp. 280-281).

Overall my own perception is that the choice to conduct one case study over a longer period of time was a fruitful decision. As the process-related aspects have been important in the study, I think that time has been an important aspect, or put differently "truth is the daughter of time" (ibid, p. 271). What have the problems been then? From time to time I have perceived problems in maintaining boundaries for the case study. There have been so many aspects that could have been included, and sometimes it has been hard to tell what is important to include and what can be omitted. This points to the challenge of transforming huge amounts of empirical material into a final case-study description (Van de Ven and Huber, 1990, p. 217).

Given the amount of material, I will here try to evaluate and make some retrospective reflections on the empirical material. Miles and Huberman (1994) list a number of features of well-collected qualitative empirical material as described in Table 24, as will be discussed in relation to my study below.

²⁷ I take the liberty to include this quotation without starting a discussion on whether truth actually exists. I think I have made my point clear in these matters earlier in the text.

Description	
 local groundedness (material collected in close proximity to a specific situation) 	
focus on a specific case (a bounded phenomenon)	
Thick descriptions that are:	
• vivid	
nested in a real context	
have a rung of truth	
go beyond "snapshots"	
possible to assess causality	
 inherent flexibility in the study which gives confidence of understanding 	
reveal meanings people place on events, processes, and structures	
perceptions and assumptions etc	
 connecting the revealed meanings to the social world 	
Qualitative empirical material is often a good strategy for exploring new areas.	
Qualitative empirical material often gives a strong potential for testing hypotheses.	
Qualitative empirical material is useful for supplement, validate, explain, illuminate, or interpret quantitative data.	

Table 24 Features of Well-Collected Qualitative Empirical Material (based on discussion by Miles and Huberman, 1994, p. 10)

In my case study I think that the empirical material (linked to the issues described in Table 24) focuses on ordinary events in natural settings (1). Regarding this issue the material could perhaps have been better bounded to a specific phenomenon, which on the other hand would have limited the context in the case-study description. My aim has been to give a picture of a general manager's work, rather than a picture of a limited phenomenon on a manager's agenda. This leads to the second issue about richness and holism (2) where my approach has meant that I have included the real context in the description. My empirical material has been collected over a sustained period

of time (3) and is, in my opinion, far from a "snapshot". I have tried to include people's "lived experience" (4) in the description of events as my material to a large extent has included a basis for such descriptions. Regarding the potential for developing (5) and testing (6) hypotheses I would say that I rather have used the potential for developing hypotheses than for testing. In my case the empirical material has not been used to supplement quantitative data (7).

Overall I think this description in terms of the features of well-collected qualitative empirical material illustrates that the empirical material has formed a strong basis for the case-study description. This does not mean that one cannot argue that things could have been done differently.

9.1.4 On Using a Reflective Dialogue

When reflecting in retrospect on the use of the reflection dialogue (see section 3.6.5) my first reaction is that I have learnt very much from the dialogue. The meetings with the managing director have been interesting, and I have increased my general understanding of managerial work. For the purposes of the study, the findings from the reflective dialogue have helped me interpret findings from other sources of empirical material. Even though the reflective dialogue has included only one perspective from the organization, that of the managing director, the findings from the dialogue have added a significant depth to the case-study description.

Is there anything I would have done differently regarding the reflective dialogue? In one sense I would like to have started the dialogue earlier (we began the dialogue after I had been in the organization for about one year), but I am aware of the need to build a firm basis of trust first before initiating a dialogue of this type.

9.1.5 On the Research Process

When reflecting on the research process (see section 3.6) my first thought is in line with the expression that "science is a journey, not a destination" (Gummesson, 1991, p. 18). The process has been a journey visiting many different places including many interesting stops. I will start my reflections by looking at the research process seen in the perspective of three important challenges facing researchers (ibid, pp. 11-14):

- (1) access to reality
- (2) preunderstanding and understanding
- (3) quality

Regarding the first challenge (1) I think that my research process has been very helpful for access to reality. By applying the clinical research approach over a longer period of time I would say that the access to reality has been very good. The second challenge concerning preunderstanding and understanding (2) deals with the insights into a problem when starting the research process, the input, and the insights gained during the process, the output. Here I think that my preunderstanding was limited. Although I had conducted a previous research study in a context partly related to the area (Mårtensson and Mähring, 1992), I did not have a deep understanding of managerial work. Furthermore, I did not have a specific focus before the research process started, but developed the focus over time. On the other hand I would judge the insights gained from the process to be considerable. The final challenge about quality (3) is hard to evaluate as it comprises many different factors. I have tried to be as explicit as possible regarding the research process in order to give the reader an opportunity to make an independent picture of the quality of the research process.

The use of triangulation for increasing the possibilities for interpretation (see section 3.6.7) has been useful in the research process. Combining different types of empirical findings and challenging findings from, for example, interviews at one point in time, with findings from minutes from the meetings in the management team, has been a fruitful process in my opinion. An opportunity for triangulation which I have not used is the investigator triangulation (see Table 10, page 65). Looking at the research process I think that alternative interpretations made by another person would have been helpful. It has been a matter of limiting the total workload of the project (and to some extent the challenge to find a suitable person willing to spend the necessary time and effort) that has stopped me from involving another researcher in the project.

A final comment when looking at the research process in retrospect is that the time I have actually spent on reflecting on my own empirical material and my own research process as such during the research process has been valuable. Maybe this has been one way of trying to add another perspective (instead of another researcher) by attempting to view at my own material and process from an external perspective.

9.1.6 On Possible Methodological Alternatives

My methodological combination could be given the following quite awkward description: "an interpretive approach to a single longitudinal case-study conducted with a clinical research approach including a reflective dialogue". My first reflection is that it sounds like a tongue-twister. My second reflection on the methodological combination is that I agree with Jönsson when he says that interpretive research is suitable for clinical research (Jönsson, 1991, p. 377). My involvement in the organization, the concrete actions in combination with the reflections on what is really going on, has been fruitful for finding different interpretations. I also think that the combination of action or experiencing with reflection has been most useful for my own learning process (cf. Kolb, 1984).

Is there anything that I would like to have done differently in the combination? One thing that could have added value to the study is a questionnaire to a wider group in the organization, a more quantitative dimension forming a broader picture based on the views of more people in the organization. This was an alternative I rejected in order to limit the project.

I certainly considered several different alternative methodological combinations. As described earlier (see section 3.2) I think it is hard to disregard personal preferences when discussing methodological choices. I do not believe that there is an objective truth that comes to a conclusion and design – it is a person, i.e. me, who has decided how to conduct the study. Having said this, I will in the following paragraphs present some reflections on the alternatives I chose not to use. In Table 25 some possible alternatives are summarized.

Methodological Aspect	Possible Alternatives
1. Role of researcher	Involved researcher vs outside observer
2. Research method	Case study vs survey
a. Number of cases	Single vs multiple cases
b. Time-span	Longitudinal vs snapshot
c. Supplement	Case study vs case study plus smaller survey
3. Unit of analysis	Individual – group – organization

Table 25 Summary of Some Possible Methodological Alternative

One alternative was to not get involved to the extent that the clinical approach implies (1). Here the choice was rather easy. In accordance with my personal

preferences I wanted to work as an involved researcher. Regarding method, the case-study approach was a natural choice (2). One alternative was to conduct a larger number of interviews with people in different organizations. Another alternative was to include several cases and choose to conduct a multiple-case study instead (2a). I chose to focus on one organization and follow it over a longer period of time (2b) as I wanted to include process factors in the study, which may be hard to capture with a broader approach, for example conducting interviews with persons from different organizations. The choice not to add a smaller survey to the case study (2c) was a more difficult choice. Here I decided to limit the extent of the study by not adding a survey. Instead I saw an advantage in spending all efforts on the case study instead. Regarding the unit of analysis (3) my primary focus has been the individual (the managing director) with a secondary focus on the group level (the management team).

When reflecting in retrospect on the choices made, I see the risk that a combination with other cases or a wider survey would have split the focus. Beyond this, the amount of the empirical material from the single-case study turned out to be much more extensive than I could imagine at the outset of the study.

9.2 How to Evaluate the Quality of the Study?

Here the reader will meet concepts often found in methodological discussions: validity, reliability, generalization, and contributions.

9.2.1 Validity and Reliability?

A short description of validity and reliability is that a piece of research is valid if it closely reflects the world being described, and is reliable if two researchers studying the same arena would come up with compatible observations (e.g. Rubin and Rubin, 1995, p. 85). One problem with the two concepts is that many indicators of validity and reliability do not fit qualitative interpretive research, and trying to apply the concepts mechanically to qualitative works may distract more than it clarifies (ibid). Nevertheless, it is important to discuss and reflect upon the quality of the research, and in following paragraphs I will first say a few words about the validity and reliability of my study and then suggest some alternative concepts for discussing the quality of the research.

The ultimate validation test in clinical research could be said to be when the researcher can predict the outcome of an intervention in the organization (Schein, 1987, p. 52). More traditional tests are to look for what is referred to

as *type I errors* (believing a statement to be true when it is not) and *type II errors* (rejecting a statement which is true) (e.g. Silverman, 1993, p. 149). Here things get a bit complicated given an underlying view of science that there is no objective truth, but the world is socially constructed and every person makes their own interpretations of the things. I think it is difficult, and perhaps not meaningful, to apply instruments for testing validity that are developed mainly for quantitative studies with positivistic assumptions. With an interpretative approach it is important to present different possible alternative interpretations and to be as explicit as possible in describing these.

Reliability is not easy to deal with either, especially not in longitudinal studies (Kimberly, 1976, p. 338). It is difficult to argue that another researcher should observe the same things that I have and make the same interpretations. Once again the people involved in the study are important, in this case the researcher. Expressed differently research is something personal, closely related to the person conducting the study. What one can investigate regarding reliability is how the research process has been handled and what methods have been used. By being explicit about how the research work has been carried out and what procedures have been used, the reliability can be improved as other researchers would at least know how to conduct similar studies, even if these studies would be highly influenced by those persons and their own beliefs, values, and interests.

Given the difficulties in discussing validity and reliability, what could one do? Rubin and Rubin (1995, pp. 85-91) suggest that the credibility of qualitative work could be discussed in terms of its transparency, consistency, and communicability, see Table 26.

Criteria	Description	
1. Transparency	to allow a reader to see the basic processes of data collection	
2. Consistency	to show that ideas and responses that appeared to be inconsistent have been checked out	
3. Communicability	to present the research arena so that participants can see themselves and other readers feel confident	

Table 26 Criteria for Judging the Credibility of Qualitative Work (based on Rubin and Rubin, 1995, pp. 85-91)

When reflecting in retrospect on my study in terms of the criteria presented in Table 26 I make the following judgements. My aim has been to be as transparent (1) as possible regarding both my methodological approach and how I have carried out the research. For this reason I have chosen to write a fairly extensive chapter on the methodology. This means that in some respect I would say that the research process is rather transparent. On the other hand, I have conducted the empirical collection, documentation and interpretations on my own, both in the organization and during the writing process. This means that even if I present what I have done and how I have worked, it is still to some extent a black box for the reader regarding how I have conducted the work in practice. Overall I think it is hard to fully eliminate this in qualitative research, but I hope that my attempts to share how I have worked have improved the transparency of the study.

Regarding the consistency of the study (2) I have had good opportunities to check inconsistencies in the empirical material. When I have found something which has not made sense to me, it has been easy to check it. In retrospect, I can see that I could have been more explicit and described more inconsistencies I have checked out. Now, the results are often presented without describing the process of checking the inconsistencies. There is, of course, always a balance regarding how much to include in the final description: to give a description that is as complete as possible and at the same time keep it readable in respect of the length of the description.

In order to increase the communicability (3) of the final report I have included a large number of quotations, with the intention of sharing a feeling for the situations I describe. I have also checked with participants to see whether they recognize themselves in the situations or not. Whether the reader feels confident in the description or not is of course up to every reader to judge. In order to increase the likelihood of confidence in the description I have let several people not involved in the study or the organization read it in order to identify issues where there have been needs for clarifications.

When using the criteria suggested in Table 26, my own judgement is that the study meets the criteria for credibility fairly well. As this is a matter of opinion, everyone has to make an own judgement.

9.2.2 Generalization?

One important aspect of any piece of research is the extent to which the results of a study are generalizable and add new general knowledge. Eisenhardt (1989) describes how theories can be built from case-study research. The process she describes adopts a positivist view of science and is "directed toward the development of testable hypotheses and theory which are generalizable across settings" (ibid, p. 546). When she contrasts her approach with Strauss (1987) and Van Maanen (1988) she says that the other authors "are more concerned that a rich, complex description of the specific cases under study evolve and they appear less concerned with development of generalizable theory" (Eisenhardt, 1989, p. 546). Here I would argue that this is a matter of different research approaches with different underlying views of science. This in turn means that one can see different types of generalization. In the following paragraphs I will reflect on my study in relation to some types of generalizations.

Case studies can be compared to experiments in natural science. One single case study or experiment alone is not enough for a generalizable theory, but can be seen as steps towards generalization (Lee, 1989, p. 41). In the same way that one single experiment cannot make a theory general, one case study has only tested the theory against some empirical circumstances. Instead a case study adds to generalizability, and further case studies are needed for tests against other empirical circumstances. That is, case studies do not represent a "sample" aiming at *statistical generalization*, but instead the goal is to expand and generalize theories, *analytic generalization* (Yin, 1994, p. 10).

In these examples of generalization there seem to be an underlying assumption about an objective reality and the final aim is to find "a truth" (or maybe "the truth"). Given a study with an interpretive approach I will look at four different types of generalizations described for interpretive case studies (Walsham, 1995a, p. 79), see Table 27.

Type of Generalization	Description
1. Development of concepts	Developing new concepts from one situation which can be generalized and are useful for explaining other situations, like for example the concept "informate" from Zuboff (1988).
2. Generation of theory	Constructing theoretical frameworks which are then applied in analyses in different areas. This in turn may lead to suggestions for further theoretical development.
3. Drawing of specific implications	Drawing implications from specific situations, like for example from an in-depth case study, which may lead to useful insight for related work in other contexts.
4. Contribution of rich insight	Capturing insights from the reading of reports and results from case studies that are not easily categorised as concepts, theories, or specific implications.

Table 27 Four Types of Generalizations from Interpretive Research (partly based on Walsham, 1995a, pp. 79-80)

The four types of generalizations described in Table 27 are not mutually exclusive categories (ibid). My own reflections on the study in light of the four types of generalizations result in the following. The different conceptual frameworks suggested could be seen as a combination of (1) and (2). That is, the frameworks combine concepts into frameworks that could be applied in other contexts. I also think that my results can be generalized in terms of the latter two types of generalizations (3) and (4). That is, implications drawn from the context of my case study can be applied in other organizations and contexts and hopefully be useful in explaining other situations. The case study has also, hopefully, contributed to a rich insight in the areas studied, which can be used when conducting further studies.

The topic of generalization is a controversial one, especially when using a single case-study. My aim with this section has been to illustrate that the concept of generalization is complex and there are several ways of looking at what can be generalized. Often generalization is seen through a positivistic lens where quantitative analyses are to prove that results are applicable in other contexts (maybe with given statistical significance). Given my research approach, I think it is more applicable and fruitful to discuss generalizations in

other terms, which I have tried to do when using Walsham's different types of generalizations.

9.3 A Judgement?

It is, of course, a difficult task to make a judgement of your own study. Nevertheless, I have tried to discuss some aspects of this study's methodological qualities in the previous sections. By highlighting different perspectives on the quality of the study, I hope I have offered the reader possibilities for making her or his own judgement of the methodological qualities.

There are many different types of criteria that could be used. Above I have argued for the importance of applying criteria in accordance with the overall research approach. This is an important aspect when discussing methodological qualities of a research study.

10 Concluding Remarks

In this concluding chapter I will link back to the overall research question and specific purposes outlined in the introduction. First I will discuss how the study addresses the purposes and then reflect on the process that led to the results of the study. Following from this I then discuss implications for practice and finally I present some ideas for further research. It should be noted that the specific results of the study are presented and discussed above in chapter 8, with a summary of main findings in section 8.7 on page 301.

10.1 Linking Back to the Outset

The main findings from the study are summarized above in the concluding section of chapter 8, see section 8.7 on page 301. This means that the reader looking for a brief summary of the results will find it there.

In this section I will try to illustrate how the purposes have been addressed in the study. There are two aspects to be considered when considering the extent to which one can argue that the purposes are fulfilled: first the quality of the study, as has been discussed above in chapter 9, and second the findings per se, and to what extent they correspond to expectations.

In the introduction the following overall research question was asked:

RQ How can an information perspective contribute to the understanding of managerial work?

Based on this question three specific purposes were presented:

- P1. To describe a general manager's work seen from a process and cognitive view, by applying four theoretical perspectives (information, agenda, communication and development) to management processes.
- P2. To discuss and explore patterns in a general manager's work (based on the description from P1).
- P3. To discuss and propose conceptual frameworks for understanding a general manager's work (rooted in findings from P1 and P2).

In the study managerial work has been viewed through a process lens and described in terms of management processes. Four theoretical perspectives

have been applied, as described and discussed in chapters 5-8. It is now time review to how I have tried to address the purposes.

The first specific purpose (P1) has been addressed in different ways. There is a chronological description of a general manager's work in Appendix H. In chapter 2 there is a brief overview of the empirical setting. A general manager's work is then described in chapters 5-7, where the description is organized according to the suggested framework for management processes.

The second purpose (P2) has been addressed mainly in chapters 5-7 where different patterns are identified and discussed. In line with the overall research approach, different interpretations of the empirical findings are illuminated in the discussions.

The third purpose (P3) has been addressed mainly in chapter 8 where the findings are discussed in light of previous work. The discussions are organized according to the four theoretical perspectives and conceptual frameworks are suggested with the aim of contributing to a richer understanding of managerial work.

The idea has been to apply theoretical foundations from the field of information management when investigating management processes. Given that the study has been conducted during a period of time sometimes described as "the information age" and that information plays significant roles in managerial work according to previous research (especially seen from a cognitive view), this theoretical basis could be seen as natural. Nevertheless, most previous research on managerial work has had other theoretical starting-points. This study thus primarily aims at contributing to the understanding of managerial work by adding to the knowledge of management processes. The study can also be seen as an attempt to illustrate the applicability of theories from the field of information management. Given the role of information and communication in society, the study can be seen as an argument for using theoretical foundations from research on information and communication when trying to increase our knowledge in areas traditionally seen as being outside the scope of information management.

In the field of information management the tradition of building information systems has resulted in a number of hard-earned experiences. One such lesson relates to the need to view information systems in their broader contexts, i.e. to learn about broader contexts of the systems in order to increase the likelihood of successful results. Transferring this insight to the context of managerial work helps to identify a need to view information and communication in

managerial work in broader contexts. In this study this has been illustrated, and conceptual frameworks have been suggested as means for doing so.

Addressing the purposes has been a journey where the general direction, that is the research question, has been decided and firm since the very beginning. My aim was to investigate managerial work seen from the horizon of information management. The specific purposes have partly changed over time. In the beginning of the process I had more of a focus on information per se. The idea was, for example, to investigate managerial information sources and media used, in more detail. Over time I realized that I was about to fall into the trap of limiting the scope to information at the expense of the context in form of managerial work. I outlined four theoretical perspectives with the aim of including multiple views of managerial work. Based on these views, and patterns that emerged when investigating the case study, the frameworks evolved over time.

It is, of course, up to the individual reader to judge to what extent the findings meet the expectations presented in the introduction and if the purposes can be said to be fulfilled. Here, I have tried to share some of my reflections on the process.

10.2 Implications for Practice

The main goal of an academic study is to contribute to our knowledge about phenomena at hand. An additional goal is to identify practical implications of the results. In this section I will briefly reflect on some implications for practice that follow from the findings of this study. The implications are discussed in general terms and can be seen in relation to various types of practical settings, e.g. organizations operating in different industries.

Implications for Managerial Activities

The framework for management processes proposed in the study (see Figure 14 on page 113) has implications for managerial activities. One aim with the framework is to illuminate different dimensions of managerial activity, expressed as management processes. From a practical point of view the framework can be used as a tool for describing managerial activities. The picture that appears can then in turn be used as a basis for discussions of priorities among different activities. Given that time is often seen as a scarce resource, a rich

picture of the present situation concerning managerial activities can contribute to efforts to improve the situation.

Findings from the study furthermore suggest that managerial work can be seen as carried out on two levels: on an execution-level dealing with specific issues on an agenda and on a development-level dealing with how issues are addressed. Short-term driving forces focus on the execution-level, while there are few forces supporting work on the development-level. The study emphasizes the importance of a combination of activities on the two layers of management processes. A practical implication of this is to identify driving forces to include activities on the development-level, i.e. to reflect on and develop how managerial activities are carried out. Issues on an agenda in a management team can be seen in light of their focus on execution or development. In case of an imbalance with too much effort spent on short-term execution issues, efforts can be focused on identifying those driving forces that could improve the balance. This way what was identified as an *execution trap* could be avoided, i.e. when too much attention is paid on execution at the expense of development efforts.

The study has also emphasized the importance of reframing issues on the managerial agenda because the way issues are framed influences both what issues are included on the agenda and how these are dealt with. An implication of this finding is that managers should review how issues on the managerial agenda are framed and how these issues can be reframed. By explicitly viewing issues through different frames, alternative priorities can be revealed, which in turn can alter the balance among different management processes. One example is, for instance, to investigate how IT-related issues are framed on the managerial agenda and how these could be reframed. Whether issues are expressed in terms of problems, such as project delays or budget problems, or in terms of opportunities for business activities, has consequences. By changing the framing of issues, managers can create opportunities for handling the very same issues differently.

Implications for Communication in Managerial Work

Findings from the study emphasize patterns in communication seen on two levels: one specific level and one meta-level. They also suggest that distinguishing between the different levels of communication is important for managerial communication. One implication of this is the importance of the capacity to deal with levels of communication. By recognizing communication on different levels, a manager can improve the possibility of reaching some people in an

organization with a message while also influencing other people on a metalevel. Some communicative actions may be effective for intended effects while others may be counterproductive. The study suggests that an awareness of communication on various levels and a deliberate use communication on a specific and a meta-level can increase efficiency in managerial communication.

The study emphasizes that sending and receiving information takes place simultaneously. Information flows are described as two-way traffic. This means, for example, that the act of asking for information also at the same time sends messages, intentionally or unintentionally. Requesting information or sending information can influence both oneself and other persons. A framework for the combination of informing and influencing is proposed (see Figure 30 on page 251). This framework can serve as a tool for investigating informing activities and can help managers reflecting on their own personal strategies for using information to achieve intended results.

Furthermore, the study points to the importance of an awareness of intentional and unintentional communication acts in relation to desired and undesired effects (see Figure 33 on page 269). This means that communication is taking place constantly, intentionally or unintentionally. These communication acts have desired or undesired effects. The suggested framework (see Figure 33) can be used as a practical tool for reflecting on communication efforts and thereby help improve future efforts. The study suggests that a certain amount of reflection on communication acts in managerial work can help increase the likelihood of achieving intended effects.

Implications for Information-Support Activities

Findings from the study of information aspects of managerial work have consequences for information-support activities. One factor is the importance of viewing information in the wider context, regardless of whether the information-support activities are computer-based or not. Given the close links between information and managerial work discussed in the study, demands on the people involved in information-support activities are huge, and closeness between information providers and managers is important.

The scope for information-support activities needs to be widened and understood beyond the traditionally narrow conception of information, in accordance with the findings of this study. In the discussion of empirical findings a quote from a person in the case study was highlighted: "It is not only about a report." This illustrates the importance of viewing development of information platforms for managerial work in a broad context of business structures and

processes, and the people involved. Findings from the study suggest that a narrow focus on information needs and information media is an oversimplification. There are close links between the information and the people involved, as well as the business activities, and all these aspects need to be included in the development process of managerial information platforms. A narrow scope from the outset may have negative effects on results and prolong development processes. Furthermore, a narrow scope may lead to results that do not meet demands.

Empirically the study indicates that problems first framed as, for example, an information problem later can turn out to be business or person-related problems (cf. Figure 36 on page 280). This means that there is a delicate balance involved in development efforts: on one hand to have a wide scope and include several levels in change efforts and on the other hand to limit the scope due to make it feasible. This highlights the advisability of conducting a preliminary analysis at an early stage when developing information-support structures or processes. The aim of such a study is to put development efforts in a wider context and to reveal problems on other levels.

10.3 Ideas for Further Research

When working with a study over a period of time, a number of new research ideas arise. Here I will summarize a few of these ideas and point to how they could extend some of the results of this study.

Building on the framework for management processes suggested in the study, a path for further research is to investigate the balance between efforts spent on different types of management processes. Such an investigation could help further the understanding of balance between various processes in different settings. One type of process of particular interest would be management processes for handling change efforts, for example in the context of IT investments.

The two layers of management processes suggested in the study need to be investigated and explored in more detail. This could be done through broader investigations of how general managers' work is carried out on an execution-level and a development-level. Of particular interest is to identify and explain mechanisms for shifting focus between the different layers, i.e. to identify triggers for shifts. This means that triggers for development of different management processes could be revealed, and in conjunction with this, the roles of information and communication could be explored.

Based on the discussions on driving forces for agenda formation, it would be of interest to investigate the entrance of new issues on the managerial agenda. One specific example of particular interest to investigate in more detail is the entrance of IT-issues on managerial agendas. The study at hand indicates that the number of IT-issues has increased and further studies on driving forces behind the inclusion of these issues on managerial agendas would be of interest. Additionally, IT-issues would be an interesting example to investigate in terms of framing of issues, i.e. how IT-issues are framed on managerial agendas and the consequences of different framings. Here one could also compare the entrance and framing of the issues on managerial agendas on the board level compared to the management-team level.

Regarding vertical communication processes there are several interesting paths for further research. One is to investigate and compare different parts of the chain of vertical communication processes, i.e. to compare the dyads board – general manager and general manager – subordinates in terms of information sharing norms and arguments used for reducing misinterpretations. Here it would be of interest to investigate the use of different levels of communication in the different dyads, for example to what extent communication on a meta-level is intentionally used in different dyads.

From a methodological point of view, the use of the reflective dialogue with the managing director has awaken my interest for *innovative research methods to combine theory and practice, academics and practitioners*, an area where there is room for new initiatives. It is my firm belief that both parties have much to gain from innovative forms of cooperation.

List of References

- The list of references is in English alphabetical order with the Swedish letters \mathring{A} and \mathring{A} treated as A and Swedish \mathring{O} as O. For non-English works my English translations of titles are presented in curly brackets $\{\}$.
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Appendix A: Introductory Letter to Omega

The introductory letter sent to MD at Omega on April 1st, 1993 reads like the following (the original letter was written in Swedish):

Management Information and Managerial Work

My name is Pär Mårtensson and I work at the Institute for Business Process Development, a research foundation at the Stockholm School of Economics. Significant for the work at the institute is that we combine theory and practice through a combination of research and assignments. We experience that the research work contributes to the assignments, and correspondingly that the work in assignments contributes to our research.

Since 1989 I have, together with a colleague of mine, collaborated with financial directors and controllers from about 15 major Swedish corporations (among that group is NN who gave me your name). The focus of the work (which was reported in a licentiate thesis) has been information support from central staffs to management teams. One of the results from the project shows the importance to view work with the improvement of management information in its wider context as development of managerial work, and not only focus on information.

One example of the strong link to managerial work is how crucial it is to receive fast and distinct signals when something unexpected occurs in order to take action. It is also critical that the message or the signals to control the business activities reach out in the organization and have the intended effects. I believe that there is a huge potential for the improvements of this "system of signals" of receiving and sending of information/messages. It is all about viewing the management information as a part of the managerial work.

Through work with the improvement of this "system of signals" the preconditions for the management activities can be improved. One tangible proposal is to conduct a limited review to get a better picture of the current situation, which is a first step in the work to improve the situation.

I would very much appreciate meeting with you to discuss this and to listen to your points of view. I will get in touch with your secretary within the next few days for a possible appointment.

Yours sincerely,

Pär Mårtensson

Appendix B: Facts and Figures About Empirical Material

The following is a brief description of some facts and figures about the empirical material used for the case-study description.

Interviews and Meetings etc.

- 105 interviews and booked meetings
 - with altogether 29 different persons
 - o total time ca. 180 hours
 - o ca. 700 pages of documentation
- 50 of the 105 interviews and booked meetings with the managing director alone or together with someone else
 - o total time ca. 95 hours (out of the 180 hours)
 - o ca. 350 pages of documentation (out of the 700 pages)
- a huge number of informal discussions, unbooked meetings and phone calls
 - o wn field notes ca. 100 pages

Written Internal Sources

- Minutes from board meetings
 - 15 consecutive meetings
 - o ca. 200 pages of documentation (ca. 70 pages plus enclosures)
 - o own written summaries ca. 30 pages
- · Minutes from meetings in the management team
 - o ca. 60 consecutive meetings
 - o ca. 1,100 pages of documentation (ca. 300 pages plus enclosures)
 - o wn written summaries ca. 130 pages
- Various internal documents (in total ca. 500 pages) like for example:
 - o strategic plan
 - internal long-term plan
 - information policy
 - o IS/IT-policy
 - o analysis of the business environment
 - o descriptions of functions and process
 - o final TQM-report

Written Public Sources

- Annual reports
- Public internal magazines

Appendix C: Interview Guides

The following is the interview guide used in the survey conducted in 1993. The purpose was to interview a number of people about their perceived information needs and their opinion on the present situation in general and regarding the management information in particular.

The First Interview Guide - 1993

Ask the interviewee to describe and comment on the following issues:

- Background
 - Personal background
 - Background to the position in the organization
- About the Specific Unit [i.e. the unit the person belongs to]
 - Business activities
 - Size (number of employees, geographical range etc.)
 - o Critical Success Factors for the unit
 - Relation/role to other parts of the organization
- Overall Goals and Results
 - Short term and long term
 - Potential problems for reaching the goals
- Information and Reports
 - The internal information within the unit
 - The Flash-report
 - The Monthly report
 - The Quarterly report
 - The Forecasts
 - Other information or reports
 - Non-financial information
 - Key ratios
- Information Systems
- Business Environment
 - Internal
 - External

- Persons
 - The Managing Director closeness
 - The Board closeness/role of the board
- Change Efforts and Projects
- General Comments
- Next Steps

For each item links were made to the specific unit (region or department).

The Second Interview Guide - 1995

The following is the interview guide used in the survey conducted in 1995. The purpose was to interview a number of people about how they perceived the situation after the loss of the important contract. Whereas the first interview survey in 1993 had its main focus on information related aspects, the survey conducted in 1995 had a main focus more on business activities, including information and communication related aspects.

Ask the interviewee to describe and comment on the following issues:

- Present situation own area of responsibility
 - Short facts on the own area of responsibility
 - Changes that have occurred recently, or are about to take place?
 Changes in the preconditions?
 - The main challenges/problems to deal with in the own area of responsibility?
- Present situation overall Omega
 - At present, what do you personally perceive as Omega's greatest:
 - strengths?
 - weaknesses?
 - What are the greatest problems today that are important to deal with for the future Omega?
 - Who are the most important interested parties for Omega? Internally? Externally? (To whom is this a problem?)
 - How would you summarize Omega's preconditions for the future?
 - With the starting-point in the lists of weaknesses, possibilities, etc. from the meeting in the management team in January: which are in your opinion the three most important:
 - strengths?

- possibilities?
- etc. [for the rest of the lists]

• Present situation – different opinions

- On what aspects do you think there are the greatest differences in opinions among different persons within Omega regarding the present situation?
- What are the most important matters that are possible to affect concerning the preconditions for Omega?

• Scenarios – future situation

- What do you personally this is the most likely scenario for what will happen with Omega year 2000?
- What are the main obstacles you see in the work to shape an Omega year 2000? What do you think will be most difficult to deal with?
- What is the very most important factor to deal with immediately?
- O Do you think that the present sense of uncertainty in the organization about what will happen will cause many persons to look for new jobs? (Any differences between different types of positions? What is the likelihood that you still will be with Omega in year 2000?

Miscellaneous

- What is all this about really?
- The relationship/closeness/communication with MD (the managing director)?
- The new business controller? The new IT-controller? How are things working? Anything that does not work?
- At the coming meeting in the management team on the present state is there anything special that you think is important to bear in mind?
- What did I not ask?
- The plan of action in the Southern Region?

Appendix D: List of Persons Interviewed

In total the case study is based on 105 interviews and meetings with about thirty different people. The number of times I have interviewed or held booked meetings with people vary considerably: from 50 interviews and meetings with the managing director to some persons I have interviewed just once. In the following paragraphs the persons interviewed and included at meetings in different phases of the case study are listed to give a view of the informants for the case study. Excluded from the list below are all those ad hoc and unbooked discussions, meetings and phone-calls with various people in the organization. I have taken notes from many of these events, which have been used in the case description, and these people are included in the list below.

Interview Survey 1993

25 interviews and meetings were held with the 18 persons listed below. (Some persons were interviewed more than once and some interviews were held with two persons at the same time.)

- General Management
 - MD, managing director
- Finance and IS department
 - o FD, financial director and head of the department
 - FDB, accounting controller
 - o FDD, accountant
- · Purchasing and Logistics department
 - o PL, head of the department
 - PLC, controller Purchasing and Logistics
- Business Development department
 - o BD, head of the department
- Personnel department
 - PM1, personnel manager and head of the department
- The Western Region
 - WR, regional manager
 - o WRF, financial manager

- The Eastern Region
 - ERF, acting regional manager
 - ERA, manager
 - ERB, manager
- The Southern Region
 - o SR, regional manager
- The Northern Region
 - NR, regional manager
- Board members
 - BMA, Chief Legal Advisor in the Alpha Group
 - o BMB, managing director in another organization
 - o BMC, international consultant

Meetings Held Between the Interview Surveys 1993 and 1995

22 booked meetings (excluding all informal or unbooked discussions) were held with 7 persons in the organization between the interview surveys in 1993 and 1995. The following persons were included in these meetings:

- General Management
 - MD, managing director
 - o PA, the managing director's personal assistant
- Finance and IS department
 - FD, financial director and head of the department
 - FDA, chief accountant
 - FDB, accounting controller
 - o FDC, accounting controller
- Personnel department
 - o PM1, personnel manager and head of the department

Interview Survey 1995

30 interviews and meetings were held with 18 persons (listed below). Some persons were interviewed more than once and there where some meetings with two persons at the same time.

- General Management and Business Control
 - o MD, managing director

- PA, the managing director's personal assistant
- BC, business controller
- Finance and IS department
 - FD, financial director and head of the department
 - FDA, chief accountant
 - FDB, accounting controller
- Purchasing and Logistics department
 - o PL, head of the department
 - PLA, manager
 - PLB, manager
- Business Development department
 - BD, head of the department
 - BDA, project manager
- Personnel department
 - PM1, personnel manager and head of the department
- The Western Region
 - WR, regional manager
- The Eastern Region
 - ER, regional manager
 - ERC, manager
- The Southern Region
 - SR, regional manager
- The Northern Region
 - NR, regional manager
- Miscellaneous
 - CON, consultant from other part of the Alpha Group

Meetings Held After the Interview Survey 1995

28 booked meetings (excluding all informal or unbooked discussions) were held with 8 persons in the organization after the interview survey 1995. The following persons were included in these meetings:

- General Management and Business Control
 - MD, managing director

- o PA, the managing director's personal assistant
- o BC, business controller
- Finance and IS department
 - o FD, financial director and head of the department
- · Purchasing and Logistics department
 - o PL, head of the department
- · Business Development department
 - o BD, head of the department
- Personnel department
 - o PM2, personnel manager and head of the department
- The Northern Region
 - o NR, regional manager

Appendix E: List of Persons in Alphabetical Order

BC business controller

BD head of the Business Development department

BDA project manager at the Business Development department
BMA board member and Chief Legal Advisor in the Alpha Group
BMB board member and managing director in another organization

BMC board member and international consultant
CON consultant from other part of the Alpha Group

ER regional manager and head of the Eastern Region (1994-)

ERA manager at the Eastern Region
ERB manager at the Eastern Region
ERC manager at the Eastern Region

ERF acting regional manager and head of the Eastern Region (1993)

and then financial manager at the Eastern Region

FD financial director and head of the Finance and IS department

FDA chief accountant at the Finance and IS department

FDB accounting controller at the Finance and IS department FDC accounting controller at the Finance and IS department

FDD accountant at the Finance and IS department

ITC IT-controller
MD managing director

NR regional manager and head of the Northern Region

PA the managing director's personal assistant

PL head of the Purchasing and Logistics department
PLA manager at the Purchasing and Logistics department
PLB manager at the Purchasing and Logistics department
PLC controller at the Purchasing and Logistics department

PM1 personnel manager and head of the Personnel department (-1995)
PM2 personnel manager and head of the Personnel department (1996-)

SR regional manager and head of the Southern Region

SRF financial manager at the Southern Region

WR regional manager and head of the Western Region

WRF financial manager at the Western Region

Appendix F: An Example from the Reflective Dialogue

During 1994 I initiated the reflective dialogue with the managing director (MD). To illustrate what issues were on the managing director's mind, and also to give some examples of his way of reasoning on different matters, I will here give a brief description of one of our meetings in the reflective dialogue. The following excerpt is from a meeting that took place in October 1994.

We planned this meeting at our previous meeting about four weeks earlier. Now MD arrives at the research institute where I work at about 4.30 p.m. In the corridor on the way to the conference room that we usually use for our meetings there are a number of magazines exposed on a rack. He looks at them and says:

"The amount of information produced is unbelievable. It is impossible to read it all."

Once we have taken our seats in the conference room I start off the meeting with the usual question about how life is at Omega at present. He tells me that the week has been very hectic, but on Tuesday he spent the whole day at his home. He had told PA to only let through the very most important phone calls. He comments upon the day:

"I really got a lot of work done during that day as I could finish what I started. At the end of the day I was very pleased with myself, even though there was a small pile with issues that were stacking up at my office."

He continues:

"The problem with working at my office is that there are such short intervals. There are interruptions all the time. One reason for this is that I meet with very many people and I want my subordinates to know that they can come to me with the questions they want to discuss. They should not have to make an appointment through a secretary to meet their superior."

MD tells me about a board meeting he attended during the week in another organization where he has been a member of the board for several years. He reflects:

"Sometimes these external board meetings are fruitful, but sometimes it feels just like giving and not getting so much back."

In recent weeks there have been a lot of time and effort devoted to a problematic situation with one of the business partners in a purchasing pool. MD points to the tricky situation when he cannot openly describe everything for his subordinates as some matters are strictly confidential. This issue is one example of such an issue. At the same time it is also an example of an issue that suddenly turns up and is very important and time-consuming but one does not know about it in advance.

One issue that he did know about in advance though is the tendering process for the contract in the Southern Region. He explains that the work is now running and takes a lot of his time, as he had expected. It is a lot of hard work for a number of people in the organization.

Linked to the discussion on the way to the conference room we start a discussion on reading and conclude that it would be valuable to read more fiction but very hard to find the time to do it. From this discussion it is not a big the step to our next topic of the day: communication. We talk about communication and flows of information in a leader's daily work. MD stresses the importance of people in communication. He says:

"Persons' ears work differently depending on who is sending the message. It is important to give and shape suitable conditions for communication through the way one acts. In certain situations the receivers are not ready to hear the message."

MD links the importance of people in communication to learning and to learning organizations. He says:

"The view of learning is important. It is not certain that there always is a positive view of learning. I see two starting-points for learning in an organization: the culture in the organization and the situation in focus."

We discuss different types of leaders and the importance of making decisions all the time. MD is of the opinion that it is seldom critical to make decisions quick as lightning, except for people in trading markets. Instead he thinks it is important to show consideration to other people's views: first listen to the opinions of those who are involved, then justify the final decision, which is not always appreciated by everyone round the table.

He makes some comments on his role as a mentor for a couple of young leaders in other parts of the Alpha Group that are linked to the previous discussion on decision making. We talk about the importance of receiving signals as a leader and digging in order to find out what is under the surface. He says:

"Sometimes there can be a feeling that 'OK here I should start asking to find out more, but I just cannot do it now — that would lead to a number of processes that I do not have the time or the energy to handle right now.' It is important not to start those types of processes without taking care of them. The worst thing that can happen is to let things just peter out. That is incredibly negative."

We discuss change processes and the importance of having continuity in the change processes. MD makes some reflections on the huge difference between the previous CEO of the Alpha Group (and chairman of Omega) and the newly appointed CEO regarding their ability to create continuity in change processes. In the discussion on change processes, MD comments on the change of CEO in another large Scandina-

vian organization that has attracted a lot of attention. He speculates on the differences between the previous CEO and the new one. Following from this, we discuss how an organization is affected by a change of the leader. He makes the following comment:

"There is a danger when the dialogue between a leader and his/her subordinates is reduced both in its extent and its content, when the dialogue does not include matters of real value."

In the discussion on information that follows, MD gives an example to illustrate how personal preferences influence the communication between leaders and their subordinates:

"The former CEO of the Alpha Group did not like to read at all, while the present CEO reads everything."

Once we mention the present and rather new CEO MD tells me about a meeting for a number of leaders of different parts of the Alpha Group.

As usual, time flies during our meetings. We realize that we want to go through some notes from a previous meeting and start a discussion on the concluding steps in the development of the reports and reporting routines. MD describes that the new business controller is now becoming more fully introduced within the organization and things work very well. A minor problem is that a couple of FD's subordinates at the Finance and IS department have written a letter to MD where they ask about the new business controller and his responsibilities. MD thinks that time will show that there will be no real problems, and they will hopefully see this as time goes by. MD himself is very happy with the recruitment.

As the new business controller does not have a long retailing background, i.e. does not add that particular competence, MD has invited a senior manager from another Scandinavian-based organization to give a presentation for the management team of Omega. This is, of course, not the same as recruiting someone with retailing competence, but can be seen as one way of trying to add some retailing knowledge to the management team. MD is very pleased with the invitation.

MD mentions that the new training program is an issue with high priority. He describes some discussions with the personnel manager, PM1:

"PM1 wants to build a large program. My priority is to get something going and to make sure the program is suited for the participants. The people attending the program have to feel that the training program is urgent for them. I do not want to build a large number of modules with the risk that everything will result in nothing at all. It is better to start with something on a small scale."

It is now about 6 p.m. and time to end the meeting. We plan for the next meeting in the reflective dialogue in four weeks time. Before that we will meet at meetings at Omega as I will be there for several meetings and interviews. MD leaves and I sit down to document the meeting.

Appendix G: Coding Scheme

The following coding scheme was used for the coding process of the empirical material from interviews, meetings and field notes.

Persons & Behavior

Blue Managerial work (perceived problems etc.)

Light blue Development of managerial work

Orange Persons (aspects about persons etc.)

Pink Learning aspects

Brown Communication with the board

Tan Communication with subordinates

Business Results & Activities

Red Goals and Results

Aqua Business activities

Bright Pink Tendering processes

Violet Control and organizational aspects

Grey Agenda-setting and issues on the managerial agenda

Dark grey Issues related to the internal or external environment

Information & Information Systems

Green Information: process

Light green Information: structure (attributes, sources, contents)

Dark green IS/IT-related aspects

Miscellaneous

Yellow Miscellaneous "important" issues

Light yellow General important from my own reflections or field notes

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H The Case Study Omega

The case-study description starts in January 1993 and ends in January 1998. It is divided into a number of phases that to a large extent are aligned to a time line. The phases chosen for the description represent one way of describing the case study, which for the purpose of this study have been found to be fruitful.

H.1 The Entry of A New Managing Director – "Setting the Stage"

In January 1993 MD is appointed new managing director¹ for Omega, a Scandinavian organization, which is owned by a large service group operating worldwide, the Alpha Group.² The new managing director of Omega is recruited from another business unit within the Alpha Group where he earlier was responsible for a large geographical region. When the managing director enters, Omega has been without a general manger for several months and one of the members of the management team of Omega has been acting head of the organization. MD enters a situation when Omega in itself is profitable, but the organization under the former managing director has made some unprofitable investments which is one of the tasks MD is assigned to sort out.

H.1.1 The Omega Organization

Omega is part of a large service group called the Alpha Group, which operates worldwide. The Alpha Group consists of seven major business divisions and five rather autonomous subsidiaries³, of which Omega is one. The Alpha Group owns 100% of Omega but the board of directors in Omega consists of

Throughout the description I will use the expression managing director. When doing so I refer to individuals "who hold positions with some multifunctional responsibility for a business (or businesses)" (Kotter, 1982, p. 2). This means that the managing director in focus in this study is the "CEO" of the organization Omega. Accordingly, the person referred to as the financial director in this study is, expressed differently, the "CFO" of the organization. I deliberately choose to not use the expressions "CEO" and "CFO" as these often refer to the group management level (i.e. in this case the managing director and the financial director of the entire Alpha Group).

² The organization and the service group will remain anonymous (as will all people involved) as discussed in the chapter on research methodology. The organization has no link to those organizations that have supported the study financially.

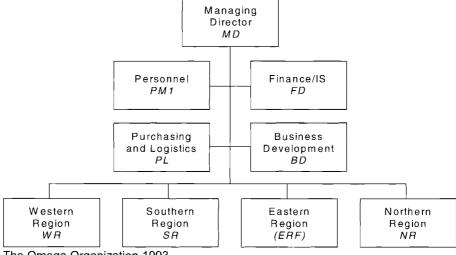
³ These conditions reflect the situation at the time when the project started in 1993.

both internal members from other parts of the group and external members. At the time MD takes office there are four board members in Omega, plus MD and the financial director FD who acts as secretary at the board meetings. The two internal members are the CEO of the Alpha Group (chairman) and the Chief Legal Advisor of the Alpha Group. The two additional external members have experience as CEO or equivalent. The board of Omega meets quarterly. (The board is later changed to only internal board members from other parts of the Alpha Group.)

The business activities of Omega consist of retail trading, which differs from most of the other parts of the Alpha Group. The company is located mainly in the Scandinavian countries, but also in a few other European countries. There are about 600 employees in Omega as compared to the entire group which consists of more than 10,000 employees worldwide.

Omega is one of the more profitable units of the entire Alpha Group and is therefore considered as more important than it's relatively size in numbers of employees. This is illustrated for example by the fact that the CEO for the Alpha Group is the chairman of the Omega board. The contracts involved in the Omega business activities are rather complicated and therefore give cause for the legal expertise among the board members.

The organization of Omega (as of 1993) is described in the chart below:



The Omega Organization 1993

There are four sales units which are geographically oriented, here called Western, Southern, Eastern and Northern. (ERF is acting head in the Eastern Region.) Some of the business activities outside Scandinavia are smaller new

units run by the Business Development department. The Purchasing/Logistics, Personnel, and Finance/IS departments all serve the other sales units. (In addition to the units included in the chart above, there were initially some smaller units that were sold shortly after the project started and therefore are not included here.)

The people mentioned in the organization chart above, and the personal assistant of the managing director, form the management team of Omega.

The business activities of Omega are quite independent of the Alpha Group. MD reports to the board but aside from this Omega operates like an autonomous unit. In MD's own opinion the following are key factors for the Omega's business activities: the logistics, the relationships with the suppliers both for contracts and for information about the markets, the understanding of the business itself, the knowledge about customers and competitors, and the long-term contracts. In the financial director FD's opinion the key factors for the business activities in Omega are the prices and contracts with the suppliers and the logistics.

From a board member's (BMB) point of view Omega sometimes pays attention to issues that are not the core business. As a result of this, MD has to wind up some unprofitable investments. The board members have learnt to be more cautions regarding new business projects and have signalled that it is now time for a focus on the core business activities and more focus on cost control, which is part of the assignment that has been given to MD when he was appointed.

When MD enters Omega he finds an organization where the business activities are quite decentralized. The different regions are in number of respects rather independent. MD finds this decentralized situation combined with a system of control, that is in his opinion insufficient. Strategically MD discovers that he cannot see a clear strategy for Omega's business expansion. The former managing director had invested in new projects in various areas, but from MD's point of view, the strategy behind the investments had not been clear. Related to this issue, MD enters a situation where work with the board is a bit tense because of the prior unsuccessful investments in new business opportunities.

Given this overall picture, Omega is facing challenges which could be expressed in the words of one of the managers in the Eastern Region:

"It is important to be able both to step on the gas and to put on the brake at the same time. It is easy to just slam the brakes." (ERA)

There is in other words a need for improvement of cost control and at the same time for development of the business activities and exploration of new business opportunities.

H.1.2 Different Units in Omega

In the following sections there will be short introductions to the different units in Omega, starting with the four regions.

Western Region

The Western Region is led by WR who is a veteran in the organization. The region consists of six units and has about 110 employees. The feedback they receive from the headquarters is not satisfactory and they perceive a problem in the distance between the region and the headquarters. Within the region they work consistently with feedback to the different parts of the region: if there is a sales record somewhere etc.

In the region they work very much on their own. One example of this is that the financial manager in the region spends quite some time feeding data into their own system for analysis. By using their own information system they have found a way of keeping track of the different parts of the region. WR says:

"The managers for the different areas know that we keep track of them. This signals that it is important." (WR)

To some extent one could say that they take pride in working on their own.

Southern Region

The Southern Region is led by SR who has worked in the region in several different positions and as the head of the region for about a year. There are about 180 people working in the region, which is divided into five subunits.

SR runs the region with three main goals: to maintain market share in the region, to improve marketing, and to keep track of the costs. She stresses the importance of taking many small steps and rationalizing. The geographical distance between the region and the headquarters is not seen as a problem for SR:

"The communication with the people there is very good." (SR)

Eastern Region

A new manager, ER, is one of MD's early appointments, recruited during his first year. (The former manager for the Eastern Region left the organization short after MD was appointed new managing director for Omega, a position that the former manager for the Eastern Region had applied for.) Before ER is appointed ERF (the financial manager for the region) is acting head for the region. Eastern is the largest region and is divided into about 15 different geographical units. In total there are about 230 employees in the region.

Although this region is located rather close to the headquarters there is a perceived need among some people to know more about what is going on at the headquarters. Still, this is the region where there are the closest links to MD for two reasons: the geographical distance as the Eastern Region is nearest the headquarters, and the fact that the new manager for the region is an MD appointee (unlike the other regions where the managers appointed earlier are still at their positions).

Northern Region

The Northern Region is led by NR who has worked within the Alpha Group for about ten years. She is one of the people in the management team of Omega who has been with the organization a long time. The Northern Region is slightly different from the other regions as the relations between the Northern Region and other parts of the Alpha Group are very close. Some of the business in the Northern Region is carried out cooperatively with other parts of the Alpha Group. One could say that this region is a mixture of other parts of the Alpha Group and Omega, although it belongs to Omega. This is perceived as a challenge and expressed in the following way by NR:

"The double loyalties are a problem. It is a balancing act." (NR)

NR sees the conditions as challenging, but she and MD (who is her superior) are in agreement on the conditions. There are seven persons working at the headquarters for the Northern Region, and they then work in cooperation with personnel from other parts of the Alpha Group. The cooperation with the Alpha Group is facilitated by the fact that the premises are very close, and thereby it is convenient to meet with people working at other parts of the Alpha Group. Altogether about 2,500 people are involved in the business activities, all employed by other parts of the Alpha Group. According to NR most of them are positive towards cooperation with Omega, but the challenge for them is to have time enough for their work.

Key factors for the business activities in the Northern Region are, according to NR: changes taking place in other parts of the Alpha Group, the line of products and the contacts with authorities. (The second factor about the line of products is especially important for the Northern Region as they work with a smaller number of products and therefore are more dependent on each product in the assortment.) NR summarizes the challenging situation with these words:

"The business activities in the region are complex, but I sleep well at nights." (NR)

Business Development Department

The Business Development department is led by *BD*, who has been with Omega about two years. The Business Development department, which consists of about ten people, are responsible for starting new business activities. These projects for new business activities either grow to be units, or remain as smaller projects within the department. This means that the people at the department run smaller units in countries where the business activities of Omega are very limited. The department also has responsibility for business intelligence. On his own role in the organization BD says:

'I think it is only MD and I who are 40 plus in the management team. This means that I can comment on matters with a broader experience then most of the others, and maybe I see matters slightly differently. [...] My role is a bit provocative. I see my own role to be a little bit outside the other in the management team. I have not always been successful in gain hearing." (BD)

Part of the work of the department is to look at the long-term development of the business as such.

"Because I had made the most fuss about it, I was appointed to make a proposal for a future business scenario. The problem that there are not enough determination for and understanding of these efforts even though they are very important. Someone has to bang his fist on the table." (BD)

Purchasing and Logistics Department

The Purchasing and Logistics department is led by *PL* and consists of about 15 people. PL has a solid background in purchasing and logistics both from companies within the Alpha Group and from other organizations. He was recruited to Omega by MD. The mission of the Purchasing and Logistics department is to serve the rest of the organization arranging purchasing by goods and logistics.

According to PL Omega lags behind other companies regarding costs of personnel and tying up of capital compared to turnover. He stresses the importance of seeing what other companies do and learn from them. In cooperation with other organizations Omega is part of a purchasing pool consisting of several large organizations which cooperate in order to improve contracts with suppliers. This has the advantage of improving their bargaining power with suppliers. On the other hand they are, to some extent, dependent on other organizations. This dependency carries a risk and requires that they constantly need to evaluate their partners in the purchasing pool. This in turn means that business intelligence regarding these companies is important.

The core of the activities of the Purchasing and Logistics is expressed in the following way by PL:

"The essential question for our activities is How to handle the purchasing efficiently?" (PL)

They have recently conducted a T50-project⁴ in order to reduce lead times. In the project they found that 90% of the contribution to profit comes from 50% of the products, and the remaining 50% of the products thus makes 10% contribution to profit. One reason for this could be that the wide range of goods affects the results of the business negatively as the possibilities to negotiate competitive prices are reduced. PL finds it difficult to achieve an understanding for this the organization, and according to PL the department is squeezed between customers and suppliers, and they are highly influenced by the environment. Their relationships with the suppliers for example are essential for their activities.

Finance and IS Department

The Finance and IS department consists of about ten people and is led by FD who had been with Omega for about five years when MD was appointed the new managing director. He has a background as a chartered accountant and he had worked in other positions within the Alpha Group before he came to Omega. FD describes his job in terms of four different roles concerning: accounting, finance, business control, and IS administration. Regarding how he is seen in the organization, he says:

⁴ The name is inspired by an ABB-concept T50, meaning that lead times should be reduced by 50%.

"I guess I might be seen as closely related to MD and a person he discusses ideas with." (FD)

The mission of the department is to be responsible for the reporting and the reports produced in Omega. The different units all report to the Finance and IS department, and they then produce the reports and make comments etc. In this process there is a dialogue with the different reporting units. The department is also responsible for the administration of the company-wide information systems. When there are more complex development tasks, they have the possibility to buy these services from the internal IT company within the Alpha Group.

FD comments upon his responsibility for the IT-related issues:

"The IS-parts of the job are difficult as I am partial. I really did not want to be responsible for those parts, but still I think it works all right. I am more concerned with the costs and what we actually get from IT and I do not start a lot of projects immediately without proper preparation documentation." (FD)

As the department holds the responsibility for several areas, FD perceives a pressure regarding how he spends his time: "I think it is difficult to be available as much as is asked for. I am absorbed by so many things." They have rationalized the department and reduced the number of people working there and at present things work quite well at the department, according to FD. He describes another situation some years ago when he brought the entire department for a three-day trip with purpose to improve the internal work at the department. He was amazed to find how much each person's own personality was involved in the work at department. Even if they work mostly with facts and figures at the department, their own personalities were found to be highly involved in the work.

Personnel Department

The Personnel department consists of three people and is led by *PM1*. The department had been larger and responsible for providing in-house magazines too, but most of this work has been outsourced, and thereby the number of persons at the department has been reduced. PM1 regards himself as "MD's right-hand man".

The role of the department is slightly complex as PM1 in some situations places demands on the units and in other situations is there to give support. PM1 says:

"There is a risk that other people, who do not reflect, perceive some of our work as rather fuzzy." (PM1)

Often there are legal issues that put limits on different solutions regarding terms of employment etc.

In the organization they use a tool for evaluating all leaders. This tool consists of a questionnaire that every employee fills out once a year and a follow-up discussion of the results between PM1 and the leaders (both in groups and on an individual basis). The results of the evaluation are also discussed in the management team, PM1 makes the comment that:

"It is all about getting people and business to walk hand in hand and to monitor soft issues too and not only financial ratios. [...] Financial information cannot measure everything, like development, well-being, creativity, dissatisfaction, and wishes. Measures for softer issues may be blunt, but are still important." (PM1)

H.1.3 Key Persons

The most obvious key person is MD, the managing director. When taking office as managing director for Omega, he has held several different positions within the Alpha Group for about ten years. He is in his mid-forties.

Another key person is FD, the financial director at Omega. He has held that position for about five years when MD entered Omega. Before that he has held similar positions in other business units within the Alpha Group for about five years. He is responsible for the Finance and IS department. That is, he is not only responsible for the finance, but also for IT-issues. His own comment on the latter issues is: "Challenging and educational, but one has to keep track of the financial situation in all projects."

When MD comes to Omega he brings his personal assistant PA from his previous business unit. They have worked together for a number of years. Her formal title is secretary, but personal assistant is a more appropriate title as she in practice acts as MD's assistant in a wider sense than traditional secretarial work. Besides being MD's personal assistant, she is also head of all other secretaries in Omega. In the management team her role is to keep the minutes of the meetings.

BC becomes a key person as soon as he is recruited as business controller in Omega. As will be described later, he is recruited as a part of the development of the information platform and to strengthen the management team. He is in his mid-thirties.

In some respect every member of the management team is important in the study. Here, I have focused on those of them who play more significant roles than the others.

A complete list of all persons interviewed is shown in Appendix D and Appendix E presents a list of persons in alphabetic order.

H.1.4 Initial Views on Information by the Managing Director

At an early stage it becomes obvious that MD wants to change a lot in Omega: the control structure, information flows, more work in projects etc. Regarding information he stresses the difficulties in changing the information before he knows the organization and the people in it better. There are some issues he identifies regarding the information during his first couple of months: he wants to have more deviation analyses, more graphic presentations, better types of key ratios, and last but not least he wants to improve the dialogue where the information is used. He says:

"Much of this is to create and demand participation, which in turn will increase efficiency." (MD)

He regards information use in two directions: to the management team and from the management team. He says:

"It is easier to catch signals than to send them out in the organization. [...] It is hard to reach the entire organization. One cannot be at meetings out in the organization as the calender quickly gets full." (MD)

He wants to improve his picture of the organization and as a step towards that he wants to improve the quality of information. He gives the following view of information:

"The information is there within the organization—it is a question of give-and-take. [...] Information is a type of perishable, just like milk—it turns sour quickly." (MD)

Even if he stresses the importance of improving the information he is cautious to view the use of information as one part of the managerial work. He says:

"One cannot run the business based only on key ratios, one has to meet with people. A lot of management is about interpretation of reactions in behavior, body language etc. This is never caught in key ratios or in phone-meetings. The drawback is that it is time-consuming." (MD)

At one of the first regular meetings with the management team, the new managing director raises among other things the question of how the information to the management team can be improved. He tells the management team that he wants to improve the control in the organization and that he will focus on the cost control. In the minutes from the meeting it says:

"We should not only stand out as an organization capable of creating revenues, but also as a cost efficient organization." (MD in minutes)

He declares that he is not happy with the present situation regarding the reports to the management team and initiates a project to change the situation.

H.1.5 An Initial Project Is Taking Shape

In April 1993, when MD has been in office for a couple of months, a project to change the management information is initialized. According to MD he wants the reports to be both a better tool for the members of the management team in their own work and a tool for the members when they inform their subordinates about the business activities. He stresses that:

"It is important to openly explain what the information reported is actually used for, who uses it, and why it is important." (MD)

It is obvious that an explicit purpose for different reports is lacking and is perceived as important.

MD stresses the importance of changing the present situation both regarding the *contents* of the reports and the *form* of the reports. There has been a discussion within the organization which has said that management information should be "correct, on time, relevant, and have been analyzed". The final point means that information should not just be passed on, but the person forwarding the information should first analyze it. So far, this has merely been a discussion, now is the time to make changes in practice.

The perceived need for change concerns both the *structure* of the management reporting (what kind of reports they used at present etc) and the management reporting *process*. Regarding the management information process, FD stresses the importance of rationalizing the reporting process, "the steps from the information systems to the actual reports to the management team have to be improved". He explains that the steps are time-consuming and that there is room for quality improvements.

Following from the problems perceived with the management information in Omega, a project is developed. MD states that "the goal is that I will have a

suggestion for a new management report in my hand and that it is anchored in the organization". It is decided that a survey on perceived information needs and opinions on the current situation would be a suitable first step in the project. The purpose for the first phase of the project is decided:

"The purpose of this work is both to develop the reporting process, and to develop management information regarding both form and content. Through this work the information support to the management team of the organization is to be improved." (Excerpt from the description for the initial project)

The underlying intentions when the project is initiated are several: to change the reports and the reporting process to be in better harmony with the business activities, to improve the information support for members of the management team and board members and to improve the harmony between different reporting units. All these intentions can be seen as part of the managerial work of MD as a newly appointed managing director for the organization. He has some beliefs about how the current situation can be improved and sees the information related issues as one important part.

When MD has been at Omega for a couple of months and he has initiated the project concerning the information he makes some general reflections on a meeting. He reflects on what has happened during his first months at Omega. He then comments on his own reflections:

'It is really fruitful to sit down and discuss and reflect upon what one is doing. I have not taken the time to sit down and summarize and reflect on what I have done during these first months here. It is useful to do so now and then." (MD)

The project is launched. The first part of it includes interviews with a number of people in the organization about their perceived information needs and their opinions on the present situation in general and regarding the management information in particular.

H.2 Investigating the Present Situation – "What's Up?"

MD perceives a need to improve his picture of the current situation regarding perceptions of information needs. There is a common opinion among members of the management team that there is a need to improve the information coming to them. Some board members have also made serious complaints about the information they receive.

An early step in the process of improving the information supporting the managerial work is to design and conduct an interview survey on different people's perceptions on information needs. FD, as the financial director, has overall responsibility for the interview survey. The purpose of the interview survey is to map different perspectives on information needs and possible improvements. This phase takes place June – October 1993.

The interviews focus on information in its context. This means that there are not only questions regarding information, but also about the business activities in the organization as a whole and in the unit to which the person interviewed belongs. The more specific questions used during the interviews are described in Appendix C.

Beyond the people in the management team and the board members, there are a number of other persons involved in the work with reporting that are crucial to the interview survey. Between 15 and 20 people are selected for interviews, to be adjusted as the interview process runs, if suitable. A list of the persons included in the interview survey is found in Appendix D.

H.2.1 A Profitable Organization

The first year for MD in Omega includes a number of tasks to conclude and wrap up some unprofitable business activities, which takes both much time and effort. These efforts are challenging as some of the members of the board earlier have been involved in establishing the unprofitable activities.

Omega's financial results are very good (with the unprofitable activities removed). Actually, the results are so good that they may become a problem because as one of the interviewees points out, willingness to change may become limited in the organization. This means that the good financial results may hinder change efforts. This challenge for the management team is expressed in the following way by PM1 at the Personnel department:

"It is highly dangerous that we make a lot of money now. What is the incentive to change?" (PM1)

Even if the margins are good, BD who is responsible for the Business Development department emphasizes that they are not enough to cover the initial expenses for new business activities, which in turn means that every new project costs money for the rest of the organization at the beginning. It is necessary to improve the results, even though they are good at present. BD says:

"A little provocatively, I use to say that I could improve the results in each unit by 10% just by poking about in it." (BD)

Another perspective on how the results could be improved is offered by one of the board members who stresses the importance of having the right staff:

'It can result in a 10% difference on the bottom-line if the team meeting the customers is playing in the 5th division or in the Premiere League." (BMB)

To summarize the overall results and the goals of Omega, one can say that MD first has to tidy up in the sense that there is a need to wind up old unprofitable investments. Then there is a challenge in the fact that the business is profitable and thereby there may be a limited willingness and understanding for change efforts concerning for example improved cost control.

H.2.2 The Information Situation in Omega

The first part of this section gives an overview of the reports used in Omega and the second part describes the information situation as seen from MD's perspective. The following parts describe different perspectives on the reports used in the organization, the reporting processes, and finally on information needs.

Management Reports in Omega

The main management report used in Omega at the outset of this study is a monthly report sent to all members of the management team, and to the members of the board. This monthly report typically consists of about 6-8 pages and a typical report could have the following structure:

- An executive summary in the form of a table with figures summarizing the
 results of the month, comparing the results to previous year and to budget.
 The results, including several financial key ratios, are presented for each
 region, and for different departments. (Page 0)
- The results for Omega in total are presented in figures and text under the headings: Sales, Net Income and Net Margin. The deviations from budget are presented in absolute figures and/or in percentages. There are two graphic presentations: one describing Sales (a bar chart: outcome, budget, and previous year) and one for Net income (a similar bar chart). (Page 1)
- The results for each region are presented in figures and text under the same headings: Sales, Net Income, and Net Margin. Short comments under each heading make the presentation of each region between a half page and a

page long. The deviations from budget are presented in absolute figures and/or in percentages. There are no graphic presentations for the regions. The regions vary with respect to comments. Different regions focus on different factors and explain the results with a varying wealth of detail. Each region can make its own choice as to level of detail regarding product segments, changes of customer category etc. Sometimes the heading Net Margin can be missed out for a region. (Pages 2-5)

• The last page or two consists of brief accounts for Business Development and for Purchasing and Logistics. Business Development presents operating revenue and net income for different projects they are running, including some comparisons to budget and previous year (when applicable). The Purchasing and Logistics department gives some information about the stock-in-trade. (Page 6)

This example of a typical monthly report illustrates that the comments from the different reporting units (the regions) vary both regarding the contents and the extent. Apart from the introductory executive summary there is little comparison between the regions and few graphic presentations in the report. The length of the monthly reports vary from month to month, but usually the report follows the structure described above.

In addition to this monthly report there are other reports:

The *Flash Report* is a quick and brief report produced on the very first day of the month. The purpose with this report is to take a quick snapshot in order to get a first impression of the results of the previous month. The report is distributed to a few key persons at 1 p.m. on the first day of the month and gives a rough estimate of the sales figures for previous month.

Product Reports are produced in the regions in the organization and sent to the central staffs but are rarely used in the management team for any specific purposes, but rather as background information.

Budgets are produced annually and updated versions every third or fourth month.

A CEO-letter is sent monthly from MD as managing director in Omega to the CEO of the Alpha Group. This letter is a very short report on one A4-page and gives a brief the description of the state of Omega. The headings included in the CEO-letter are predefined by the CEO of the Alpha Group.

The reports described here are all prepared at the Finance and IS department under the supervision of the financial director, FD. There are three or four people in particular who are most involved in the process of actually producing the reports. Regarding the CEO-letter, FD usually composes a draft and then MD makes his revisions before the letter is sent to the CEO of the Alpha Group.

To summarize the reporting situation at Omega, The most important report is the monthly report to the management team and the members of the board. There are other reports, both regular reports and more ad-hoc reports, but as part of the managerial work in Omega the reports mentioned in this section are the most significant ones. The next section provides a picture of how this reporting situation was perceived by the newly appointed managing director MD in Omega.

The Managing Director's Perspective

During his first few months in Omega, MD spends quite some time trying to reach out in the organization with information on his view of the organization, what direction he sees for the future etc. On several occasions he presents information at general meetings where many people from different parts of the organization are gathered. One of his purposes is to give the same information to many people at the same time when the information is still of immediate interest.

In the beginning, MD spends much of his time working on the overall goals for the organization and the long-term strategies. That is, much attention is paid to a process of defining his actual assignment. Regarding the information he uses, and perceives as useful, the financial information plays the most significant role. His aim is to minimize the amount of information and in his opinion two components are extremely important regarding information:

- reports on deviations (from budgets)
- graphic presentations

He stresses the difficulty in finding the right information:

'It is hard to find the right information, especially before one is completely familiar with the organization and its business activities." (MD)

MD begins a process of focusing more on cost control in the organization and some people in the organization perceive the changes as negative as they think there is more control in the organization than there used to be. He is aware of this and notes that this process to increase control will take some time and recognizes that one cannot be sure to find the best solution for everything at

once, but one has to view it as a process to be improved over time. As the financial results for Omega are good, there is no immediate rush to increase the control.

Rather soon MD identifies two important areas for improvement regarding the information:

- the key ratios used in the reports
- the communication, dialogue and closeness between the management team and the rest of the organization

Regarding the key ratios, MD's opinion is that there should be a limited number of key ratios used by all units within Omega, and it should be possible to make comparisons between the units. In addition to these key ratios, every manager can (and should) use those key ratios he or she finds most suitable.

MD believes that there should be close links between the business activities and work with the information used for management in the organization:

"The one who works with information needs to be close to the business activities and not only deal with the information." (MD)

That is, he does not believe in a special "information manager" to work with information for managerial work. This position could, according to MD, be suitable for huge organizations when dealing with external contacts and the media etc.

MD is well aware that changes regarding information for managerial work will be time-consuming:

'The key is creating and demanding participation, which then in turn will result in improved efficiency. Everyone has to feel like a part of the whole." (MD)

When changing and improving control within the organization, MD has included targets in both "hard" and "soft" terms for his reporting managers, with the following explanation:

"There is a danger in focusing entirely on those issues that are easily measured in monetary units. Even if some soft measures are difficult to measure, or maybe are entirely subjective estimations, they are better than nothing. One has to improve the measures over time. These soft issues are most difficult to handle as a newly appointed manager." (MD)

In order to learn more about soft issues, MD attends management meetings in the reporting units with the underlying purpose of getting a better picture of how the reporting managers work, getting to know them better and learning

more about the organization. He wants to meet people and not simply run the business on key ratios. When he attends meetings in reporting units he stresses the importance of not taking the reporting manger's place. He acts not as the managing director, but rather as a visitor at the meetings he attends in the reporting units. Besides attending different meetings in the organization, MD stresses the importance of a secretary, or a personal assistant, as a "tentacle" in the organization as a means to catch signals of different kinds.

MD perceives that the reports do not give him a good picture of the business activities. He lacks the possibility of comparing the different units and graphic presentations etc, and he exemplified the latter by the following:

"If one sees a graphic presentation with a declining curve it is much harder not to make comments on how to take measures than if there is only a figure, such as 0.3." (MD)

Furthermore, he wants to monitor the business activities more closely. MD misses comments on suggested actions to take when units report on deviations from budget. The comments need to be more specific, according to MD.

MD's opinions could be summarized as follows:

- There is a need to improve the possibilities for making comparisons between reporting units, for example through key ratios.
- He misses graphic presentations in the present information to the management team.
- The comments in the reports need to be both more precise and more linked to actions to take.
- The communication between the management team and the rest of the organization needs to improve.
- The work with information should be closely linked to the business activities.
- The engagement of several different persons in the process of improving the information to support the managerial work is crucial.
- The improvement of the information is a process that will take time.

Perspectives on the Monthly Report

The general view is that there it is necessary to improve the information to the management team and the board members. Almost everyone interviewed

complains about the monthly report, whereas the flash-report is perceived as well-functioning and useful for a quick snapshot in the very beginning of the month. The complaints about the monthly report are expressed in different ways, for example:

"It is much like a historical description. One cannot understand what measures to take. Analyses are often missing. There are more statements of facts." (MD, the managing director)

"The information is far too coarse. The sales and the results show on an overall level how things are, but the information is useless for making changes." (BD, the Business Development department)

"The monthly report is hopeless. The reports are so general that they do not say very much." (SR, the Southern Region)

There are complaints not only on the general level of the information, but also on the content per se. PL, at the Purchasing and Logistics department, for example thinks that the reports at present are too focused on financial information:

"They focus on costs and mostly on a local level in the different regions. It is hard to get the whole picture. The focus on revenues is less clear." (PL)

FD at the Finance and IS department, who is responsible for the reports and the reporting, sees the problem in the present situation too. He thinks it is hard to answer questions about the business activities based solely on the monthly report. He admits that:

'It was not until I sat down at the kitchen table at home and went through everything I really got a clear picture of what was behind the figures..." (FD)

BD at the Business Development department is surprised that they do not use more tools for analysis of the information at the Finance and IS department. He has done some compilations of key ratios himself recently, as he is an ardent advocate of key ratios. Regarding the use of key ratios there are different opinions among the members of the management team. WR at the Western Region for example is much more sceptical towards key ratios:

"Key ratios are really difficult. There are two reasons for this: there are different definitions of them and the business activities where they are used differ." (WR)

So far all of these opinions on the reports are from the perspective of members of the management team. The opinions of board members broadly follow the same pattern. BMB, for example, is very dissatisfied with the information

coming to the board members. He thinks that the information does not give a good picture of the business activities. He says:

"It is scary if we as members of the board receive information like this. What do they use themselves?" (BMB)

The answer to his question is that the members of the management team use the same information. BMB is of the opinion that the information is very difficult to grasp (for reasons of layout etc) and that crucial things are not included (e.g. more clear statements of what different activities cost and where the actual results are generated). He sees the information more as accounting information than information for business control and management.

"The question is what the figures in the report really say? Where is the pain threshold? I do not know how good they are?" (BMB)

During an interview BMB takes the report he just has received and browses through it with the comment:

"Blabla... soon I won't manage to get through this anymore. I would like to know what is profitable — not that it turned out this way or that way... Much of the information is uninteresting information. Structure is important: 'this I promised, this has happened, this I promise now'. Furthermore, the design should be consistent so one is familiar with the report." (BMB)

Another member of the board, BMA, is also very disappointed with the monthly report:

"The monthly report stinks! One don't get it. I can't manage to read it. There are no comparisons. There is a lot of information in the report, but one cannot see the big picture in it. [...] Important pieces are missing in the monthly report: W hat have we done and what consequences did it have and what scenarios do we see now? There is no analysis of the present situation." (BMA)

He is really disappointed and continues:

"Some of the information to the board is just figures in the spreadsheet. They say nothing about causes and consequences. Garbage-in-garbage-out." (BMA)

The third board member interviewed, BMC, was not happy with the information at present either. In her opinion one major problem is that the reports are not written from the perspective of board members' needs. One example she gives of the difficulties is that everyone reports financial information but there is no way to compare different units. Furthermore, she is disappointed with the verbal comments in the reports as they, in her opinion, are more cumulative than comments on the issues in the present report.

What seems to be most frustrating for BMC is the fact that she has not been able to make a change in the information presented to the board. She says:

'I have expressed my point of view on information every month for eight years, how many months is that? But nothing has happened!" (BMC)

Regarding possible reasons for this she reflects:

"The problem with the information may depend on either the system or the people involved." (BMC)

Following from this, the next paragraphs will describe some aspects of the reporting processes.

Perspectives on the Reporting Procedure

Every month the different sales regions report to the Finance and IS department. Most of the reporting is done manually by different types of forms. There are a lot of complaints from the regions regarding the procedure.

In the Western Region WRF is financial manager and responsible for reporting to the headquarters. He is annoyed at all the forms to fill out as they are not, in his opinion, consistent. The procedure is that he retrieves all data from the systems and then feeds them into his own system. He is aware of the extra work, but operates this way in order to keep track of the figures and reduce the number of things that are redone. In his opinion one can be almost certain that there will be errors in the end if things have to be redone a number of times.

As head of the Western Region WR is concerned with the reporting procedure as he sees the time WRF has to spend filling out all forms. WR thinks that the Finance and IS department ought to find a better solution than the huge number of forms to fill out.

In the Southern Region the financial manager (SRF) is responsible for the reporting and SR as the head of the region does not take part in the reporting at all. She explains that she is only interested in the results of it. She writes her own comments in the report though. Even if she is not involved in the reporting herself she is frustrated by the number of forms to send to the headquarters:

"We have to send one form after another. Every month my financial manager has to send about 100 forms. That is too much! It costs us a lot of time. It ought to be done electronically. All this works gives us no time for analyses. This is not acceptable." (SR)

In the Eastern Region the financial manager is acting head of the region at the time of the interviews. He has a slightly different perspective on the reporting procedure. He thinks that reporting has an unpleasant ring, but in his opinion it is really a privilege to report and look ahead.

As a financial manager he is heavily involved in the reporting process and they have also arranged to report some of the data electronically to the Finance and IS department. The general view among other managers in the region is that there is a need to improve the reporting process and make it more efficient.

In the Northern Region the head of the region, NR, expresses the difficulties with the reporting process in the following way:

'It is a huge problem that there is no time for analyzing the figures once they are available." (NR)

Once the regions have reported to the Finance and IS department, the staff analyze the data they have received and produce the monthly report. FD, as head of the department, sees the importance of getting more analyses automatically, without the amount of manual work that is needed at present. He also comments:

"To some extent there is a lack of competence at the department [Finance and IS]. It is not only about getting the balances correct, but it is also about what the figures actually say." (FD)

In the process of producing the monthly report there is often a need to contact the reporting units for more information. Staff at the Finance and IS department often call the reporting units, most often the financial managers at the region. FD says:

'The reporting units find it interesting when we ask questions. It shows that we use the information that is collected. [...] It is important to ask a lot." (FD)

FD is well aware of the perceived problems with the reporting process in the regions. In his opinion it is important to find systems and routines that are not too cumbersome, so the regions can handle the reporting.

For natural reasons the board members do not have many comments on the reporting procedure as they are not involved in it. Nevertheless one of the board members has the opinion that the staff at the Financial and IS department receiving the information from the regions do not place enough demands on what is reported, but simply produce the monthly report from what they receive:

"There is a lack of understanding among those who write the reports about the fact that actions and intended effects have to be closely linked. [...] The person who is reporting is not a businessman, but an accountant." (BMC)

A final comment on the reporting procedure is that one person reveals that they have tried to send fake numbers from the region to see if they should have any response. They did not get any feedback on the fake numbers.

Perspectives on Information Needs

Following from the description of the monthly report and the reporting procedure there will now be a focus on information needs and how the members of the management team and the board members use the information they receive, including what they might miss etc.

MD, the managing director, feels that the written reports give an overall picture and that actions are discussed at the meetings in the management team. The ongoing projects are reported on in these meetings. Here MD would like a simple model for reporting on projects. On the use of information, he comments that "uniformity is important for comparisons". NR at the Northern Region summarizes the usefulness of the information as follows:

"The challenge is to find the trends as early as possible." (NR)

There are several different views among the members of the management team regarding what they think is missing in the reports. PL at the Purchasing and Logistics department misses bench-marking with competitors. BD at the Business Development department is in broad agreement as he misses key ratios in general and key ratios for comparisons not only between own units but also to make comparisons with other organizations in the business. He is well aware of the difficulties in finding the necessary data for some key ratios, but according to him the principle is the important. One has to estimate and try to base the key ratios on the best data possible. It is important to strive for possible comparisons.

At present the information included in the monthly reports is decided by the Finance and IS department, but there are deviations between both the contents and the quality of the data reported from the regions. BD (Business Development department) is of the opinion that there is a need for better control:

"I am not a central bureaucrat, but... I think it is necessary to centralize and take better control over information than the case is today." (BD) He gives an example describing when he felt a need for some information he could not find in the reports and simply called the financial manager at the Southern Region:

"I called to get the figures for the sales in the Southern Region. A while later SR [head of the region] called back and asked what I needed the figures for." (BD)

One of the board members gives an example from a previous position he held when he visited a business location and asked about how often they cleaned the floors as he thought they were not clean. The question raised many eyebrows. He comments:

"One must dare to ask questions! Sometimes it causes laughter." (BMB)

According to BMB information is a managerial issue. The scope for the information should not be too broad. In his opinion it is important to write about the issues that can be influenced and changed. Another board member expresses similar opinions in the following way:

'The reports should reflect the business you run! It should show how the business activities work in order to achieve the goals. The reports should force those who report to reflect and report. One has to report the critical factors to achieve the goals. The reports should be a tool for control and link the business together. [...] The actions have to be linked to what one wants to achieve." (BMC)

The board members stress the importance of quality in the information:

"When there are small mistakes in reports this raises question-marks and causes uncertainty." (BMC)

"If there are details that are incorrect this leads to continued questioning" (BMA)

BMA emphasizes the need for information to follow up on different activities:

"It is important to include the whole chain: what to do, how to do it, what happened, what to do now – including what people are appointed to handle the situation." (BMA)

The information needs are not satisfied just by presenting the right fact; according to BMA the material has to be well-prepared:

"The better the information [to the board] is prepared, the better are the chances that the intended results are achieved. [...] In board-meetings there is often a lot of information and at the same time no information: One million figures, but they do not say anything about the overall picture." (BMA)

As illustrated here there are several different opinions on information needs: what information is missing, how information should be presented, etc. PM1, from the Personnel department summarizes information needs in the following way:

"It is important to view the dice from different perspectives." (PM1)

H.2.3 Views on Information Systems

In the management team FD is, of course, most up to date on information systems because he is responsible for the Finance and IS department. Among the other members of the management team, ERF, the acting head of the Eastern Region, is one of the most up to date on information-systems issues. He is the financial manager of the region and involved in different information-systems projects.

ERF describes the different opportunities offered by the information systems available within the organization: how different systems can contribute with different types of information etc. WR in the Western Region, on the other hand, is very negative to the information systems available:

"The system we are using is from the Stone Age. It is not possible to rebuild it." (WR)

BD from the Business Development department points to the problem that the information systems used in the largest units are very good, but also very expensive. This means that they cannot be used in the smaller units, for example new units within the business development department. In his opinion this is not a huge problem as the principle is the important, not the precision in the information. In other words, he feels that even if the information is retrieved manually with less precision it can be useful.

One of the board members, BMB, points to the potential in using more sophisticated information systems. He thinks "there is more to do with computerization". At the Purchasing and Logistics department there is an example of a project to make use of the information technology for increasing the efficiency in the business activities. This IT-project has grown since it was started and its schedule has been delayed several times.

Another example of IT-project is found in the Northern Region where they run a project which was started several years ago. The first time it was started the unions were against it and then the company who ran the project went bankrupt. Now some years later it is becoming increasingly important for the business. The system will be important for increasing control in the region where many different people from different parts of the Alpha Group are involved.

H.2.4 The Managing Director's Work

First some observations on how MD thinks he is perceived as a new leader in the organization:

"probably rather determined and results-oriented, hopefully interested, many may wish that I had been out in the organization more than I have - I guess I am perceived as a communicative leader." (MD)

NR at the Northern Region is happy with MD as her superior and appreciates his leadership:

'He has started to ask more awkward questions, which may not please those who do not want to keep things ship shape." (NR)

Several people comment on the role of the leader of the organization, for example one of the board members:

"It is important to behave. Leaders talk to people. [...] An organization bears the stamp of its leader." (BMB)

He continues with comments on the close link between information and managerial issues:

"As a leader of an organization one has to be very close to the business activities and to show an interest in the business. The systems for control have to be in harmony with this. [...] One has to be grounded in the business activities and to have the gutfeeling for it — to know the business." (BMB)

According to board member, BMA, it is important for Omega to recruit from outside the Alpha Group in order to strengthen the management team. There are several voices saying that there is a need for new competences in the management team, and there are especially calls for persons with a retail background. Given that so few people in the management team have this background, one manager at the Eastern Region, ERB, points to the growing demands on the information coming to the management team:

"As this is the case, it is of course extra important for them to receive the right information. MD has visited us once since he was appointed. One wonders where he receives his information." (ERB)

This could be seen against the background of MD being new to the business and needing to learn it from the beginning. This is challenging as there are some old unprofitable investments that have to be wound up first, which in turn means that much of his time during the first year is spent on a few issues. MD describes the challenges in terms of priorities:

"During the first year much time has been devoted to a few issues, now when the work is entering a new phase I will have more time to spend out in the organization and to meet with people in different parts of the organization. Now it is up to me to actually take the time to do this. It is about scheduling time for it." (MD)

Matters are a bit complicated as some of the issues that MD spends a lot of time on during his first year are not public and familiar to everyone in the organization. This means that the first year is filled with a number of tasks that are invisible for most of the people in the organization.

H.2.5 The Work in the Management Team

The management team of Omega consists of the people responsible for the different regions and departments plus MD and his personal assistant PA, i.e. ten persons. They meet for monthly meetings often lasting lunch-to-lunch working late into the night. At these meetings the results of all units are discussed and all kind of other issues concerning the organization. BD at the Business Development department has the following view on the work in the management team:

'The information in the management team is lukewarm. This means that we seldom discuss each other's problems. It is important to get the management team to work as a group. Some people bring their problems there, e.g. personnel. We have presentations but these are rather causal." (BD)

People feel that the communication within the management team has improved since MD was appointed managing director:

"I have incredibly good communication with MD. There is an improved openness, dialogue and discussion within Omega now when MD is here." (SR)

"There is a better openness now when MD is here." (WR)

When MD came to the organization, PM1 at the Personnel department arranged a trip for him to visit all units of Omega to increase the closeness between MD and the people out in the organization. PM1 perceives a need to reduce the distance between the management team and the people out in the

units in the organization. ERB, a manager at the Eastern Region, makes the following comment on the distance:

"We who work ought to present our projects to the management team directly. There is a danger if there is a filter between the management team and the operative business activities. Important information is lost on the way." (ERB)

He illustrates the point by describing a situation where a member of the management team presented a project and then was asked questions that he could not answer, which in turn resulted in a strange decision. ERF from the Eastern Region also stresses the importance of delegating and letting people take responsibility. In PM1's opinion, MD and FD sometimes tend to be involved in too many issues and they could, according to PM1, let other people, both from the management team and others, take greater responsibility.

One point mentioned by several members of the management team is that issues sometimes are discussed too much, i.e. the discussions are prolonged and there is no action. ERF at the Eastern Region emphasizes the importance of clear goals. This in turn links to the next paragraph on the work in the board, which presents the management team with goals for the business activities.

H.2.6 The Work in the Board

The board of directors consists of four members and meets quarterly. There are two members from the Alpha Group (the CEO⁵ and BMA) and two external members (BMB and BMC). MD wants to use the board for strategic discussions and as support for projects, and he comments on the persons on the board members:

"There are really different people who are on the hoard. From persons interested in the most overall picture to those interested in details. [...] The reports to the board need to be on an overall level and focused on deviations and actions. This means that the discussions can be more strategic and not about details." (MD)

Before MD was appointed there were some unprofitable investments which in turn might have changed the work in the board and the board members perceived information needs. MD says:

⁵ The idea was to interview the chairman of the board (the CEO of the Alpha Group) at a later stage, but at this point in time there was a change in the Alpha Group and he was replaced.

"They [the members of the board] feel that they have not been informed about the development of the investments in new business activities. [...] They probably feel that they have got their fingers burnt, which may characterize their perceived need for information on details at present." (MD)

Even if the unprofitable business activities were wound up during MD's first year in office, history influences the work in the board. According to BMA, the Chief Legal Advisor of the Alpha Group, the board is an authority to control the business activities and the management of the organization. There are legal dimensions of the board of directors' tasks. BMA says:

"I am on the board of Omega to look after the interests of both the Alpha Group and Omega. I see myself as someone who always says no to everything. I question issues quite a lot if there is something important to do. [...] The purpose of the board of directors is not to discuss too many details, but sometimes details can say quite a lot about the overall picture." (BMA)

He continues:

"Maybe the board has been too negative lately regarding projects etc. The board has probably been regarded as negative. [...] Some issues have been ill-prepared when they have been presented to the board of directors. The information to the board has been damn unsatisfactory, both regarding contents and form." (BMA)

BMA thinks that too much time is spent on different projects, at the expense of discussions on the core business. He can see some possible reasons for this:

"Projects are more fun. A lot of money is spent on projects with limited results. [...] They waste their ammo. Things have become better lately though." (BMA)

One of the external members of the board, BMB, is of a similar opinion as he thinks that the management team of Omega ought to spend more time on the core business and less time on special deals and take different kinds of urgent measures.

The second external board member, BMC, sees two main tasks for the board: to make decisions regarding large investments and to be advisors. In her opinion the board could be put to a better use. She thinks that the board members could be engaged more in the business activities and thereby be a better support to the organization. One idea she has is to move some board meetings to different units of the organization in order to see more about the business activities. In other words, she wants to reduce the distance between the work in the board and the business activities. She makes the reflection:

"There is seldom anyone from the different units at the meetings, which means that it is hard to express opinions to people out in the organization." (BMC)

This is something that is very much in line with the opinions of several of the members of the management team who are not members of the board:

"I do not know any of the board members. I have never attended a board meeting." (SR)

'I had to ask who is on the board. There ought to be more industry competence among the board members. One idea would be to combine a board meeting with a meeting with the management team. This way the board could learn more about the business activities." (WR)

'I want to present my issues by myself to the board. It is never the same to just produce a presentation that someone else presents. This issue has become better with MD as the managing director." (BD)

NR also makes the point that the distance between the work in the board and the management team has been reduced. She describes with delight a presentation she held at a board meeting:

'The nearness to the board has increased with MD as the managing director. I had a presentation for the board which was planned to take 20 minutes but was expanded to more than one hour." (NR)

H.3 Building an Information Platform – "Getting the Grip"

During the first year MD, puts a considerable amount of time and effort on how to improve control mechanisms of the organization. One important part of this work is the development of systems and structures for the information supporting managerial activities, including the change of the monthly reports to the management team and to the board. In this section first the introduction of the new monthly report is described, then the perceived need to improve meetings and the improvements made are described. The period described is from fall of 1993 to the beginning of 1994.

H.3.1 Developing a New Report

The monthly report to the management team and to the board is redesigned regarding both its content and its form. The report is changed in a number of ways:

- New key ratios are introduced (and defined).
- There are more graphic presentations in the report.
- The comments written by the different reporting units are co-ordinated better. There are, for example, common headings that all reporting units should use in their reports.
- Comparisons between different regions are made easier both through the graphic presentations and through the written comments.
- There is a new section called "Special Analysis" where a special topic is investigated more thoroughly each month and analyses are made in depth.

The last item on the list is an attempt to build in a higher degree of flexibility into the report by creating the possibility of including different types of measures just for a month. The section is seen as spotlight illuminating different areas each month.

The process of deciding what to include in the new report was a challenge for the people involved. The key ratios that included measuring more soft issues (like different types of personnel measures) met resistance among some members of the management team. There were comments like the following one on a draft (where the measure mentioned never was introduced in the final report):

"What is this? Absence due to illness? It stinks! PM1 [the personnel manager] should not influence what is included in the report. He does not do anything with the information anyway."

This quote from one of the regional managers is to illustrate that there were many emotions involved in deciding, for example, what key ratios to include in the report.

Before the new report is introduced, the people responsible for the actual production of the reports are sent on a short training course on the software to be used in the report production. The aim is to find procedures to reduce the amount of work that is carried out manually.

H.3.2 The New Report Is Introduced

In October 1993 the first version of the new monthly report is introduced. It is used both for the management team and for the board members. The latter group have expressed that they appreciate the improvements in the information they receive, but emphasize that there still is a need for more comments and analyses in the reports.

In the management team the new report is used as a part of the support documentation for the monthly meetings. Each month there are also meetings at each region where the region's results are discussed. The managing director, MD, and the financial director, FD, attend these meetings. MD wants to establish a model for presentations at the management meetings in order to give a better structure to the monthly meetings.

As one step in the process of improving the work in the management team MD writes a letter to all members of the management team in October 1993. He asks explicitly for better discipline at meetings and in the preparation of issues for the monthly meetings. Among other things he says:

"There is a need of good conditions in order to meet our high ambition regarding quality, volume and time for ideas, creativity and the future." (MD in a letter to the management team)

About two months after the new report has been introduced, MD perceives a need to change the agendas for the meetings. He wants to get better congruence between the written reports and the meetings held in conjunction with the reports. He perceives a need for establishing "fixed" agendas for the monthly meetings in the different regions and for presentations of the results at management-team meetings.

H.3.3 "It Is Not Only About a Report"

In December 1993, MD therefore launches a task force (with himself in charge) for changing the agendas for the monthly meetings. The underlying purpose of this work is to establish new structures for the meetings which are much more in harmony with the information reported in the monthly reports. MD perceives a need to improve this harmony. FD, the financial director, comments on the need to work with the fixed agendas:

"It is not only about a report." (FD)

In the work to develop fixed agendas for the different meetings, MD involves himself to a greater extent than in the process to develop the new monthly report. In December 1993 there are four meetings to work with the task. These meetings are held with people involved in the production of the reports and with people from the management team. Between meetings, different people have different assignments. At each meeting there are new ideas brought to the discussion, often strongly influenced by what has been taking place at other meetings just before the meetings in the task force.

The deadline to develop the fixed agendas is set for January 1, 1994, i.e. the time is short. In the work, it is obvious that this is something that is really important for MD. He spends a lot of time and energy on the work and shows an engagement in all activities. There is for example no difficulty in finding time for the meetings in the task force.

One driving force behind MD's commitment to the work may be revealed in his comments on his view that they miss a good way of working in the management team and he says:

"I hate it when people get the impression that we are not competent." (MD)

In the work of the task force some problems are revealed. One is that the people working at the Finance and IS department and producing the reports feel that people in different reporting units do not respect the reporting procedures. There are many questions from the units and the routines for the reporting procedure do not work properly. At present the persons at the Finance and IS department are of the opinion that there are often many follow-up questions to the reporting units, and there is sometimes a lack of respect for the people asking the questions. According to MD it is a challenge for the organization to increase the responsibility for the controllers.

Another problem that is revealed and discussed when working with the agendas is the perceived lack of balance between *accounting control* and *business control*.⁶ At present MD thinks there is a focus on accounting control, while he perceives a need for further analysis of the figures presented in the reports.

FD, the financial director and head of the Finance and IS department, raises the question about how the people at the different units will be able to run a change process and to focus more on business control. He says:

"They already complain that they are too busy." (FD)

⁶ The persons involved saw accounting control as mainly production of the figures with a focus on history and present state, while business control was seen more as analysis of the figures with a focus on present state and the future, including action planning.

The focus for the work in the task force, however, is focused on the development of a fixed agenda to be used at management meetings.

H.3.4 Fixed Agendas are Introduced

The intensive work includes many discussions about details of what to include on the agendas. The result of the work is the following agenda for the monthly meetings in the regions:

- 1. Minutes from the previous meeting
- 2. The business (business environment, competitors, partners, prospects)
- 3. The results (a number of financial measures)
- 4. Key ratios (including non-financial measures)
- 5. Projects
- 6. Personnel issues
- 7. Any other business

For each item there are further details on what key ratios to include etc. It is possible to add items to this list, but these issues should be covered at every meeting.

The agenda described above is agreed on at a meeting in the management team and then introduced at the meetings in the regions. Guidelines for presentations at the management meetings and the meetings with the different regions are also produced. The purpose of these guides is to determine what to include in the monthly presentations, and how this information should be presented in order to increase consistency between different units.

When these fixed agendas are introduced, things improve regarding the focus in the meetings, but still MD has the feeling that this is not enough. In the task force for the fixed agendas problems were revealed concerning the communication between people at the Finance and IS department and people at the different reporting units. The problem with a perceived lack of balance between accounting control and business control also re-emerged. The latter problem is according to MD central to the improvement of information and thus for the support of managerial activities.

H.3.5 Some Work Is Done and Some Remains...

In the beginning of 1994, when MD has been in office for one year, he looks back at his first year at Omega and can see among other things:

- a year filled with activities to wind up old unprofitable investments
- efforts to improve the information platform to support the managerial work and to improve the cost control in the organization
- a number of problems in the change processes emerged during the first year

Through the changes in the management report, weaknesses in the reporting routines and systems have been revealed. These are not novel to the organization, but have become indisputable. There is a need to replace some of the old information systems and in the near future the main accounting information system has to be replaced. It has become evident that the old systems do not offer sufficient support any longer.

The process of changing the management report also has revealed a need for a stronger focus on what MD calls business control (more analysis in the reports and clearer links to action plans etc). These needs for changes have to be dealt with in the near future and can be said to deal both with routines and systems for the reporting procedure and with people involved in the process. The latter meaning, among other things, that new persons have to be recruited.

H.4 Strengthening the Management Team – "Team-ing Up"

In the beginning of the second year, i.e. 1994, MD declares that he wants to focus on business control and that he intends to establish a new function for business control. The work during his first year at Omega has pointed to the importance of strengthening the organization. One important part of this is to recruit a business controller to the management team. In this section there is first a description of the recruiting process, then descriptions of the recruitments of a new regional manager and an IT-controller. The section describes the spring of 1994.

H.4.1 Recruiting a Business Controller

Even if MD states in early 1994 that he wants to recruit a business controller and establish a new function for business control, this turns out to be easier said than done. In the following paragraphs aspects of the process to recruit the business controller are described.

The Perceived Lack of Business Control

MD wants to improve both the quality and the amount of analysis conducted. He is also annoyed with some aspects of the information he receives. He gives one example:

"Today the basis for decisions is not ready when I receive them, but I have to involve myself in the process to achieve the documentation for a decision. I want the documents to be ready including risk analyses etc. when I receive them. I do not want to take part in the discussions and preparation of the material." (MD)

When commenting on the shortcomings of the documentation he receives and explaining how this situation has occurred, he says:

'I guess the reason is partly that this is the way things have been done traditionally in the organization, partly because I am too kind and do not make the right demands. I started to answer questions in the process when the documentation is prepared because I was unsure whether the questions depend on lack of competence among those who ask or on poor working methods. It is dangerous if the boss abdicates." (MD)

Instead, MD wants a situation like the following:

"I want them to try the documentation first and not involve me until a later stage in the process when there is something to decide. The formalities should be done first." (MD)

At present MD thinks that the accounting works well, and that the business control focus is a natural next step, he says:

"Today we have hardly any business control at all." (MD)

In his opinion the reports are produced and all the figures are presented, regarding both financial and non-financial issues, but there are not enough analyses carried out. He receives a number of reports, but he lacks analyses where persons have reflected on what the figures actually say and what could be done to improve the situation. This is what he wants to remedy when focusing on business control. MD comments on the present situation regarding business control in Omega:

"At present the only business control activities taking place are done on my own initiative. In principle there is no one else with a driving force for business control issues. [...] Frankly speaking, there is no one else who reflects on the figures. This is a harsh statement but in principle I think this is the way things are." (MD)

MD thinks that an increased focus on business control will be useful not only for himself, but for the many people in the organization. For example he points to the learning aspects and says:

"There is room for learning." (MD)

Forcing people to reflect more on *what* is reported helps them learn more and hopefully link better to what needs to be done in order to improve the situation.

When MD wants to focus on business control and get a better grip of the organization this means that there will be a new situation for the reporting units, and they will be under additional pressure from headquarters and ultimately from MD himself.

MD thinks that the business controller can be part of the preparation for meetings in the management team and also for board meetings. Furthermore, MD wants this person to follow up on decisions made at previous meetings, which he comments upon:

"I do not like a situation where there is no power to carry out decisions that have been made." (MD)

MD also wants someone to help him with different types of investigations and analyses. There are also many projects at present, which ultimately end up on MD's desk because no one else is committed to the task. Here, he sees that a business controller could be helpful.

The Combination of Accounting and Business Control

The people at the Finance and IS department focus mainly on accounting control issues and do not do enough with business control, in MD's opinion. They produce reports and make sure that all information is reported from the different units. They also carry out a number of reconciliations etc. FD, as the head of the department, has many roles in the organization at present: in addition to being head of the Finance and IS department, he is also chief controller, unofficially "number two" in the organization, secretary at board meetings, responsible for IT-development, "the voice of wisdom" in the organization with his knowledge of the history of Omega, etc.

Now MD wants clear responsibilities regarding the accounting control, which he thinks works fine at present, and business-control tasks. In order to analyze the need for a business controller and a business control function, MD and FD carry out an analysis where they describe the division of responsibilities between the Finance and IS department and the new business control function. They see some tasks that belong to accounting control (AC) at the Finance and IS department, some tasks that belong to the new business control (BC) function, and some tasks that belong to both parties (AC/BC). The following is a summary of their analysis:

- AC-tasks: producing reports and reporting routines, supporting the units in their reporting to the headquarters, producing financial forecasts, handling tax-related issues, provision of IT-support to the reporting units for the reporting procedures.
- BC-tasks: initiating different types of analyses, analyzing potential investments, preparing management-team and board meetings, keeping track of different projects, conducting follow-up activities for decisions made at management meetings.
- AC/BC-tasks: discussion of analyses, making action plans, supporting MD, supporting the different unit in AC/BC-issues.

Once the analysis is carried out, the next step is to start finding a suitable person for the position of business controller. But before this step is carried out there has turned out to be some clouds on the horizon.

Tensions and Uncertainties Below the Surface

FD has concerns about the relationship between the business controller and the Finance and IS department. He sees a risk that the new business control function may mean that the most interesting tasks are removed from his department. He worries:

"There may be an unclear division between the business controller and myself. The business control analyses are the most interesting parts of the job. [...] What is the reason for recruiting someone? If he reports to MD how will he be linked to the other units and to the personnel at my department working with analysis and follow-up? Will all analyses be done by the new person?" (FD)

The recruitment of a new business controller is simply a stress factor for FD. This is revealed step by step in the process of recruiting the business controller. FD brings new questions and worries to the discussions. He is concerned that this is not a good solution. Some of the questions reveal worries about

who will be MD's right-hand man: FD or the new business controller? MD states the following at a meeting:

"FD, the new business controller and I will form a troika to lead the organization." (MD)

Still this is a change for FD, who at present is part of a duet rather than a trio.

MD perceives FD's worries and at a meeting MD in forcible words expresses:

"Accounting control is number one and has the highest priority at present and in the future. Accounting control is a precondition for business control activities." (MD)

In other words, MD tries to stress the importance of the work carried out by FD and his department. MD regards the situation that FD will have a sparring-partner in the business controller, and he comments on FD's worries:

"The last thing I want is that FD should think his job is boring and quit." (MD)

From MD's point of view the business-control function will improve the possibilities for the Finance and IS department and he thinks they will have more important and more interesting tasks when the business-control unit is introduced. He also wants to show to the entire organization that business control is crucial and that now it is time to focus more on these issues. That is, there is an important signal effect in the recruitment, alongside all other effects.

At one point in the process MD has a discussion with FD and then finally states that the decision is made to recruit a business controller. It is decided that the primary tasks for the business controller are to be the following:

- analyze and follow-up the business activities in Omega
- participate in the management team of Omega
- be responsible for follow-up activities of several projects within the organization
- develop competence and routines for business control in Omega
- carry out different types of analyses and investigations

Now it is time to find the right person for the position.

Finding the Business Controller

When it is finally decided to recruit a new business controller and what the controller's primary tasks will be, the question is who to recruit? FD prefers a more junior person rather than a senior persons, where he regards himself and

MD to be senior. FD suggests an internal candidate for the position (who is later rejected by MD for being too junior) and is a bit curious about how MD looks at the recruitment. FD says:

'I have checked if there is any special person he [MD] wants for the position, but that does not seem to be the case." (FD)

MD on the other hand has a simple description of the person he is looking for:

'I hold the view that in principle one can have any form of organization as long as one has the right people. The person I am looking for should be damn competent and be a driving force." (MD)

The personnel manager, PM1, is involved in the actual hiring process. MD stresses the importance to keep up the pace in the process:

"Go for 80% preparation so we can start searching for the person. We have to move forward." (MD)

They advertise for a new Business Controller and their ads attract quite a few applicants. The selection process is carried out in accordance with usual practice and the new business controller, BC, starts working at Omega in late August 1994. He is in his mid thirties and his background includes work at other units within the Alpha Group. Both MD and PL (at the Purchasing and Logistics department) have met BC earlier.

Introducing the Business Controller to the Organization

MD devotes a considerable amount of time and attention to the issue of finding a clear and suitable role for the new business controller. He thinks it is very important to establish the "right" role for the new person from the very beginning. MD wants to introduce BC as a senior person in the organization with close links to himself and to FD, and he wants BC and FD to work well together. One of the very first tasks for the business controller is to produce the documentation for the first meeting with the new board. At this meeting he also is appointed to keep the minutes of the meeting.

Somewhere in the process of finding and introducing the new business controller, FD's worries diminish and he is more pleased with the solution. MD is cautious to keep FD involved in the entire recruiting process from the very beginning until BC is introduced to the organization.

H.4.2 Recruiting a New Regional Manager

In addition to recruiting a new business controller, and thereby establishing a new business-control unit, there are some other recruitments related to the managerial activities during the second year. A new head of the Eastern Region is appointed and there is a new position for an IT-controller.

The new head of the Eastern Region (the largest region) is appointed in the beginning of the year. MD is highly involved in the recruitment of ER as new head of the region, and he already knows ER. When MD comments on the new head of the Eastern Region he says:

"ER has added structure and stringency. I attended a meeting he held at the region the other day. There were short and concise pictures that summarized every item on the agenda. Quite structured. He brings structure to the work which sends signals to the other persons in the organization, ERF for example [the financial manager in the region] attended the meeting and was most likely influenced by the way ER worked." (MD)

MD regards the recruitment of ER as important first of all for the very important Eastern Region itself, but also to help bring more structure to the work in the management team.

H.4.3 Recruiting an IT-controller

The number of IT-related issues dealt with at the meetings in the management team has increased during the last year. When these issues are discussed, it is often in terms of delays or cost overruns, etc. The following few paragraphs illustrate some of the discussions held at meetings in the management team in 1994.

At the very first meeting in the management team in 1994 MD makes clear that the managers for the different reporting units need to hold separate meetings in their regions on IT-related issues. There are several IT-projects running in the organization, and it is necessary to keep track of these projects. The most extensive IT-issues are also dealt with at the meetings in the management team, but MD perceives a need for the regional managers to keep better track of their IT-projects, both large projects and smaller ones. In order to support the units, it is decided that FD, as head of the Finance and IS department, will assist the regional manager in arranging specific meetings for IT-issues.

At the second meeting in the management team in 1994 MD once again stresses the importance of separate meetings regarding IT-related issues. It is once again decided that FD will assists in planning and carrying out the meetings. At the meeting in the management team there are several IT-projects discussed. They are all discussed in terms of their schedule, and two of them are behind schedule.

At the third meeting FD suggests the establishment of a special forum for dealing with IT-related issues – an IT-council with an IT-controller. He argues that the importance of IT-related issues has grown and it is now necessary to spend more time on these issues. There is also, according to FD, a need to create a holistic picture of IT-related issues and to make sure that the right competence is available. At this meeting in the management team there are fourteen different projects reported, several of them including IT-related issues.

The time spent on IT-related issues increases and the management team's fourth meeting the year includes presentations and discussions of seventeen projects, including several related to IT. Regarding these IT-related projects, one project is delayed due to difficulties in updating a present system, one is meeting problems in the implementation phase and one project, still at a very early stage is having difficulties in getting enough attention from all parties involved.

In light of the discussions described here, the members of the management team decide to recruit an IT-controller. The purpose of this recruitment is to strengthen the organization's handling of IT-related issues, and the IT-controller will to be located at the Finance and IS department. FD wants to strengthen the focus on IT-related issues because they are becoming increasingly important for the department and for the entire organization. There are several new projects concerning new information systems underway and the IT-controller can support these activities in a way that other members of the management team cannot.

The new IT-controller, ITC, is recruited and starts working in the organization in late August 1994.

H.5 Issues on the Managerial Agenda – "Everyday Life"

When MD has been in office for about 18 months, in August 1994, a number of processes that have been running since he joined the organization are concluded, and his work is entering a new phase. The old unprofitable investments, which he inherited, are now concluded and the information platform in the form of reports and reporting procedures are in place. There have been some recruitments to strengthen the organization and a business-control unit is established. To make a long story short, he feels that he now has built a solid base for future managerial work.

In this section there is a description of some of the issues on the managerial agenda during the fall of 1994, that is, after the introductory work is completed. Then there is a short characterization of MD's working style for addressing the issues on the agenda, and finally there some of MD's own reflections on the situation.

H.5.1 A Picture of the Managerial Agenda

In August 1994 MD returns from his holidays filled with creative power to run the businesses of Omega. He is happy that the first phase of his work is concluded and it is now time to look ahead at future challenges. There are many different issues to be dealt with during the fall, and he takes the time to sit down together with FD to list the main issues on the managerial agenda in order to get a better overview of the situation. They list the following issues as the most important ones for the managerial activities in Omega during the fall of 1994⁷:

• To formalize the goals for all units (for the forecast and planning process).

There is an urgent need to break down Omega's overall goals to the different units and the units have to present forecasts for the next year. MD has stated that: "I want better cost consciousness in all ways." As a part of this overall change of the organization, it is necessary to rationalize most of the units within the organization. According to MD there is most to do in the Western and Southern Regions. FD on the other hand has already rationalized his department more than the other units. In order to make this

⁷ The issues appear in the same order as they were listed by MD and FD.

change effort more visible he is asked by MD to present his rationalization efforts at a meeting with the management team.

• To win a huge contract in the Southern Region.

The contract in the Southern Region is, of course, first of all an issue for the Southern Region, but because of the contract's importance for the entire organization it will involve several of the members of the management team. The contract is of such magnitude that even the newly appointed CEO for the Alpha Group is well aware of its importance. (The work with the contract is described in more detail below.)

• To evaluate the potential of business partners.

There is a broad, ongoing discussion on whether Omega should be engaged in more partnerships. During the fall the ambition is to evaluate the potential in these partnerships and to evaluate some potential candidates.

• To communicate the strategies to the entire organization.

MD is of the opinion that it is important to change the way people think, in order to achieve any change in the organization. Therefore, his plan is to spend a considerable amount of time on the communication process in order to reach the entire organization. His engagement for the issue has already been shown, for example in his participation in a number of meetings (six meetings with altogether 1,800 people) that NR, the head of the Northern Region, has held with people in other parts of the Alpha Group who work close together with the Northern Region. These meetings have met with a very positive response. MD is determined to spend time on the communication process in order to reach people with his messages.

• To move the headquarters.

Omega is going to move their headquarters about 10 miles to a new building during the fall. This is not a big issue, but still perceived as an important one by MD and FD as it affects the employees.

To introduce the new business controller and the IT-controller to the organization.

The new business controller and the new IT-controller both have to be introduced to the organization during the fall. As soon as they get familiar with the organization and their tasks they can start adding value to the organization. Both MD and FD plan to spend quite some time making sure that the two new key persons will be properly introduced.

• To create the new relationship with the new board of directors.

A new CEO has been appointed for the Alpha Group. It turns out that he will not be the new chairman of the Omega board, instead his vice president enters the role as new chairman. At the same time there is a change regarding the composition of the board, the two external members of the board now are replaced by new members who are internal from other parts of the Alpha Group. The first meeting with the new board is held in September 1994. MD thinks it is important to wipe away the inspection stamp that the "old" board used to have. Much of the focus has been on control at the expense of more future-oriented issues. Given the history of earlier unprofitable investments MD understands the reasons for this, but now it is time to look ahead and enter a new phase. He wants to use the board for more strategic discussions and for support for larger projects.

• To start working with a quality project.

They plan to start working with a quality project. There is a huge quality project running in most parts of the Alpha Group, and MD and FD can foresee that the new board may be interested in focusing on quality in Omega too. Furthermore, the quality project is regarded as a part of the change process in the organization and may help improving quality in several ways.

• To plan and run a training program for a large number of leaders in the organization.

The personnel manager is responsible for a large training program that is planned to start during the fall. This is part of the development process of the organization and will involve all members of the management team, especially MD as the managing director for Omega.

• To plan a project to change the accounting information system.

Several smaller IT-projects have been started during the last year and now the plan is to start a larger project for changing the accounting information system for the entire organization. As the changes in the management report have revealed, there is a need for a new system. This project will, to different degrees, involve everyone in the management team, especially FD as head of the Finance and IS department. Before this project is started the new board must give its approval.

To conclude the change process regarding the reports and the reporting procedures.

Finally, an issue for the managerial agenda is to conclude the change process regarding reports and the reporting procedures. Details in the new report have been changing more or less constantly during the first months of its use and now it is soon time to stop these small changes. MD is happy with the new report and the reporting procedure so far. The new fixed agendas have been introduced and MD says: "I am pleased. The meetings are running more smoothly now and I get a clearer picture of things. They seem to be pleased at the different units too." MD wants to involve the managers of the regions in the reporting so that they not only delegate the reporting to their financial managers, but write their own comments and reflect on the results. He can foresee an increased pressure on the reporting units and wants to make sure that the support to the units is improved. Routines for reporting have to be improved. Furthermore, MD stresses the importance of giving feedback on the information reported to the headquarters, and says: "It is the most frustrating thing one can think of to just report and then hear nothing about what happens with the information."

These eleven issues are listed by MD and FD in August 1994 as a sort of overall agenda for the fall of 1994 and reflect their ideas on important managerial activities. In the following paragraphs there will be a short characterization of MD's way of working with the issues on the agenda above.

H.5.2 The Way of Working

MD spends a great deal of his time at different meetings. There are meetings with the whole management team, with the different regions and departments, with project teams, with individual subordinates, with unions, with suppliers, with business partners, with authorities, with colleagues at other parts of the Alpha Group, etc. (The list could be made longer.) There are meetings that are planned long in advance, others called with short notice and meetings that are not planned at all. There are meetings that are well-prepared with written documentation in advance and there are meetings with no preparation at all. There are meetings with proper documentation afterwards in the form of minutes etc, and there are meetings with no documentation at all. There are meetings where MD has the upper hand and other meetings where he is the underdog. There are meetings where MD is the chair of the meeting, where he is an active participant, and where is a passive listener. There are face-to-face meetings and telephone meetings. There are meetings on his home court and meetings with long journeys. There are successful meetings, unsuccessful ones and meetings which are neither. There are fun meetings and there are boring

meetings. In short, the days are filled with a myriad of meetings. MD's own comment on the situation is:

"I go from one meeting to another meeting all day long." (MD)

Many persons in the organization want to meet with MD to check things out, to tell him this or that, to get an okey, etc. For MD it is important to be available to his subordinates and accordingly he tries to keep his door open as often as possible when he is at his office. As he travels quite a bit he does not want to close his door when he is at home, but instead be available.

The time available for working on his own is very limited. Therefore, he sometimes tries to find ways for work without breaks. Sometimes when he has been to a meeting in one of the regions he stays there for an extra day just to sit there and work on his own. Sometimes he spends a day, of half a day, at home in order to work without interruptions in form of phone-calls or people knocking at the open door. He comments upon one such day:

"I really got a lot of work done during that day as I could finish what I started to do. At the end of the day I was very pleased with myself, even though there was a small pile with loose ends waiting at my office when I came back there the next day." (MD)

In addition to his duties as the managing director of Omega, MD is involved in some external activities. He is a board member on a couple of boards in other organizations. Furthermore, he is involved in a training program for young leaders in the Alpha Group. He describes that when he has held a lecture on organizational change for a group of 30 young leaders one of his main messages to them was: "It is important to create a feeling of security during a process of change."

Regarding all this activities, MD focuses on a few major issues at the time and keeps all other issues in the background. The issues he focuses on are usually decided by his own interests and/or by external demands of different kinds.

MD perceives that there are some main challenges in his work and one of these is how to plan the time available. One example of the problem related to time allocation and planning is illustrated in the following conversation between MD and his personal assistant PA:

"This is not realistic MD" says PA about the time schedule in an arrangement. "She is aware that things may be dragging on a little bit" he answers and PA just looks tired.

In the opinion of PA, MD is a genuine "time-optimist" and often thinks that it is possible to get more things done in the time available than is practically possible. As they have worked together for a long time, she is well aware of the way MD works and things usually work very well, even though they have some arguments about time now and then.

H.5.3 The Managing Director's Own Reflections

When MD reflects on his own working situation he says:

"The problem with working at my office is that there are such short intervals. There are interruptions all the time. One reason for this is that I meet with very many people and I want my subordinates to know that they can come to me with the questions they want to discuss. They should not have to make an appointment through a secretary to meet their superior." (MD)

During one period he has spent a lot of time and effort on a problematic situation with one of the business partners in the purchasing pool. MD points to the tricky situation when he cannot openly describe everything for his subordinates as some matters are strictly confidential. This issue is one example of such an issue. At the same time it is also an example of an issue that suddenly turns up and is very important and time-consuming even though one does not know about it in advance.

On the whole, MD enjoys his work and thinks that he has found a working style that functions (despite the challenge of planning the time available). The one thing he sometimes thinks can be a bit stressful is that he perceives himself as rather lonely regarding some issues. The perceived loneliness is emphasized by the fact that he is in charge of one organization, Omega, that differs from the rest of the service group it belongs to, the Alpha Group. This means that he does not have any close colleagues in other parts of the group, and in a moment of stress he says:

"I am probably one of the most lonely managers within the Alpha Group." (MD)

The loneliness consists of the fact that many issues end up on MD's desk and he has to make a decision which sometimes is hard to discuss with other members of the management team as they are often involved. PA, as the personal assistant though, is not involved in the same way as the regional and departmental managers and is therefore often used by MD for discussion about different ideas in his work.

When reflecting on a change of CEO in another Scandinavian organization MD comments on the importance of the dialogue between a manager and subordinates:

"There is a danger when the dialogue between a leader and his/her subordinates is reduced both in its extent and its content, when the dialogue does not include matters of real value." (MD)

This is one reason he tries to keep his door open for his subordinates.

Regarding dialogue he also reflects on the importance of establishing suitable conditions for such a dialogue:

"Persons' ears work differently depending on who is sending the message. It is important to give and shape suitable conditions for communication through the way one acts. In certain situations the receivers are not ready to hear the message." (MD)

MD points to the importance of timing in communication processes.

H.6 Tendering for a Contract – "A Big Game"

Roughly eighteen months after the managing director, MD, has been appointed, the organization faces a major challenge in a tendering process for an important contract in the Southern Region. MD and several other members of the management team spend a considerable amount of time working with this tendering process during the fall of 1994. This section focuses primarily on this tendering process, but there is also a description of further work with the information platform and the enlarged management team, and finally there is a brief description of what happened with the other issues on the agenda described above.

H.6.1 The Tendering Process

As mentioned above the tendering process for the contract in the Southern Region is very important issue for MD at this point in time. The people in the management team have known for quite some time that this important contract is coming up and in March 1994 there is a meeting with the parties involved in the Southern Region, i.e. an information meeting about the invitation to bid for the contract. MD attends this meeting and he then informs the whole management team about the situation at a meeting in late March. Omega is promised further information about the tender procedure in the next few months.

They receive this information and learn that there are 5-8 different organizations that finally are invited to bid for the contract. The first planning for the tendering process takes place before the summer of 1994. MD is aware that this process will take a lot of his time and attention during the fall.

In mid-September there is a kick-off meeting for this work. A large number of people who will be involved in the process attend the meeting. This very first meeting is mostly a brainstorming session about how they will plan their work.

MD involves himself in the work from the very beginning, the same goes for both BC (the business controller) and FD (head of the Finance and IS department). People from the Southern Region dominate the group that work with the tender, as the contract is within their region, even if it is important to the entire Omega (and even effects the whole Alpha Group). MD thinks it is important that the final contractual offer has a "touch of the South" to it, as it applies to the Southern Region. In the group working with the tender there is also a controller from the Western Region highly involved in the process. MD comments on his participation like the following:

'I brought this controller to the group first because he is very competent, second because he has an external perspective on the contract." (MD)

The work in the group begins with hard work and long hours for many people in the organization. There is also external expertise involved in parts of work.

At the meeting of the management team in October, MD reports from the tendering process that the work is running at full speed. Everyone in the management team with questions or comments on the process is asked to get in touch with BC, the business controller, within a week. Some of the people are directly involved in the work through their positions, e.g. PL as the head of the Purchasing and Logistics department and PM1 as the personnel manager. Other people are less involved, for example WR, ER and NR as managers for the other regions. MD is careful to involve everyone, either directly or by trying to catch their possible comments.

At a board meeting in early November, MD presents the status of the tendering process. He informs the board that things work fine in the process and that the bid will be submitted in late November. The board members enter their view that the contract is extremely important for the organization in the minutes of the meeting.

The work is divided between different subgroups focusing of different parts of the tender. There are, for example, financial aspects of the tender, there are

aspects linked to purchasing and logistics, to personnel, etc. BC and people from the Southern Region build complex simulation models to make it clear how different factors are related. These models are used in the calculations for the tender and for different decisions. At the final stage these models play a significant role when deciding the bottom-line level, i.e. the final decision on what level they should place their tender. But the tender is not only the bottom-line, they also have to show their trustworthiness. Therefore, they carefully formulate and document how they will handle the situation in different areas if they win the contract: the logistics, the personnel, etc.

The participants are grateful for the careful planning they did in the beginning, which turns out to be an advantage at the end. The different pieces of the complex tender fit nicely together when they are combined at the end of the process. MD says:

"It was a relief to see them fit together at the end." (MD)

Despite the planning of the process there is a huge amount of work left for the last couple of days. The group working with the tender is literally working night and day during the last period in order to complete their work. MD is involved all time, and at a later stage he makes the following comment on his own involvement:

"I wanted to be part of the process and I wanted to show everyone how important this work is." (MD)

At a final stage of the process, when the group is to decide their bottom-line level of the tender MD has the last word. They use the models which BC and people at the Southern Region have built as a useful tool. When they more or less have made the final decision on what level they want to conclude their tender MD stops. He says that before the decision is made he wants to hear the opinion of FD and asks him if he thinks this is the level they should go for. Later MD makes the following comment on this situation:

"I did this for two reasons. First, I wanted to have the final opinion of FD who is very experienced and has been with Omega for a long time. Second, I wanted to show FD that he is important and that he does not have to fear any competition between him and BC [the business controller] as he feared when BC was recruited." (MD)

They agree on a final level for the tender and the final documentation is prepared. The final material is presented at a meeting in the management team and is graded "passed with distinction" by the management team, according to the minutes of the meeting. MD expresses his gratitude for the hard work many

members of the management team have put into the tendering process. He also says that he finds this way of working as "efficient and stimulating".

The tender is handed in late November. The outcome of the evaluation of the different tenders is said to be presented before Christmas.

"Phew" is the first word MD utters at a meeting the day after the tender was handed in. The last weeks have been more hectic then most weeks and other operational tasks have piled up during the tendering process. He says:

"The tendering process has taken all our time and then almost some more." (MD)

MD shows a copy of the final documentation, which is prepared by an advertising agency. He describes the tender and there is no doubt that he is very pleased with the results of the tough process. He says:

"My judgement is that we now have done all we can and it is just to wait and see what will happen. The decision will be made before Christmas." (MD)

MD seems be very happy and gives an impression that he is rather confident that they will win the contract. When asked about the people who will evaluate the tenders and make the decision, MD is not exactly sure about the names of the people in the group. He also says that he thinks that the ABC Corporation will be the main competitor to win the contract.

H.6.2 The Outcome of the Tendering Process

Four days before Christmas people from the Southern Region call MD and inform him that there has been a press-release saying that the ABC Corporation won the contract. Omega has lost the extremely important contract. MD has now concluded his second year as the general manger for the organization by losing a contract that was very important not only for Omega, but for the entire Alpha Group.

MD goes to the Southern Region as soon as possible when he hears about the bad news. He wants to learn more about the circumstances and after his trip he describes what he found out about the evaluation process:

"The people who evaluated the different tenders only focused on the hottom-line. They did not evaluate the reasonableness in the different tenders and the different assumptions made. The ABC Corporation was below us on the bottom-line. There were however things they did not consider or they chose a completely different risk-level." (MD)

MD presents the results of the tendering process for the board members and he also presents and explains the situation for the CEO of the Alpha Group. MD comments:

"They have all taken it well. [...] Given our calculations, there is no chance that someone can make a profit on a lower bid [than ours]." (MD)

The CEO of the Alpha Group is used to this kind of situation from his previous position in another organization where a great deal of the business activities is based on tendering for contracts. MD says:

"To him this is not so dramatic, but for Omega it is a tough situation." (MD)

In January 1995 MD reflects on the lost contract. His predecessor as managing director for Omega is now with the ABC Corporation, i.e. the organization that won the contract in the Southern Region. Furthermore, MD has heard that this person now is leaving the ABC corporation short after having won the contract for a position in a new organization. He reflects on for this person's motives, including the likelihood that he was willing to take huge risks in the tendering process as he is leaving his position and will not have to fulfill the obligations.

Whatever the reasons for the loss of the contract, the fact is indisputable: Omega lost the contract. Even if much time and effort were spent on the tendering process during the fall, there were also a number of other issues on the managerial agenda.

H.6.3 Further Work With the Information Platform

The work to improve the information platform continues during the fall of 1994. The new monthly report has now been introduced and used for a number of months. MD and the other members of the management team, as well as the board members, are rather happy with the report. They are of the opinion that the report gives them a better picture of the business activities, and that comparisons between different units are easier now.

Even if the report now works rather well, there is some further work done with the report and the reporting procedures during the fall. MD is only partly involved in this work. He now sometimes gives the impression that this is a task for FD and that he ought not to be involved in the work himself. Nevertheless, he attends a number of meetings, partly to send signals to the other people involved that he thinks the matters are important.

The reports are developed with some minor changes in key ratios and layout of some graphic presentations. There is also some work done with a sort of "TD-cards" for the different regions with a number of short basic facts and figures for each unit. These so called "ID-cards" are developed in accordance with the short report, the CEO-letter, which MD sends to the Alpha Group CEO monthly. The idea is to improve the link between the short report given in the CEO-letter and the internal reports within Omega.

Furthermore, a separate *project-report* (a form to fill out regarding the status of ongoing projects) is introduced during the fall. As MD has put more and more work in the form of projects, the total number of projects to keep track of have increased. In order to get a better picture of the progress of these projects a common form is developed for them by people at the Finance and IS department with input from several members of the management team.

An important part of the information platform is the monthly meetings in the different units where MD participates (often together with FD or BC). Now with the fixed agendas in combination with the new reports, MD is rather happy with the picture he gets of the business activities in different parts of the organization. He comments on all follow-up meetings that consume a considerable amount of his time:

"Still it is important to spend time on those meetings." (MD)

MD has the opinion that these meetings are valuable for the business activities in the different units. They are a forum to bring up various matters with MD and the decisions-making process is facilitated by the monthly meetings as several minor decisions can be made at one and the same meeting.

H.6.4 Further Work With the Enlarged Management Team

The new business controller, BC, is introduced during the fall. As he is highly involved in the tendering process for the contract in the Southern Region, as described above, he has every possibility to become familiar with the organization. Early in the fall MD spends a considerable amount of his time on the introduction of BC and comments on the time he spends:

"I see it like an investment that will yield a good return at a later stage." (MD)

When MD welcomes BC at the first meeting of the management meeting that BC attends, MD gives the following description of BC's main tasks as the new business controller:

"The following are the overall tasks of BC as our new Business Controller:

- analysis and follow-up of the business activities in Omega
- participation in the work of the management team in Omega
- participation in tasks to improve the results
- responsibility for the follow-up of projects and action programs
- support for operative units with analyses and models in business control"

 (Excerpt from minutes of meeting in the management team)

During the fall there are some doubts expressed by people at the Finance and IS department regarding the relationship between the department and the new business controller, but things calm down. The tendering process takes a lot of attention for many persons and is a help for the business controller to find his role in the organization.

The new IT-controller, ITC, is introduced during the fall and he starts by doing an inventory of all projects concerning IT within the organization. The purpose of this task is twofold: first to give him a good picture of what is going on and second to let him get to know the people in the organization and thereby introduce him to the organization. Concerning the IT-related issues, MD expresses his doubts to the management team concerning the extent to which the organization is making use of the possibilities offered by new information technology.

Work in the management team continues during the fall with monthly meetings as before. At the meeting in December there is a discussion of how the management team should work. MD wants a discussion on their working style and if they should continue the same way as before or if they should change anything. ER, the manager for the Eastern Region, asks for better discipline regarding prepared documentation in advance for the meetings. He wants the material at least one week in advance. SR wants a better dialogue between the members of the management team regarding all ongoing projects. PM1 wants the people in the management team to listen to each other better. As a result of the discussion they decide to alternate the meetings in the management team between ordinary meetings and meetings focused on specific themes.

H.6.5 What Happened With the Other Issues on the Agenda?

As described above, MD and FD listed a number of important issues on the managerial agenda in the beginning of the fall or 1994. So far three of them have been described:

To win a huge contract in the Southern Region.

- To conclude the changes regarding the reports and the reporting procedures.
- To introduce the new business controller and the IT-controller to the organization.

In the following paragraphs there will be brief comments on what happened with the other issues on the agenda.

To formalize the goals for all units (for the forecast and planning process).

The financial results for the different units, and thus for entire Omega, are very good during the fall. The organization is ahead of their forecasts. The process for the new forecasts does not work as well as was hoped however. Some parts of it fall between the cracks. Many people pay more attention to the intensive work in the tendering process than the forecast and planning process.

• To evaluate the potential of business partners.

During the fall one partner in the purchasing pool leaves, a problem that takes quite some time to solve. There are only some discussions on potential business partners, no real evaluation is taking place.

• To communicate the strategies to the entire organization.

MD and FD do one thing that is not well received when they communicate the strategies during the fall. They put restrictions on different types of account on a detailed level. MD wants to see how different specific accounts actually look, for example the travel account. He can see some tendencies to use different accounts slightly creatively in parts of the organization, and he therefore wants to take a closer look at these matters. MD describes the situation:

"We sent a letter, signed by FD, and now there has been a queue of people outside FD's room... It stirred up had blood as the interpretation was that we want to manage on a very detailed level and do not trust the people in the organization." (MD)

The thing became an issue at a meeting of the management team. MD's comment on the letter about travel expenses is that it is interesting to see what managers side with the employees and what managers side with the organization. He says:

"Some will explain it to their subordinates as MD & Company making a fuss and throwing spanners into the works, while others will explain that it will not work to overspend on traveling. One reason for an account like travel to hit the roof is that it is much easier to say yes and approve than to say no, which leads

to the situation where one rather overdraws an account than takes the unpleasantness of saying no." (MD)

This example illustrates communication that is carried out through actions. There is also some work done to facilitate the verbal communication of strategies. In this work an internal information policy is prepared as support for the communication of strategies etc.

To move the headquarters.

The headquarters are moved. It does not involve MD or the other members of the management team to any great extent. PA, MD's personal assistant, keeps the administrative activity functioning during the move. There is a celebration for the staff working at the headquarters in connection with the actual move.

• To find the new relationship with the new board of directors.

The first meeting with the new board is held in September and the new board gives a very positive impression, according to MD. They give MD and the other members of the management team many degrees of freedom and possibilities to develop Omega, which MD comments upon in the following way:

"At least in theory the degrees of freedom are great; in reality however they are more limited." (MD)

The new board is more expansive than expected and gives go-ahead to the project to change the accounting information system at their first meeting. During the fall MD also meets with the new CEO of the Alpha Group (who is not a member of the Omega board). The CEO tells MD that he recognizes the challenge involved in leading an organization that differs from the rest of the group.

• To start working with a quality project.

Some early planning work is done for the quality project. There is not enough time or effort to start the actual work in the project due to all other activities in the organization during the fall.

- To plan and run a training program for a large number of leaders in the organization.
 - The training program is started and the personnel manager, PM1, is responsible for it in the beginning, then an external project leader is engaged.
- To plan the project to change the accounting information system.

The project is started during the fall. After the decision to go ahead at the board meeting in September there is a detailed survey of perceived needs for the system and an evaluation process of suitable systems. In the beginning of the process there are 6-7 systems that seem to be suitable, and by the end of the fall the number of candidates is reduced to two main candidates. FD is very pleased with the engagement in the project – everyone involved in the project is working hard and seems to be motivated. The plan is to implement the system during the spring of 1995 and start using it in July 1995. MD stresses the importance of keeping the schedule.

In addition to the issues described here, there is a business deal in the Eastern Region which is extremely important but not as spectacular and prestigious as the one in the Southern Region. MD is really happy that they close this deal successfully. The conditions in the Eastern Region were totally different from those in the Southern Region and the personal relationships with the people involved were much better. MD makes the following comment on the deal in the Eastern Region in the light of the lost deal in the Southern Region:

"If we had lost this deal [too] I guess we could just have closed down Omega." (MD)

The external engagements which MD is involved in continue during the fall. In one of the organizations where he is a board member there are negotiations for a large business deal. He comments on his external engagements:

"PA has asked me if I've got the time to spend on this. And I said yes. This is about a driving force to conclude things – first to lay down the broad outlines for something and then to conclude the deal." (MD)

In this case MD is highly involved in the process to conclude the deal.

He is also involved in different training programs for leaders in different parts of the Alpha Group. One program is for more experienced leaders where he talks about leadership in terms of his own experiences and what his career has looked like. His message to the group of leaders includes the following list of important dimensions of leadership: energy, will power and driving force, a structure for work – a structure to keep track of things, to influence activities and people in order to achieve results through other persons, an ability to communicate, to be visible and honest and serve as a model in behavior.

When reflecting on all the issues on the managerial agenda, both internal and external, MD makes the following comment on ad-hoc activities that continuously occur and are time-consuming:

"You never know what the next thing will be, only that there will be a next thing."
(MD)

The next main issue on the managerial agenda, after the fall of 1994, is to deal with the major loss Omega incurred when they lost the contract in the Southern Region.

H.7 Evaluation After a Loss – "What Now?"

The lost contract in the Southern Region turns out to be both a major problem and at the same time an important wake-up call for the people in Omega, particularly MD and the management team. After losing the important contract, MD perceives a need for a better picture of different people's views of the present state of Omega. In order to get this picture MD initiates an investigation in the form of an interview survey (see Appendix D for a list of people interviewed).

The focus of the interview survey is on persons' perceptions of the situation in the company after the lost contract in the Southern Region. This is also an opportunity for MD to get a better picture of different perspectives on the situation Omega is facing now when he has been in office for about two years. There is no question that the organization now is facing an important problem, and MD wants to learn more about the situation. He says:

"Some people say that they see every problem as an opportunity. That is not right. Sometimes a problem is a threat and there is no use trying to ignore that fact." (MD)

He engages himself in the design and planning for the survey and in Appendix C there is an interview guide describing what issues that were included in the interviews. The following sections describe different perspectives of the situation in Omega in the spring of 1995.

H.7.1 The Internal Situation at Omega

The lost contract in the Southern Region could be seen as a wake-up call. To extent the metaphor, one could say that just as it is not always pleasant to be woken up in the morning, it is not pleasant to lose an important contract, even if the sense of urgency in the organization increases and efforts to change are facilitated. The contract was important for all of Omega (and even for the Alpha Group) but 'next of kin' is the Southern Region with the regional manager SR. She comments on the lost contract:

"We need to keep up our spirits. [...] Emotionally this region is like a mausoleum. It is trying." (SR)

She explains that as a consequence of the lost contract the number of employees in the region now will be reduced, and the work with the layoffs has already started. When SR describes the pending reduction in the business activities in the Southern Region she says:

"In itself there are no problems with reduced business activities, but..." (SR)

It is a tough situation in the Southern Region and especially for SR as the manager. There are also voices saying that the lost contract will help the organization to meet tougher competition (a view for example expressed by BDA at the Business Development department). The alarm-clock effect from the lost contract is described by BD, head at the Business Development department, who immediately notices a difference in the organization:

"Now after the loss in the Southern Region there is another focus, which there ought to have been earlier too. There should not have need to be such a great difference in focus in developing the business after the loss, but the long term effects were not in focus until now. This means that I have more to do now than before." (BD)

There are discussions in Omega on possible reasons for the loss of the contract. BD suggests that the main reason has to do with the time horizon:

"The contract in the Southern Region is an example working with a short-term perspective. We could have offered a tender with no profit at all." (BD)

He argues that it is such an important contract to win that maybe it would have been worth winning it with no profit at all. BDA, also at the Business Development department, thinks that the contract was lost because of people:

"They did not have confidence in us." (BDA)

No matter what the reason for losing the contract, there is a common view that it is now important to learn from the process in the Southern Region. This in turn is regarded as a challenge since there is no tradition of learning from each other between different regions, according to several members of the management team. SR, from the Southern Region says:

"We do not make use of synergies." (SR)

She gives the example of the regions having printed some price-lists together and in her view that is about it regarding making use of synergies. Now, however, there is an urgent need to make use of the lessons learnt in the Southern Region as the Western Region is facing a major challenge in the form

of an extremely important contract that is coming up in less than two years time. WR in the Western Region stresses the importance of starting to prepare for that tendering process as early as possible. He also reveals that there are tendencies toward competition between the different regions and he suggests that perhaps the different regions should go their own ways entirely.

At present though the regions are linked together in Omega, although they act independently within their geographical markets. The managers for the different regions, WR (Western), ER (Eastern), SR (Southern), and NR (Northern), also act independently and differently. BD, head of the Business Development department, makes the following comment on different styles when producing budgets:

'In the Eastern Region they are timid in their budgets and are always ahead of the budget. In the Western Region they make tough budgets, but usually make it anyway." (BD)

According to BDA, at the business development department, all units work very autonomously, and the distance between the departments at the headquarters and the different regions is very large. She says:

"Sometimes it is even hard to arrange a meeting." (BDA)

From her perspective the regions are strong and do not listen to the staff at the central departments. But there is a perceived gap between the different departments at headquarters too. BD, the head of the Business Development department, says:

"I left some papers on projects in the Southern Region with FD [at the Finance and IS department] and BC [the business controller] about a month ago. I have not received any feedback from them yet. I think it would be valuable if some people left the figures and their financial papers for one day a week and did something else." (BD)

Besides the perceived gap between the different departments there is a specific gap between the Northern Region and the rest of the Alpha Group. As the business activities in the Northern Region are closely related to other parts of the Alpha Group there is a need for a regular dialogue with these units. NR, as manager at the Northern Region, does not appreciate the move of the Omega headquarters. Given her need for a dialogue with many other parts of the Alpha Group, the former location was better for her. The new premises are better as such, but the colleagues in other parts of the Alpha Group are located closer to the old premises. (Generally speaking about half of the people

at the Omega headquarters are happy with the move to new premises and the rest miss the old headquarters.)

One question-mark in the organization concerns the need to focus on the core business or to expand into new areas. BD, head of the Business Development department and thus responsible for many projects for new businesses, says:

"About a year ago we [at the Business Development department] received the signals: forget about the desire to expand. The organization should achieve stability and not expand into new geographical areas. [...] Personally I think this is restrictive. But one has to make the best of it. It is not my money." (BD)

There are also some question-marks concerning how the business activities are organized. ER at the Eastern Region expresses this in the following way:

'In the organization there are some question-marks regarding what should be centralized and what should be decentralized?" (ER)

There are other persons expressing the question-marks in more harsh terms, like for example PLB at the Purchasing and Logistics department:

"The entire organization of Omega is wrong. We ought to be organized in business areas instead of regions." (PLB)

Given the major loss in the organization (i.e. the contract in the Southern Region) there is a general discussion within the organization questioning the foundations for the business activities. WR at the Western Region describes what he perceives as an unwillingness to let go of businesses that are profitable within Omega. He suggests there is no clear picture of what to include in the business activities, but instead there are bits and pieces without a clear focus.

There are several questions raised about the business activities and how they are organized. WR and several others are looking for a clear vision as a guide for the organization. Others, like PLA at the Purchasing and Logistics department, are of the opinion that new blood is needed in the organization. Yet another idea about what is needed is suggested by ERC at the Eastern Region:

"A weakness is that we do not have well functioning processes." (ERC)

Here the main problem is identified as the processes in the business. MD is also of the opinion that clearer processes are necessary along with clear owners of different processes and receivers of outcomes etc.

H.7.2 Many Change Efforts and Projects Are Initialized

After the lost contract many different types of efforts are initiated. At a meeting of the management team held in January 1995 a huge number of possible activities are listed. There is a sense of "go" in the organization after the lost contract and PLA at the Purchasing and Logistics department says:

"Now there is a change. A good thing happened in the Southern Region. It turned out to be an alarm-clock. [...] Now many projects are started. Things have to work now." (PLA)

With the many projects that are started it is a challenge to find suitable people for all the tasks. PM1, who as the personnel manager looks at the human resource perspective, says:

"Often projects attract about the same people. We do not spread out the way we ought to. If we would spread more there would be a possibility that people would grow with the tasks." (PM1)

One person who is engaged in many projects is BC, the business controller. FDB, at the Finance and IS department comments the fact that BC is namned project leader for a new business-development project:

"There is nothing wrong with BC, but there are several other people with different experience than he has regarding the issues in the project. MD has to be over-explicit on why he chooses BC in such a situation. There is a risk that a number of people feel as if they are being incapable because they have got the time to lead the project. This is about a form of honesty to the personnel. The system of signals is not good." (FDB)

Finding the right people is not the only challenge. It is also a challenge to see how all the projects fit together. BD at the Business Development department who is used to run several parallel projects in his usual activities explains his worries:

"I think we do not have the right starting-point for our projects. We run a number of projects here and there. We ought to do more by groups: the different regions and the Business Development department. We have no clear focus at present. The projects are run with too many special interests, which is not always for Omega's best. [...] Everybody wants to solve their problems with their own solution." (BD)

He gives an example where the different regions have had separate projects with their own consultants involved in the different regions.

The large number of projects is seen as a sign of activity after the loss of the contract in the organization, but also a product of MD's working style. As expressed by PL:

'MD likes projects. Sometimes we ask if it is necessary to put something in a project or if it can be handled in the ordinary organization." (PL)

The business controller, BC, makes the following comments on the present situation in Omega:

'It is all about a change process. There are always different opinions in a change process. Some people are worried and ask how they will fit into the new situation, while others see the change as challenging and fun. The motivation is the most important part. It is extremely important that everyone is on the train. It is important with one common vision. The challenge is to create a shared vision and to make things happen." (BC)

One example of a person who partly enjoys the situation is WR at the Western Region who says:

"It is fun to work now. There are many things going on right now and a positive atmosphere in the organization. In the Western Region we are moving to new premises which is great." (WR)

At present there is a view in the organization that there are many things happening, but there are few who can see the whole picture, i.e. how the different pieces fit together.

One important project running through the entire organization is the training program which PM1 is responsible for. There is an urgent need for new leaders in the organization which is exemplified by ERC who sees a lack of competent leaders.

Several of the projects running involve the use of information technology in more or less innovative ways. NR at the Northern Region complains that there are several projects for new information systems that are very time-consuming. This problem is most obvious in the Northern Region as they are developing their own systems.

Regarding change efforts NR in the Northern Regions describes an event that happened to her last year (i.e. 1994). In October 1994 a change in the staffing situation in the Northern Region took place, but there was no influence on the results at this point in time. Instead there had been a significant dip in the results earlier, in March 1994, although there was no change taking place at that point in time. Her explanation for this is that in March 1994 the forthcom-

ing change was announced and probably much attention was paid to this change within the region. So when the change eventually took place in October there was no change in the results; it had already taken place when it was announced.

NR thinks this is an example of the importance of people's motivation and their perception of security. This is mentioned by MD too in the following way:

'In change processes the major mistake is to underestimate the importance of people." (MD)

The business partners are very important and a question that is asked in the organization after the loss of the contract in the Southern Region is about how to still be an attractive partner in the alliances where Omega is a member. ER at the Eastern Region says:

"We need to show the environment that we are an attractive business partner. [...] It is important to show solidity and seriousness." (ER)

There are opinions on how much the loss has damaged the reputation of Omega. PLB at the Purchasing and Logistics department says:

"We are known as a weaker company now, after the loss in the Southern Region." (PLB)

BD at the Business Development department is of the following opinion:

"Our reputation in the business is very good, but a little bit sullied. It was an enormous loss in prestige when we lost the contract in the Southern Region. We cannot afford to lose more." (BD)

In the organization there is a shared view that it is necessary to build relationships with business partners. Some people stress the need to do the homework before further work with business partners is planned. PLA at the Purchasing and Logistics department for example says:

"There will be an air of ridicule if we approach other parties too early." (PLA)

Regarding competitors everyone is well aware that the competition is tougher than ever before. As a part of the training program running in the organization there is a seminar where four of the main actors in the business present how they work. All members of the management team are present and the day is well received. There are many thoughts about how Omega can, and must, improve the business activities. The lost contract is also seen as too telling an argument for the tough competition.

In order to get a good picture of the business environment, the management team runs a project which results in a 35-pages report describing different aspects on the business environment. The idea is to use the findings as the basis for the long range planning of the organization.

H.7.3 Still a Profitable Organization

Even if there is great disappointment in Omega after the loss of the contract there is one thing to celebrate, namely that the results for 1994 turn out to be extremely good. At the first meeting of the management team in January 1995 there is even applause for Omega's best results ever. The minutes of the meeting do not say much about the loss of the contract, but focus more on the good results for 1994. But BD raises a question:

"We have to ask ourselves: What results could we possibly reach? How can we constantly improve?" (BD)

A common perception in the organization is that the good results are positive, but at the same time there are several disadvantages. It is worth noticing though that the persons in Omega have no personal advantage of the profit as the organization is wholly owned by the Alpha Group. Instead several persons see problems with the profits. PL at the Purchasing and Logistics department for example describes that the good results in the organization have led to a situation where there is a high level of comfort and more overhead than necessary. He continues:

"There is the dilemma to create a climate for change in an organization that is doing well." (PL)

PL refers to the cost control that at present are annoying people in the organization:

"They don't see the point in it as the results are so good." (PL)

There are several people talking about this dilemma of change. BDA at the Business Development department says:

"One problem is that the results are too good. It is hard to achieve a climate for change under those conditions." (BDA)

The business controller, BC, expresses the dilemma in the following way:

"We are profitable. In the short run we are well off. In the long run this may be a disadvantage as there may be difficulties in changing the organization. How well prepared are we to meet a tougher competition?" (BC)

FD, as head of the Finance and IS department, talks about profitability as a weakness:

"The profitability is a weakness — we are not efficient enough, too many people are involved in different projects and decisions." (FD)

The situation is such that the organization is doing very well, in financial terms, but at the same time there are huge challenges regarding the openness for change. There is a perceived lack of direction in the organization and there are several persons talking about the lack of a clear vision:

"We need to have clear goals that are expressed in plain terms. We need to be more specific. Maybe we should cooperate more with business partners." (WR at the Western Region)

"We need guidelines." (BDA at the Business Development department)

"Maybe the vision is the weakest spot. We need a better analysis of the consequences." (PLB at the Purchasing and Logistics department)

Regarding the analysis of the situation WR has a simple description:

"There are two ways to go ahead: together with someone or alone." (WR)

The business controller, BC, agrees that there is choice to be made between either starting something new or buying something. He has no strong opinions about which one, but for him the most important thing is to get everyone to walk in the same direction. WR on the other hand has his opinion clear as he thinks the first alternative is the better one and he continues:

"Many people dream that we can develop the businesses ourselves. But we do not have the time to do it." (WR)

There seems to be a search for a clear vision for the organization. PM1, the personnel manager, is afraid that this search will result in inactivity:

"If we are looking for the only way, we will get nowhere." (PM1)

When PM1 explores his views on a vision and describes what he thinks the present situation in Omega really is about:

"It is about a culture revolution — a break in the trend. We need to break loose. We need to let go. We have some kind of mental deadlock and something like a complete inability to act. We need to get to: 'Now we go damn it!' Then the energy is released and we work toward one goal. I do not think there is an easy way to get there. I do not know how we should approach it." (PM1)

BD is of a similar opinion and he uses the metaphor of driving a car: one has to be able both to step on the gas and the brake. (This is a metaphor which has been used before, see page H-3). It is, according to BD, important not to focus entirely on braking and he continues:

"MD has consolidated the business over two years and looked at the potential to save money. We have reduced costs, but not spent enough on development. We need to change now. It has probably been necessary to get a grip on the costs, but now we need to change track. Regarding development not much has happened." (BD)

To summarize many comments on the overall goals and results, one may say that there is a common view in the organization that the good results are not entirely a good thing. Due to the good results it is difficult to create a sense of urgency and generate a climate for change. Seen in this perspective, the lost contract in the Southern Region may not altogether be such a bad thing after all.

H.7.4 Reports and Information Needs

In this section there is a presentation of different perspectives on information. The first part gives an overview of the situation regarding the newly introduced report and reporting procedures, the second part presents information needs from the managing director's perspective, and the last two parts of the section describes perceived information needs for the management team and for the entire organization.

Reports and the Reporting Procedures

The new monthly report has now been used for more than a year. It has been well received among the users of the report. FDB, at the Finance and IS department and working with the actual production of the report, describes that the formal reporting procedures now work very well. The written comments from the reporting units are still of varied quality, according to FDB. There are still some key ratios where some question-marks remain. FDB himself says that he now both understands and appreciates the new design and content better than he did in the beginning.

There are some people at the Finance and IS department that are not happy with the relationship to the reporting units. They perceive that they are made the scapegoat for MD's different information demands. FDB refers to the example of the travel accounts that MD wanted to have a closer look at (see page H-56 above):

"When MD and FD went down to specific accounts in the work with the forecasts it was a source of irritation. But if this is the way he wants things he should make it clear and the entire organization has to follow it." (FDB)

This episode is perceived differently by different persons. FDA, also at the Finance and IS department, makes the following comment:

"MD wants to keep better track of details. This is not to keep track of the details per se, but to make sure that the details are kept in order. Not everybody has understood this, but some people think that he wants to control things on a very detailed level. This has a signal effect which has been noticed in the work with the forecasts." (FDA)

Since the new report was introduced, the unit for Business Control has been established. There is still some friction between some members of the Finance and IS department and the business controller. FDB says:

"BC plays in another league than FDA and myself regarding financial key ratios. It is sort of an insult to us and we have asked if it was a vote of no confidence in us [when he was recruited], but it was not. I think BC is here more to relieve the pressure on MD." (FDB)

FDA does not think there are any major problems in working together with the business controller, but in his view FDB and he could work more with business-control issues themselves. He says:

"With the new accounting information system we will have more time available as the system will relieve the pressure on us considerably. BC's position should really be named Business Support' instead." (FDB)

It is not only the persons directly involved who notice the friction between the staff at the Finance and IS department and the business controller. PA, MD's personal assistant says:

"Things are not perfectly all right between FD and BC. It is a bit tricky with a third person. [...] FD has partly withdrawn himself. Female intuition tells me that he might not be so happy with his situation. He has ignored some meetings etc." (PA)

She describes that the different roles are partly unclear. MD is aware of some uncertainties regarding BC's role as business controller, but holds the opinion that the question-marks will disappear over time. He considers changing the name of the business controller position into business support instead, which he does later when the unit for Business Control is renamed to Business Control and Support. This is done to emphasize that the unit is a support unit

for the entire organization and in the hope of removing some of the questionmarks regarding the newly established business-controller function.

Information Needs - The Managing Director

The new reporting procedures make MD much happier with the information support he receives. Still, there are information needs that are not fulfilled. After the loss in the Southern Region many different activities are started. MD expresses several times that he wants a master overview to get a better picture of all the activities that are going on or are planned.

He also feels needs for a better picture of the state of the org anization in its present situation, which results in an interview survey. But there are other ideas about how to get a better picture of the present situation. FD suggests a questionnaire in order to increase the engagement in the organization at the same time as the results of the questionnaire would give valuable information. MD thinks this could be a good idea, but maybe at a later stage. He thinks it is important to be able to take care of all the material in a questionnaire in order to reduce the risk that it would be perceived as a gimmick.

MD is lacking two things. First, a higher-resolution picture of the present situation in the organization. Second, a better overview of all activities. The latter is exemplified by a situation before one meeting in the management team when MD expresses that he wants a single A4-page with a time-line for the process of spring 1995. He wants the time-line to include the following issues: board meetings, the strategic plan, the present state, the visions for future states, a plan for communication and an action plan for 2000. Expressed differently he lacks an overview on a top level of all major processes that are running in parallel, or in his own words:

"We need a clear structure and an obvious plan for our work." (MD)

Here he uses the word "we" and sees himself as part of the management team.

Information Needs - The Management Team

The members of the management team are for the most part happy with the new report. But there are some exceptions. BD (at the Business Development department) thinks it is a "disaster" that all the key ratios are still not settled

⁸ MD often uses the expression "master plan", but as the word "plan" is used with the meaning of "overview", I use the expression "master overview" in the description in order to reduce the risk for misinterpretations.

completely. He is also pessimistic about the information for the management team:

"We have poor knowledge of our own position. The loss in the Southern Region is an example of this. We need to start working with first things first." (BD)

In other words, he perceives a need to pay closer attention to information on the business environment. BD is disappointed regarding the possibilities to get information on an ad hoc basis. He complains that his department (Business Development) cannot have the accumulated figures they would need. He says:

"I have written letters to the Finance and IS department for a year, but nothing has happened." (BD)

The need to sometimes take a look at the information from new perspectives is expressed by FD when he states that:

'It can be fruitful to look more closely at the present situation and perhaps do some calculations in new ways." (FD)

Overall members of the management team perceive a need to keep track of the business activities. ER at the Eastern Region says:

"We need to evaluate the business activities all the time. WR might have shorter time horizon than the rest of us, which may be good and put pressure on the entire organization." (ER)

Besides the report that has been introduced over a year ago, the fixed agendas have also now been used for about a year. The common view among the management team is that these agendas have helped to focus the discussions in the meetings, and thereby helped improve the support for managerial activities.

Information Needs - The Entire Organization

So far this description has addressed information needs of the managing director and the other members of the management team. Given the trying situation Omega is facing there are obviously information needs for the entire organization. In other words, there is a need to inform people in the organization about what will happen now, what is going on, etc.

Here, Omega's challenge is that the company has grown to a size where it is not obvious how to inform people in the organization in an efficient and helpful way. ER at the Eastern Region makes the following comment on this: "Omega has developed considerably. Earlier everyone knew everyone within the organization. Now there is a sense of not knowing what is going on. I get signals from my team of managers in the Eastern Region that they want to be more involved. But the time should be available." (ER)

ER finds it hard to find the time to inform people more. This process to inform the organization is regarded to be rather time-consuming and MD announces that he wants an "information plan", i.e. a plan for how to present information about the work that is going on and thereby reduce the anxiety in the organization. Both MD and FD think it is very important that it is obvious to everyone that Omega is investing in the future and that people can see that things going on: a training program, a new accounting information system etc.

One channel for informing people in the organization is the monthly in-house magazine. In the issue of February 1995 there is an article in which MD tries to reduce the anxiety in the organization. Among other things the article says:

"The disappointment has passed. Our target is already new projects and ventures, and the focus at Omega is on the next Century. [...] To learn from a lost deal is also important, and to make use of the lessons learnt for purposes of developing." (from Omega Internal Magazine, February 1995)

In spite of the efforts to inform the people in the organization through various channels such as information meetings, internal magazines and letters, there are voices saying that the information to the organization is not good enough. BDA at the Business Development department says:

"I have no information about how the business is doing. The flow of information to people in the different departments has stopped. Information is not public anymore. They can't do this, can they?" (BDA)

The feeling of not being informed is perceived as a problem and FDB at the Finance and IS department says:

'It is important to make the purpose and overall goals clear. [...] The uncertainty is the toughest thing." (FDB)

In order to reduce the uncertainty and to signal that the work in the management team is not secret MD and the other members of the management team decide that the minutes from the meetings in the management team should be public. That is, every person in the organization has a right to come and read the minutes, but they cannot make their own copies of them.

Another part of the efforts to meet the information needs of the organization concerns the results of the previous year, including major previous and coming

events. FD, as head of the Finance and IS department, provides the other members of the management team with a copy of a manuscript for a presentation of the results (including overhead transparencies) which could be used when the members present the results and the major events to their part of the organization.

But not only the people within the organization need information. Losing the contract in the Southern Region was an event that caught public attention. BD, head of the Business Development department, in his role as joint spokesman for the management team (together with MD) produces a short paper on how to deal with the press. This includes what to reveal to the mass media and a suggestion for how to present the current situation.

H.7.5 IT-issues

The first part of this section presents different views on the handling of IT-issues in the organization. The second part says a few words on one major IT-project running in the organization. In the third part the relationship between people working with the IT-issues and those in the operative business is discussed. Finally the two remaining parts of the section describe the managing director's and the board's perspectives on the issues at hand.

Organization for IT-issues

The IT-related issues are organizational matters for the Finance and IS department lead by FD. In order to strengthen the department with competence in IT-related issues FD recruited an IT-controller (as described above), who is by now well established in the organization. At present FD is responsible for the work with a new IS/IT-policy, where the new IT-controller is highly involved.

In practice FD delegates many of the IT-related issues to a troika at his department (Finance and IS) including the IT-controller and two other members of the department. There has also been an IT-council established (see page H-42 above) where FD is the chairman. In the council there are six financial managers or controllers from the different units, and three people from the Finance and IS department (including the IT-controller). FD is rather happy with the way the IT-issues are dealt with now and with the fact that the units are part of the IT-investments, even though these matters are not his home ground. He says:

"Now it is important to get the IS/IT parts to work better and to get the IT-controller on track. One example is that we need better information on all the projects." (FD)

There are, however, other perspectives on how well the IT-issues are taken care of in Omega. PA, as MD's personal assistant, sees one problem in the organization of the IT-related issues as they are part of the Finance and IS department. She says:

'The IT-controller could have a more clear area of responsibility. Now they are kind of waiting. There are unclear definitions both for the IT-controller and for the Business Controller. FD is a little bit unclear. It is not a good solution to have an accountant as the IT manager." (PA)

There are more people that are not completely happy with the solution for the organization of the IT-related issues. ER at the Eastern Region thinks there are unclear responsibilities regarding these issues. Some systems are developed inhouse and in ER's opinion there ought to be standard application packages available instead.

Overall, there is a common view in the organization that there is a need for new and better information systems. The following are some comments on the present situation:

"The IT-issues are urgent. We work in an old-fashioned way. There is no order. The entire IT-part is a mess. [...] One problem is that we do not have any well functioning information systems." (ERC at the Eastern Region)

"We are stuck in the systems we have." (PLB at the Purchasing and Logistics department)

"We need to be open to new technology." (PLA at the Purchasing and Logistics department)

The latter comments are from people from the Purchasing and Logistics department and should, maybe, be seen in light of a comment by ERC at the Eastern Region:

"There has been talk about a new information system for the logistics for the last eight years, but nothing happens." (ERC)

An Important IT-project

The project for the new accounting information system is an important project for the organization. The project is run by both internal people from the Finance and IS department and external consultants. There is a common view

among persons involved in the project that the system in itself is only a part of the change. FD, as the head of the department, stresses that the most important part is not the systems but the way of working and the routines. He says:

'First we change the system and then the routines will be changed. These things do not happen automatically." (FD)

FDA, also at the Finance and IS department, points out that this project will save money and can, in his opinion, be regarded as an investment for the future. He says:

"The tough part is to get the training part of the project to work properly, but we have planned for it." (FDA)

The training will help changing the routines and thereby help them to get the most out of the change of the information system. The matters concerning the project for the new accounting information system take a lot of time for several members of the management team. MD, FD and BC are all members of the steering committee. FD says:

'I will not participate in every meeting in the future, maybe on a quarterly basis. There are too many people. Most of them are from the Eastern Region as that is the largest region." (FD)

Even though FD tries to reduce his engagement, the project still takes a lot of his time and attention at this point in time. He tries however to delegate much of the work to the troika at his department as described above.

The Relationship Between IT-staff and the Business Staff

As the IT-related issues are organizationally part of the Finance and IS department, there is a foundation for a close relationship between the IT-staff and the business staff. This is emphasized by the fact that the head of the department, FD, is more familiar with business issues than IT-related issues.

Nevertheless, there are elements of friction between on one hand the people working with both support and development of information systems, and on the other hand the people in the operative business activities. The different regions are not happy with the support they receive from the headquarters. An example of this is that the Northern Region wants to hire their own systems administrator for their own nine information systems, soon to become ten. NR describes the Northern Region's plan for installing a new information system that will be very useful in their operation:

"At the Northern Region we are developing our own Management Information System for statistics and control in order to give better information to our partners in the Alpha Group. The system will be very neat! We plan to start using it in April [1995]." (NR)

The Northern Region is not the only unit to take IT-matters into their own hands. In WR's opinion Omega is far behind regarding the use of information technology. He says:

'In the Western Region we have done some work on our own that they cannot handle at the headquarters." (WR)

At the Finance and IS department people are worried about the fact that the regions are developing their own systems instead of using the ones that they offer from their department. BD at the Business Development department thinks that every region is running its own race in many issues, not only regarding the information systems, and he comments on these matters:

'We should not even talk about the information systems. Everybody runs their own systems with poor discipline." (BD)

IT-issues from the Managing Director's Perspective

From MD's perspective the IT-related issues are a bit tricky. He is aware of the fact that he has not given these issues high priority and says:

"The IT-issues may have been neglected lately. There is not time enough to give priority to everything." (MD)

He has noted that the number of issues that concern information technology has risen in the management team. These are matters where he is not familiar himself, and he raises the question of whether they in Omega make enough use of the possibilities offered by information technology as a tool to support the management processes. He says:

"How good do different managers in the organization feel that the information they receive is? There is a span from a good information system for them to a printout from a computer once a month. Where do they think that they are now?" (MD)

He thinks that the kind of information they have is important. In his view, an Executive Information System would not fulfil any of his own needs, but it is more important for those closer to the operative business activities and directly responsible for taking actions when things need to be done.

He is also concerned about how well the organization makes use of the IT-potential to support the business processes. One major problem he perceives is that he cannot judge how good Omega is at making use of the IT-potential. He has no way of measuring or benchmarking whether they are top or bottom, or maybe more likely somewhere in between on the spectrum.

IT-issues from the Board Perspective

The number of issues related to information technology has arisen at board level too. Of course the largest IT-projects are presented at board meetings on a regular basis, and there are questions of how information technology can help develop the business activities. Starting in 1995, IT-related issues increase in number. When all the different activities to compensate for the loss in the Southern Region are presented to the board there is a shift in the presentation of the IT-related issues. Now the issues mostly are presented within the frame of helping to develop the business activities and to improve profitability. Earlier there were mostly reports on projects that often either were behind schedule and/or over budget.

H.7.6 The Managing Director's Working Style and Anxiety

In this section the first part describes the managing director's working style. The second part describes the difficulties MD experiences when trying to change the way people think and act. The final part of the section describes perspectives on the perceived anxiety in the organization at present.

The Managing Director's Working Style

After the loss of the contract MD's days are filled with all types of activities. There are meetings for new projects, meetings in the different units and information meetings for different groups of people in the organization. In this situation PA is relieving the pressure on MD to a greater extent than she has during his first two years in office. She takes responsibility for several tasks that she had not done earlier.

The fact that the situation is hectic for MD is not only a product of the situation, but also, of course, a product of his way of working. PL at the Purchasing and Logistics department who has worked together with MD for many years says:

"MD easily gets in a situation with many projects as he is interested in a lot of things and wants to do as much as possible." (PL.)

As his calender is filled with activities, mostly different meetings, there are comments on how he spends his time. PM1, the personnel manager, says:

"At present MD, FD and BC all go to the monthly meetings in the different regions. That is waste of manpower. It was ok when MD was learning about the organization, but now he wants to be involved everywhere and have 100 percent control of everything." (PM1)

There are several opinions on the way MD wants to have control. SR, at the Southern Region, for example thinks he is "extremely detail-oriented". There are different views on the reasons for MD's interest in details. FDA, at the Finance and IS department, interprets his interest in keeping track of the details as a way to make sure that the details are kept in order, not his concern over the details per se (see quote by FDA on page H-69). That is, he thinks MD wants to send signals to the organization.

Now when MD has been in office for two years and the organization is facing major challenges after the lost contract, people in the organization start making comparisons between MD and his predecessor. It seems to be a common view that the differences between the two persons are huge. PM1, the personnel manager, says:

"The former managing director was totally different: more intuitive and much quicker. MD is more analytical. We run out of steam when there is a need for 40-50 pages of analysis. The creativity is strangled. MD is more for analysis and it is like an administrative brake. There has been a culture shock in the organization." (PM1)

PM1 gives an example from a discussion in the management team when bonuses to the personnel were discussed. There are several other examples of comments along the same line:

"The former managing director had some problems with the cost control. The present managing director is not innovative and market-oriented. The ideal would be someone in between." (PLA at the Purchasing and Logistics department)

'The former managing director was not serious enough. MD is too serious. [...] Sometimes MD does not dare to take risks." (SR at the Southern Region)

This type of comparison has not been frequent earlier, but discussions on how MD acts are now common in the organization. PA, who has worked together with MD for many years as his personal assistant, summarizes how MD acts:

"Once MD has made up his mind about something he goes for it for 100 percent." (PA)

From MD's own perspective he is now in a phase where he thinks there is a need to change the way people in the organization act and, not least, think.

A Perceived Need to Change the Way People Think

Now when the situation for the organization is perceived as rather tough, MD perceives a need to get support from the other members of the management team. There have been some situations where he has felt that after a decision has been made in the management team not everyone on the team has supported the decision. He says:

'We are entering a tougher phase now. It is important to move away from 'MD has decided' and instead reach a situation where 'we have decided'." (MD)

MD is not the only person noticing this. SR at the Southern Region has a similar feeling in the management team:

"We need to focus more on the development of the whole. Many people are focusing on their own. We would need a course in psychology for how we think. [...] It really is about communication between human beings to work a little bit better in processes." (SR)

Some people in the organization have a feeling of resignation after the lost contract, but there are also people who look forward and try to see something good coming out from the loss. PLB at the Purchasing and Logistics department says:

"We need to change mentally. [...] We need to focus to get something good from the situation in the Southern Region." (PLB)

This issues on how to change mentally is bothering MD. He wants to change the way people think and act but has not yet found a good way of achieving this. In his own words this is expressed like the following:

"We need to get away from the way of thinking that there is not so much to influence, but instead think in terms of the question: Can you influence anything? [...] One has to get them to work differently. I have worked like a beaver to get them to work differently." (MD)

MD wants the people in the organization to take actions and try to influence things, instead of waiting for someone else to do it. In order to give a better picture of the current situation there will now be some paragraphs describing the anxiety in the organization.

Anxiety in the Organization

There is obviously a certain amount of anxiety in the organization after the loss of the important contract. This anxiety is perceived differently between different people – from those who do not think there is any anxiety at all to those who talk about a huge amount of anxiety. First some comments saying that the anxiety is not a problem:

"Now it feels good that the uncertainty has gone. We have to realize that we cannot be so extensive. I am happy that the management team has said that we will still be in business." (PA)

"I do not think that the anxiety is too extensive in the organization:" (FD)

"The anxiety in the operative business is not too extensive. They do not have the insight. [...] After a seminar with MD we have received signals that there is hope for the future." (ERC)

From WR's view there is more uncertainty about the contract coming up in the Western Region in two years time. Otherwise he does not think that there is much uncertainty in the Western Region. There are some people who are of the opinion that there might be some anxiety:

"There may be some worries and some anxiety. For example, at a party some persons came to me and asked if there is any point in staying with Omega." (ER)

"There is a certain amount of anxiety in the organization. One wants to see change today. Most people are secure in their jobs. The amount of anxiety varies." (BC)

Even if there are persons of the opinion that there is no problem with the anxiety in the organization, the majority disagree:

"There is rather great uncertainty in the organization. Something has to be done, but one does not know what to do." (PLA)

"There is rather a lot of anxiety in the organization. [...] MD has an important role to send the message to everyone that Omega will survive and what we will look like." (NR)

"There is an anxiety and it is expressed differently. Some persons feel that they want to move away from the organization. At the headquarters there are worries like: I want to see the projects and how they are doing. In the operative business there are more general worries: what will happen with my job?" (PM1)

Finally there are people who regard the amount of anxiety in the organization as a major problem:

"There is a huge amount of anxiety in the organization. It is important to inform people about what we will do." (PL)

"There is a huge amount of anxiety in the organization. Everyone is worried." (BDA)

"There is an evident anxiety in the organization. Very evident. In the management team I think that it is NR, PL and I who have brought this issue to the agenda." (BD)

There are different ways of expressing the anxiety and there are examples where the worries are expressed more dramatically, like for example:

"Now it is about survival – both for the organization and for oneself." (FDA)

All in all there are many different views on the amount of anxiety in the organization but most people express their worries, in one way or the other, for what is going to happen with Omega. The management team now faces an important challenge.

H.7.7 An Awakening in the Management Team

This section contains a description on different aspects of the work in the management team after the loss in the Southern Region. The first part deals with the awakening effect from the lost contract and the second part with personal differences in how the situation is perceived. In the third part there is a presentation on a perceived problem regarding the speed of the decision processes. The fourth part deals with a perceived gap between the management team and the rest of the organization. Finally a fifth part describes a discussion of what issues the management team really should deal with.

An Awakening

At the first meeting of the management team after the news of the lost contract in the Southern Region, the management team tries to get a first grasp of the situation. They start listing the company's main weaknesses, possibilities, customer characterizations, interested parties, perceived problems and last but not least they list an action plan for what to do in the Southern Region. In other words, they try to find ways to overcome the lost contract.

After the meeting the members of the management realize that they have listed far more issues and ideas than they will be capable of handling. They simply want to do too much. WR comments on the action plan they produced, that it is really more of a recorded brainstorming session than an action plan. But

even if they cannot do everything on the list, it has positive effects, particularly after it is made public in the organization. FDB at the Finance and IS department says:

'It is important to bring the list of activities in the Southern Region down to earth and establish priorities in it. The list in itself is positive." (FDB)

The perceived need for immediate actions turns out to be like an awakening in the work in the management team. Several members remark upon the difference in work in the team now, compared to the situation before the lost contract:

"We work together more in the management team than we used to do, but there is more to do now. When I came to Omega I felt that there were more individualists here than at any other place I have worked earlier." (ER, the Eastern Region)

"Now everyone is engaged to overcome the loss in the Southern Region." (NR, the Northern Region)

"There is 'go' in the work in the management team now. One is looking forward to every meeting. It may have been a strength that we lost the contract in the Southern Region. Now we are all working for the future." (WR, the Western Region)

Even if there is a general view that there is "go" in the management team now, there are also opinions on things that do not work as well as one would hope.

"Human Beings in the Management Team"

When commenting on the work in the management team during spring 1995 NR at the Northern Region says:

"The work load has been intolerable." (NR)

The business controller, BC, continues:

"There are few resources available here at the moment." (BC)

These quotes are two illustrations of the workload that the members of the management team experience at present. PA keeps her finger on the pulse of the work and keeps track on who is involved in which projects, when and where different meetings are held etc. Regarding the meetings in the different project groups there are some questions about whether it is worth the efforts to meet on every occasion. ER at the Eastern Region is of the opinion that it is not worth the efforts:

"It is not efficient to have meetings for 15 persons that fly one hour to the meeting" (ER)

Still, there are many man-hours spent traveling between the different regions. There is no real discussion on these matters, but people get involved in different projects and then attend the project meetings etc. One reason for the traveling is to make use of the available competence as much as possible. There are, however, opinions that it is necessary to change or supplement the competence available. WR at the Western Region is of the following opinion:

"There are too few salesmen in the organization. We have theorists, but they are not suitable for trade. We need a combination of competence development and new blood. We need to recruit new people." (WR)

BD at the Business Development department also thinks it is important to recruit new people, but not just anybody:

"The competence is also in experience. Some have not been through tough times, but just seen the good times. There are very high expectations and the complaints are close. It is important to recruit people from other organizations. Personally I use headhunters. We looked first for people internally but those who applied for the job were not even close to being qualified." (BD)

Besides a perceived need to recruit new people, there is also a need to keep the old ones. PM1, the personnel manager, makes the long-term prediction that in year 2000 no one in the management team will still be with Omega. PL at the Purchasing and Logistics department points out the importance of keeping the current ones and says:

"We need new resources. SR is important to keep. She is younger than the rest of us." (PL)

He can see a risk that SR, manager for the Southern Region where Omega lost the important contract, might now want to leave the organization. It turns out that SR does not have any plans for leaving the organization at the moment, but nevertheless she holds some strong opinion on the work in the management team:

"People do not dare to express their opinions in the management team. But I do. [...] There are human beings in the management team: what are the expectations on them? Do they pay each other too much respect? Do they dare to put their foot down? There are things going on now, but there are perceived needs for analyses. Just do it! We cannot spend months informing ourselves. [...] We miss artists in the management team — we only have analysts. That is my personal analysis." (SR)

She points to a problem that is perceived by many people in the organization: slow decision processes.

The Speed of Decision Processes

As described above many persons have experienced a tremendous difference between MD and his predecessor. As a result of the focus on the cost control, there has not only been an improvement in the financial results but also some frustration in the organization. The frustration is expressed in the form of complaints about the lack of speed in decision processes. PM1, the Personnel manager, says:

"The last two years have been characterized by vagueness. Instead there has been a focus on: cost control, reports to and fro and decision processes that are time-consuming – there is decision inertia, like a wet blanket on top of everything." (PM1)

There are many people complaining about the slow decision processes. The following are some examples:

"We need to be decisive. [...] It may take 3-4 months in the management team before we come to a decision. Those issues that ought to be day-to-day are sometimes month-to-month for us or even half-year-to-half-year. [...] We could do better. Much better. Nothing happens. [...] We lose business opportunities because of the slow processes." (BD)

"We need faster and clearer decisions. [...] Sometimes the analysis takes more than six months!" (PLA)

"We never reach decisions." (NR)

There is a frustration that things, or rather decisions, take too long. This differs greatly from the situation in Omega before MD took office. PLA, at the Purchasing and Logistics department, comments on the new control:

"Historically we were taught to be roadrunners. Now when there is a need for more control this is regarded as a threat." (PLA)

Even if there are many people complaining about the time that is spent analyzing matters, there are also examples of people who can view this from a slightly different point of view. FD says:

'It is a strength that we have learnt how to investigate matters. It is a weakness that the analysis some times is too extensive." (FD)

MD realizes that this is a problem, and he can see two main reasons for slow decision processes. First, in hindsight most prior investments that have been

made outside the core business, have been unprofitable, and therefore he wants to be cautious. Second, the preparation documentation for the decisions is often of very poor quality.

In MD's opinion the slow decision processes are also a result of a lack of sufficient communication in the management team. He says:

"You can notice that no one has ever raised their hand to ask the question: Damn it MD, what are we missing for making a decision, why can't we make a decision right now?" [...] Management-team members have to be willing to ask questions—and to stand firm, and I too have to be more clear on what is unclear or missing." (MD)

In some people's eyes MD is to blame for the slow decision processes, but there are some people who are of another opinion, like for example ERC at the Eastern Region:

'I do not think it's MD that puts on the handbrake, it's the next level [down]." (ERC)

She thinks that the problem is on the next level, that is, the other members of the management team. Everyone seems to agree on that there is a sort of "handbrake", that the decision processes could be quicker. There are different ideas about the underlying causes though:

"I think this is all about attitudes: what are we doing? The dilemma is that now everything needs to be ready before anything is done – the entire solution needs to be presented, there are needs for investigations. One has to dare to take a chance." (ERC)

"It must be ok to make mistakes. One seems to refuse to make mistakes after the previous unsuccessful investments. We need to dare more. We need an ok from the board that it is ok to lose some money." (WR)

"We have to analyze and analyze. I do not understand where the inability to make decision comes from. Uncertainty? The underlying documentation? If it was the latter, one has to specify exactly what is needed to get useful documentation. The inability to make decisions goes for both major and minor decisions." (BD)

As the different quotes indicate one explanation that is offered by several persons is that there is no willingness to take risks at the moment. With the history of the unsuccessful investments most people realize that there are people who have got their fingers burnt and now want to be more careful. WR from the Western Region makes the following comment:

"We need to decide which way to go. We need to decide on this as soon as possible and then make sure that we all work in the same direction. We need to dare to take risks, which needs to have the support of the board." (WR)

The board perspective on the matters will be described below, but first there will be some words on the perceived gap between the management team and the rest of the organization.

A Gap to the Management Team

The people working close to the members of the management team but not being members themselves can, of course, observe the situation, particularly the heavy workload for the members of the management team during spring 1995. FDA, at the Finance and IS department, thinks that there is more potential to delegate than they do at present and says:

"The members of the management team cannot do everything themselves." (FDA)

There is an opinion among several persons who are not members of the management team that the distance to the team has increased and that there is a gap between the management team and the rest of the organization. BDA, who works at the Business Development department says:

"We receive incredibly little information. There is hardly any information from the management team. We have managers that are invisible. The boss sits 50 meters away and I see him once a month. [...] Often the ball is with the management team and does not move any further." (BDA)

Regarding the lack of information there are also comments on the lack of presence of management-team members. FDB at the Finance and IS department for example says:

"ER is invisible at the Eastern Region. FD is invisible at our department. He is either in meetings, on vacation or on different courses." (FDB)

The gap is described not only in terms of lack of information and people, but also in terms of the difference in competences between the members of the management team and the operative staff. PLA at the Purchasing and Logistics department says:

"The managers are deep into their books. We are businessmen. Make some quick decisions and do not investigate so much. We need more doers and fewer controllers. [...] We need to move faster and to make both unpleasant and pleasant decisions with the same speed." (PLA)

This aspect of different competences is even mentioned by one of the members of the management team. WR from the Western Region thinks the people at the headquarters are "theoretical and make calculations" with the result that good business opportunities sometimes are lost because they cannot keep up with the pace. This difference in competences is also expressed in terms of cultures. Here are the words of ERC at the Eastern Region:

"There are two cultures in Omega: the headquarter culture with MD, PL and ER with an academic touch, and the operative culture." (ERC)

The perceived cultural differences result in a lack of confidence for the management team among some people in the organization. Some people regard the management team as an "administrative forum for controllers".

A slightly more external view on the gap between the management team and the rest of the organization is offered by CON, a consultant from another part of the Alpha Group who works on a long-term contract for Omega. In his opinion the communication between the management team and the rest of the organization does not work properly. He thinks that there are many things that are secret in the management team, with the result that many people in the organization feel that they do not receive any information.

In his opinion, it is important to inform people in the organization in order to avoid rumours. This is also expressed by PLA (Purchasing and Logistics department) who thinks that there is a sense of uncertainty in the entire organization and to a large extent in the management team too. From his point of view there seems to be no teamwork or harmony in the management team:

"We have an information problem. We had a general meeting one year ago." (PLA)

The members of the management team are generally aware of the perceived gap. NR, manager at the Northern Region, for example, says:

"There is a huge gap between the management team and everyone else. On the next level we do not spend as much time together as we do in the management team." (NR)

This is also expressed by PL:

"The management team works well now. We spend a lot of time on the work in the group (twenty-four hours a month). Now we need to achieve a way of working on the next level. We have spent much time together [in the management team]." (PL)

Regarding communication, most management-team members perceive this as a problem, although no one offers solutions. The problem is described in slightly different ways for example:

"Today things are introverted. There is no open communication, but instead introversion." (PM1)

'The management team is isolated. Either we decide nothing or 'the management team has decided'. This does not generate confidence [in the organization]." (SR)

"We need to be clearer in our communication in order to survive in the long run."
(WR)

'It is important to communicate to the organization that there are changes in progress. MD has taught us the importance of this, and now it is important that we practice what we preach." (NR)

The business controller, BC, interprets the requests for more information slightly differently:

"You cannot get too much information. It 's a healthy sign when people ask for more information. It is impossible to fulfill everyone's needs." (BC)

Given that there is a perceived need for more information, what could happen? PA, MD's the personal assistant, has the pragmatic solution that she has offered people asking her:

"Both FD and MD need to be more clear. I have talked to them about it. BC [the Business Controller] and ITC [the IT-controller] are sometimes just waiting for a goahead. I use to tell them that so far no one has been hanged at Omega for having done something." (PA)

In her opinion one solution is to teach people to take action instead of waiting for replies. One person who already works this way is BD at the Business Development department, who provides a recent example from a project in one of the regions:

'I exceeded my authorities four times to be exact. Both the regional manager and I thought it was a good deal. We also agreed on not telling MD or FD because that would only slow down the process. One cannot do business that slowly. FD still had some questions regarding some calculations. One has to dare to make decision and one has to dare to take risks. It is not possible to investigate every risk. This was a good deal, although rather small. [...] Without risks one cannot make good deals." (BD)

He does not want the people in his own department to behave in the way though: 'I have taken the liberty of doing a lot myself, but I cannot give everyone in my department the same liberty. I have not got the authority to do that." (BD)

MD is aware of some perceived problems regarding a gap and the perceived lack of well-functioning communication. Concerning the communication part, he stresses the importance to reflect on the signals one's action sends. He gives an example where PM1 as the personnel manager wanted to distribute some information to the entire organization without having thought about different consequences and says:

"I told him: You can imagine when you as one of the members of the management team think like this." (MD)

In other words, MD is not entirely happy with the way all members of the management team communicate with the rest of the organization. Another concern of his is what the management team actually should do, that is, which questions should be brought to the meetings in the management team and which should not?

What to Do or Not to Do Is the Question

At present the management team meet once every month. PA, MD's personal assistant, sends some documentation and an agenda to the members in advance. Often MD, together with FD, BC and PA, decide on the agenda based on their view on what is the best way to spend the time available. All members of the management team are free to suggest topics for the agenda and these suggestions are seldom turned down.

During the meetings, which in most cases last from lunch to lunch, including late night work, the prepared agenda works as a guideline for the meeting. Some issues on the agenda attract much time and attention, while other issues are dealt with more briefly. One can see a pattern with the latter part of the meetings being rather "crowded", and often there are items on the agenda that are postponed due to lack of time.

As a result of the previous work with the fixed agendas there is now a general structure for the meetings, with the results of the different units are presented and discussed in the beginning of the meetings etc. BD at the Business Development department comments on what usually happens at meetings in the management team:

"At the meetings in the management team we use to start talking about how well the business is doing. Then I usually tell them about how good our competitors are." (BD)

After the different regions present their results there are discussions of projects that are running, including the IT-projects. BD says:

"Here, at this point, it is very easy to get stuck in operative details in the projects, without being able to move forward. We never reach discussions on how to cooperate with other business partners etc." (BD)

This can be seen as an illustration of a problem that is perceived by several of the members of the management team, namely the problem that the discussions often are stuck in details. As a result of this behavior some people in the team feel that the most important issues are not discussed sufficiently.

IT-related issues on the management-team agenda have increased in number lately. Many of the issues on the agenda during 1995 are related to IT one way or another. There is the large project for changing the accounting information system, and there are also several other issues, like a new information system to support the business activities in the Northern Region.

At the first meeting in the management team after the lost contract in the Southern Region, there was less discussion on what happened and why, but instead work with lists on concrete suggestions for what to do now. There was a focus on concrete details. Given the lost contract in the Southern Region, there are already people who want the management team to pay more attention to the upcoming contract in the Western Region. PLB at the Purchasing and Logistics department is a bit impatient and says:

"We cannot lose the upcoming contract in the Western Region. Still, the management team is not seeing the importance of this issue on their agenda." (PLB)

MD is sometimes frustrated over time spent on issues that he thinks should not be on the agenda. He thinks that some members of the team sometimes bring up matters that could be dealt with without involving the entire management team. He is also concerned about issues that are brought to the management team meetings without adequate preparation.

H.7.8 The Board After the Loss

At the board meeting in March 1995 MD and FD present a number of consequences of the lost contract in the Southern Region. At the same time MD presents a number of efforts to compensate for the loss. The board members have no particular comments. They have all been informed about the lost contract beforehand.

Instead of discussing the different ideas for projects to compensate for the loss, there are some questions on the cost control in the organization from the board members. They are satisfied with the financial results for the previous year as Omega presented the best results ever, but now they want to make sure that the good results will continue.

The minutes from the meetings during spring 1995 have a fighting spirit after the lost contract. Many concrete activities to compensate for the loss are presented and discussed, and there is a sense of urgency in the minutes. The minutes have even a new layout.

Earlier the perceived gap between the management team and the rest of the organization was discussed. What about a gap between the board and the rest of the organization? One opinion is expressed by BD at the Business Development department:

'We do not know much about what the Alpha Group wants to do with us. We receive no feedback. I do not think that MD knows about the future either." (BD)

PL at the Purchasing and Logistics department points out that the Alpha Group being the present owner, means that the owner does not know much about Omega's business activities and thus does not make demands that are congruent with the business activities. He says:

"They think it is ok if we deliver money." (PL)

Given that the board members all come from other parts of the Alpha Group and none of them has a deep competence in Omega's business activities, one can ask what support the board can provide. MD says that he is rather happy with the work in the board and that the situation now has improved since his arrival at Omega. At that point in time the board, according to MD, very much acted like people who have got their fingers burnt. They had all been through a process when the organization had made several unsuccessful investments and they wanted to avoid a repetition of that. Now, instead, MD feels that there is an openness for new ideas and there is also a willingness to invest in new ideas — at least moderately.

After the board meeting in March 1995 MD makes the following comment:

'It went very well. We had put a lot of effort into the preparation of the meeting as usual. We got an ok on the planned investments." (MD)

This illustrates that MD, together with FD, plans every board meeting carefully. They prepare all documentation (together with BC and others) to send

to all members in advance. They also plan for what they want to achieve at the meeting and what they want the board members to bring from the meetings.

There is an ongoing discussion in Omega about whether the Alpha Group is a good owner or not. The business activities of the other parts of the Alpha Group differ from Omega's (as described above on page H-2), and Omega is not part of the core business of the Alpha Group. The links to the Alpha Group are seen more clearly by MD than by several other members of the management team.

As the question about the ownership is opened, there is a discussion in the organization about whether the Alpha Group will own Omega in the long run or if there are other plans. At present there are no other plans, but some members of the management team have their doubts about this. Once the issue has become an issue, there are some uncertainties in the organization. There are several voices saying that another owner would be better for Omega, such as ER:

"The owner, the Alpha Group, is an uncertainty as we are not part of their core business." (ER at the Eastern Region)

"It is a huge disadvantage to be owned by the Alpha Group. The best thing that could happen would be if we would be taken over by someone else." (ERC at the Eastern Region)

WR at the Western Region is of the opinion that Omega most likely will be sold by year 2000. The members of the management team cannot influence who the owner should be to any large extent, but still this issue is the subject of several discussions. MD accepts the owner and tries to link Omega to the rest of the group to a certain extent. He says:

"I have worked and still work to get Omega accepted in the Alpha Group." (MD)

The meaning behind these words is that as the business activities of Omega differ from the rest of the group there are many people in the Alpha Group who looks askance at Omega.

H.8 A Crowded Managerial Agenda – "Lots of Items"

The first part of this section presents a brief overview of the managerial agenda, which is rather crowded at this point in time. In the second part there is a description of one of the main issues on the agenda, a TQM-project (Total Quality Management). Finally, the third part of the section includes some reflections on the situation by the managing director. The focus in this section is on the fall of 1995.

H.8.1 A Picture of the Crowded Managerial Agenda

The managerial agenda is now more crowded than it has been. After the contract in the Southern Region was lost, many activities and projects have been started. From MD's perspective it is important to get the organization going after the loss and to involve as many as possible in the different activities. Nevertheless, some of the individuals are more involved than others.

When MD and FD sit down together and try to draw a picture of the main activities going on in the organization they list the following issues:

- The Southern Region: to develop and explore new business opportunities
- The training program: to increase competence in the organization
- The strategic plan for the next few years
- The development of the business activities: a TQM-project
- The development of a new accounting information system
- The information platform: to maintain and develop the current platform
- The internal communication: to improve the internal communication
- The organization: perhaps change the organization

MD stresses the importance of building a common base for future work. He does not want the work just to continue and then discover a lot of uncertainties under the surface at a later stage. Instead, he now wants to build a firm base for the future.

In addition to the list above, MD mentions the following issues as strategically important for Omega at present: competence, purchasing partners, business partners, IT-issues and new business areas. There are projects running to investigate new potential partners. The work with the business partners is partly the responsibility of PL at the Purchasing and Logistics department.

On an overall level PL describes the ongoing projects in terms of a change in the way of working in Omega. He points to the seminar day they had with four major actors in the business (see page H-65) as an illustration of how Omega needs to change their way of working. Among other things the other organizations' work is more centralized than Omega's.

One of the main activities on the crowded agenda is a project to develop the business activities, a TQM-project. This project will attract much time and attention and involve a huge number of people in the entire organization.

H.8.2 A TQM-Project Is Started

The background to the TQM-project is that Omega is facing changes in the business environment including tougher competition. This in turn means that the demands on the business activities increase and it becomes necessary to improve the current business activities. The TQM-project is regarded as a tool for sharpening Omega.

One reason MD and the other members of the management team choose to work with TQM is that there is a TQM-project running through the entire Alpha Group. As the management team of Omega wanted to develop their business activities they thought that the TQM approach could be suitable as other parts of the group use the same approach.

The work includes mapping all processes in the organization and making the organization more "process-oriented". MD describes three main intended effects of the TQM-project in Omega:

- to secure a method of working in the organization
- to develop a willingness to change among the people in the organization
- · to develop knowledge among the people in the organization

Theses three effects will in turn, according to MD, result in a competitive and profitable organization that is ready for changing conditions in the business environment and increased demands on the business activities.

In the work in the TQM-project a consultant from another part of the Alpha Group, CON, is engaged to help Omega to describe their business processes. According to CON, who has worked with Omega before, the business processes do not work properly at present. The different processes are not clearly defined in his opinion.

The first part of the project consists of mapping the different projects in the organization. CON is working as a facilitator and helps people in different parts of the organization describe their processes. Several smaller project-

groups are formed to describe: business processes, management processes, and support processes. MD stresses the importance of keeping the work in the project simple and clear. He can see many advantages with the project and comments:

"It feels very positive now. There are several things that have opened up now. The work with the processes is running at full steam and has proven to be very valuable. Many people thought that much of the work could be finished easily and quickly but it has, of course, shown that the project will take more time than they thought. Once you start describing the processes, it turns out that much is not as obvious as one first thought. It is also valuable that many people feel that they can contribute to the work, which in turn increases their engagement in the work." (MD)

At the meeting of the management team in June 1995 an initial part of the project is concluded, and there is a decision made on who owns the various processes: Customer needs and customer segments (ER), Concepts and assortments (SR), Marketing (BD), Product supply (PL), Sales (WR/NR), Customer relationships (ER). The schedule for the TQM-project is set to run until March 1996, with several milestones on the way.

H.8.3 The Managing Director's Reflections

Regarding the present situation in Omega, MD describes it in terms of a period between other major issues. There are several things to do, but there is no major event right now. It is more hard work. The major issues that he inherited on the managerial agenda (unprofitable investments etc) are concluded and he has built a platform.

MD says that he will start placing higher demands on the people in the organization now. He will not tolerate presentations where the speaker has not thought the matter through thoroughly. MD wants people in the organization to take greater responsibilities. He wants to step back a little bit to let other people take greater responsibilities. He gives one example that BC [the business controller] is a member of several groups in reporting units.

The projects running after the loss in the Southern Region take a lot of time and effort. Another major challenge for him is the contacts with the different business partners. One really huge challenge is the upcoming contract in the Western Region. This is not an issue yet, but it will be and MD stresses the importance of starting the preparation as early as possible.

When MD reflects on experiences in managerial work, he describes an episode from a meeting for managers in the Alpha Group. There MD managed to

arrange a short meeting with the CEO for the Alpha Group and some other managers to have a brief discussion about some plans in the Southern Region. He says:

"Often the opportunity occurs and the challenge is to seize it. The experience helps to increase the ability to seize opportunity." (MD)

Regarding the increased focus on cost control in the organization, he reflects on that tasks of this type are thankless, although important.

In the fall of 1995 MD starts reflecting on the Internet. He is shown how to search for information on the Internet and searches for some information about a country he is going to visit. During the demonstration he asks questions on what one can do etc. He also reflects that the manager commonly gets a computer but hardly any training in how to use it, and he says he would need some training, although his children help him at home.

H.9 Working with all the Issues – "Busy As a Beaver"

The intention in this section is to give a picture of how different issues are pursued in Omega 1996-97. There is a huge number of activities going on in Omega, and in the following sections there are descriptions of these activities and the persons working with them, with a focus on the managing director.

H.9.1 Many Different Activities in the Organization

First there is a description of an attempt to move and then there is a paragraph on the business environment. Then the rest of the section on business activities will describe different efforts to change and projects running in the organization at this point in time.

An Attempt to Move

During the spring of 1996 an event occurs that turns out to be quite bothersome for MD before things are settled.

The Northern Region works closely together with other units within the Alpha Group and during the spring of 1996 NR, as the manager for the region, is involved in discussions with their business partners in other units of the Alpha Group. As the Northern Region is working closely together with these units there is a proposal to move the Northern Region from Omega into another part of the Alpha Group. NR and her colleagues in other units of the Alpha

Group start planning for this organizational move and produce a document, which later is presented to MD. As MD has not been aware of their work at all, he is not happy to know about the plans. NR says:

'I have apologized for not bringing up the issue earlier. He had not been involved in the discussions earlier. On the other hand I told him that if I had presented the idea he would have told me to do an analysis. Now I have done one from the beginning. [...] There are no hard feelings between MD and me. I like him and I think things work fine." (NR)

NR says she looks at the issue from a both short-term and long-term strategic point of view and wants to develop a suitable solution for both time perspectives. In her opinion, the Alpha Group plans to reorganize the business activities and may want to sell Omega. As her region is closely linked to other parts of the group, she finds it natural to change the organization accordingly. At present she thinks that the distance to her business partners in other parts of the Alpha Group is a problem. NR also presents historical reasons for moving the Northern Region to another part of the Alpha Group. Further, she says:

"MD says it should cause anxiety in Omega if we left, but I think he exaggerates." (NR)

MD on the other hand is against the organizational move of the Northern Region. The Northern Region is discussed several times, and the work involves both BC and FD. At one point (September 1996) MD says:

"They can have one more meeting. Then that is it. We cannot spend all our time and efforts on this issue, and we are still not making any progress. [...] Ugh, I get tired of just talking about it. This issue takes too much effort without due cause." (MD)

The result of the process is that the region remains a part of Omega.

Possible Business Partners?

From time to time there are intensive discussions about possible business partners. When there are such discussions MD spends a lot of his time evaluating potential partners. These discussions are ongoing and dependent on what happens in the business environment regarding the competitors etc.

One of Omega's main competitors, the ABC Corporation that won the contract in the Southern Region, is taken over by another competitor in late 1996. The ABC Corporation has faced several difficulties and the company

that took over the ABC Corporation initiates a discussion with Omega about some sort of cooperation soon after the deal is closed.

The TQM-Project Continues

The TQM-project that was started during the spring of 1995 turns out to be very time-consuming. In the beginning of August 1995 the timetable for the project is revised. The initial plan called for the entire project to be finished in March 1996; the idea is now to run the project until summer 1996. With this delay already in the project, one can read the following passage in the minutes from a meeting in the management team in late August 1995:

"MD pointed out to all owners of processes that the timetable now has to be kept and that CON ought to be used as a coach and for quality assurance in the work." (minutes from management team meeting)

There is intensive work with the TQM-project all through 1995. In late 1995 a report on part of the project is discussed in the management team. Before the meeting in December, when this first phase is presented, MD sends a letter to everyone responsible in the project to inform them about how the processes are to be presented at the meeting. He wants to make sure that the presentations will include all the important details and cover the most important areas. At the meeting there is a perceived need to increase the pressure in the project even more.

The two main driving forces for the TQM-project are MD and CON (the consultant engaged in the project). Most of the members of the management team are not happy about the project. They feel that this project takes too much time and effort from other activities.

The work in the project continues. All different units are mapping their present processes and intended future processes etc. In February 1996 there is a seminar for two days with the management team. The purpose is to increase the focus on the TQM-project. A month later, in March, the schedule for the project is delayed once again. Now the project will run through 1996.

CON works as support in the process and is a driving force for the project, but many people in the organization are getting really tired of the project. Even if CON is perceived as valuable support for the work on the project, he is also perceived as a theorist in the organization. CON helps the units to map their processes but is sometimes perceived as someone who comes and continually asks for more work with the processes. He is seen as someone who has as

much time as is needed, in contrast to most people in the organization who have other duties beyond describing processes.

The TQM-project is an important issue at every meeting of the management team and sometimes takes a lot of time at the meetings. As the work is advancing, it becomes increasingly obvious that it is likely to result in changes in the organization concerning responsibilities between managers in the regions and managers at the central departments. Some regional managers are already looking at themselves as losers in the process. PL at the Purchasing and Logistics department could be seen as a winner according to some people.

At a meeting of the management team in October 1996 the timetable for the project is discussed once again and in November MD states that the work with the processes is advancing very slowly now. He says that he will ask CON to get in touch with the owners of the different processes. At the next meeting in December 1996 CON gives a presentation about what it means to be an owner of a process. The management team decides to focus on one main area for improvement in each process as an attempt to reduce the workload.

When the project is finally brought to an end during the fall of 1997, people in the organization have mapped their processes and learnt a lot about their business activities. As was suspected earlier, MD decides that he wants to change the organization in order to organize the business activities according to the processes involved. During 1997 plans for a new organization are taking shape.

Various Projects Running

At the same time as the TQM-project is running there are several other projects running in the organization. Many resources are focused on the TQM-project, with the result that other projects, e.g. at the Purchasing and Logistics department are delayed.

The lost contract in the Southern Region resulted in a situation where many activities are started during the spring of 1995 (as described in above). At a meeting of the management team in late April there is a count of all projects that are currently running: Eastern Region 12 projects, Western Region 7, Southern Region 5, Northern Region 7, Finance and IS department 9, Business development department 22, Purchasing and Logistics department. 9, Personnel department 2, Business Control and Support unit 4. All in all there are 77 projects running, 18 of which are directly IT-related projects.

BC is assigned to put together a catalogue of all projects in order for the management team to get a better overview. This proves to be a rather difficult task as he faces difficulties in collecting all the necessary information. A couple of times there are discussions at meetings in the management team on the need for everyone to supply him with appropriate information. Finally, he manages to produce a catalogue.

There are many IT-related projects that now are more offensive. That is, there are projects that attempt to use IT to develop the businesses.

There are also several projects run by the Business Development department with the purposes of finding new business areas. One of these projects starts growing considerably during the spring of 1996 and has to be dealt with separately in the management team. MD is concerned because the steering committee for the project does not work properly. He says:

"There is a lack of an overview. [...] I would need a binder with an overall picture of the project." (MD)

This project is discussed in several fora and MD is concerned about how to deal with it. He has a sense of not getting a grip on the project, which is rapidly growing and by now involves quite some investments. The magnitude of the project means that the project becomes an issue for the Omega board.

After several discussions the solution is to go ahead with the project and to establish a new steering committee like a "board" for the project. FD is appointed the chair of this committee.

"One More Project and We Throw Up"

Given the number of projects running in the organization, the TQM-project and all other projects, there is a weariness about projects in the organization. Some people (e.g. BC, the business controller) are involved in many of the projects.

The following are examples of comments on the situation in Omega concerning all projects running:

"There are incredibly many things going on right now. There are many different projects running and everyone is busy." (PA)

"It is hard to find the resources for the projects. There is hardly any time left. Another question is also about the right competence—is it available? There were already a number of projects from the beginning, now we are close to the maximum." (ER)

"People are enormously tired of projects. "One more project and we'll throw up' is a common reaction in the organization. It was a tight situation from the beginning and now there is a risk that the entire organization is choked." (PM1)

In addition to the large number of projects MD is starting to act tougher in the project reviews. One example concerns BD's presentation of a project, and MD interrupts to say that he wants BD to present the project in more detail in accordance with the project plan and not simply give a summary of the project. MD comments:

"It was not popular but important and efficient." (MD)

MD wants to keep better track of the progress in the different projects and starts playing a tougher game with the different project leaders.

H.9.2 ...and the Organization is Still Profitable

There is hard work with all issues on the agenda and at the same time Omega's financial results are still very good. At their monthly meetings the management team can often just establish the fact that the last month or quarter has been very good, as usual. There are some questions raised about how good the results actually could be. The good thing with the firm financial base is that all the different change efforts and projects can be carried out without any financial problems.

H.9.3 Information and Communication Factors

In this section there is first a short description of the present situation regarding the information platform in the form of monthly reports etc. Then there is a discussion of the personal information style MD has developed during his time at Omega, and finally there is part on information in communication processes.

The Information Platform Revisited

By now the information platform developed earlier is well established. The monthly report works quite well. There are still some discussions on different key ratios now and then. The previous friction between the Finance and IS department and the Business Control and Support unit has now more or less disappeared. FDB at the Finance and IS department is now more pleased with his work. MD involves himself in the work with the budgets and FDB appreciates this very much. FDB comments when MD attends a meeting:

'He is damn good at this MD. He is always there and increases the clarity for everyone who works with the issues." (FDB)

According to MD it is important to work with the information. He does not think that things sort out themselves regarding information, but one has to put some time and effort in the changes in order to improve the situation. Therefore, he is now pleased that the work with the reports, the fixed agendas and the Business Control and Support unit has been worthwhile.

MD's Personal Information Style

By now MD has developed his own personal information style in Omega. When MD now ponders the information issues in general, it sounds like the following:

"Information aspects can be divided into three different categories, which can overlap:

1) Need to know. 2) Nice to know. 3) Information to pass on. The latter is very important and there is a need to know enough about the business activities and how the information can be used etc. It is also important to pass on information, but one has to be aware of that 'information influences'. That is, once a piece of information is passed on, there are several possible signals about both the contents and the intentions behind etc. One has to know what effects one wants to achieve. It is a bit like an iceberg, first you just see the tip, but there is more under the surface. There are several sidetracks and there are demands for thinking in several ways in order to use information to inform the organization." (MD)

Continuing by reflecting on different sources for information MD says:

"Maybe the most important way to learn about the business activities is "management by wandering around". You are out and see and hear much without gunning for anything particular. Another important way of learning about the business activities is 'the written reports'. It is important that they follow a given structure and that they follow a given schedule. That is, one should know when they come and that they actually come then. Through a firm structure and time schedule for the reports one can spend as much energy as possible on the contents. As a supplement to the written reports I have 'the CEO-letter', which also follows a given structure. The different managers in the reporting units are forced to comment on the results themselves. They have to be alert and not only passively pass on the information." (MD)

One part of the flow of information that MD is concerned about is how to deal with the external information. He asks himself: What to read? How to know what to spend time on? MD gives an example on how the present situation influences how he deals with information. In his opinion there is a "stress-factor" influencing how one deals with information, and he says:

"Finding the time to read everything is a dilemma. These press cuttings are very good as they summarize. How I use them depends on how squeezed I am. There are three modes: 1) If I have really much to do I put the press cuttings aside immediately. 2) If I have slightly less to do I save them to read them later. 3) In other cases I skim through the headlines at once to read more later." (MD)

The number of e-mails to MD has increased considerably. His present solution is that PA skims through his mail and trashes those mails he does not have to read. He also describes how he puts limits regarding to what extent he wants copies on minutes etc. MD reflects on the amount of mail she screens from him and the importance to invest in persons to help with these matters:

"I am surprised to see the amount of mail I receive those days PA is not here."
(MD)

Furthermore, MD stresses the importance of highlighting the texts he reads. This way he signals what he finds important when he passes the information on to someone else. By doing so he wants to add value to the information.

Information for Communication

So far much of MD's reflections on information have been on information to him as a receiver of the information. MD sees the information as part of a communication process and stresses that he often asks for information to send signals rather than to use the specific information.

When discussing his way of communicating to the people in the organization MD comments:

'I hardly ever write formal messages to my staff, but try to deal with the communication more flexibly." (MD)

MD finds it very difficult to reach the entire organization with a message. In his opinion everyone makes their own interpretation and what is obvious for the person sending the message is not obvious at all for the receivers of the message. He stresses that one needs to get a receipt that the recipients really have understood.

As a part of improving the communication they have meetings for 100 leaders in Omega. At the meetings MD describes the present situation in Omega and shares his view on where the organization is heading. He comments on one of these meetings:

'It was a success to gather so many key people at the same time and give them all the same information. It is very important to establish a certain amount of calmness and security in the organization." (MD)

One word that is often repeated by MD when discussing information and communication is the work "openness". He says:

"Openness is very important. One should not deny the fact that information means an advantage." (MD)

As he sees the importance of building trust on facts, he hopes to avoid different types of speculations and rumours by sharing facts (e.g. through the public minutes). Another innovation he introduces is that after a board meeting he holds a short information meeting to describe what has been decided at the board meeting etc. He says:

'It is important to inform directly and to tell everyone myself. It is not enough just to send a message by e-mail. One has to communicate and not only pass on information. PM2 has very properly pointed this out to me." (MD)

PM2 is the new personnel manager who replaces PM1 when he resigns and leaves the organization and the Alpha Group. PM2 has worked together with MD earlier and joins Omega in the spring of 1996. When she enters the organization, she notices that the information and communication could be improved. She stresses that every member of the management team needs to set good examples for the rest of the organization regarding information and communication.

The communication between MD and the different members of the management team varies considerably. MD comments on the importance of finding a suitable way of communicating with each individual. He gives an example of communication between himself and one member of the management team:

"This morning I was sitting and preparing for a board meeting when PM2 came to my office and said that she needed some time with me, and not just five minutes. She said: I know you have a board meeting soon but I don't give a damn about that. I want us to sit down a while now and I want you to listen to me. We have rescheduled our meetings too many times now.' What can one do in such a situation? I put my papers aside and took ten minutes with her. She is good at expressing herself clearly. This is a clear signal in communication!" (MD)

H.9.4 IT Opportunities and Challenges

There are several IT-projects running. FD reports on several of them at the meetings of the management team. MD is fascinated by the opportunities offered by IT, but he warns the team not to be blinded by them. He gives the example of a conference system he tried with PL and FD, but things did not work. They all type too poorly so everything moved forward too slowly. Besides this, the technical connections did not work properly: suddenly someone was disconnected. Their conclusion is that they were impressed by the opportunities offered, but they do not think it would be useful for them at present.

Regarding the use of IT in the organization, MD is concerned. He says:

'Projects are delayed and people do not report on the delays until very late. This is not good." (MD)

One possible alternative that he considers is to establish a special steering committee for IT-related issues where MD himself should be a member. He can see two reasons for involving himself. First, to get better insight into the IT-related issues. Second, to signal that these issues are important for the organization. The IT-council that was established earlier (see pages H-42 and H-73 above) has turned out to be a forum for IT-related issues on a more specific level. MD lacks a forum for dealing with the issues on an overall and managerial level. Therefore, he sees himself as a member of a potential IT steering committee for the organization.

H.9.5 Managerial Issues Great and Small

The number of issues on MD's agenda is increasing. He often sees his role to monitor things and make sure that they progress according to plan. Besides this, he has to make many overall decisions and comments:

"There are extremely many activities running. Many things have been started and need to be continued now. [...] In many of these major issues one gets a bit alone in the sense that I am the last resort. The issues have to pass me and I have to state my opinion." (MD)

He is concerned that small issues take a lot of his time. What looks like small decisions take more of his time and attention than usual. It is a delicate balance for MD to work with both the large overall issues and at the same time be available for small issues for people in the organization. He finds this really challenging.

He finds it useful when the management processes are settled, or "in place". That is, he thinks it is really helpful in his daily work to have established certain procedures and routines for dealing with different issues.

In addition to all his internal duties at Omega, MD is still a member of some external boards. One of these organizations has a large acquisition on their agenda, which takes quite some time for MD. Still he thinks it is worth the time spent and he says:

'It is a way of catching external signals and to work with something completely different from the everyday life." (MD)

In his everyday life MD lacks capable project leaders. He wants to train more persons to lead projects and one idea of his is to involve CON, the consultant in the TQM-project, in this training program.

As described, there are many activities going on in Omega and all members of the management team has heavy workloads. In this process there are moments of friction between MD and other members of the management team. According to MD, some persons are disloyal when they do not support decisions that have been made in the management team because they dislike them. He is also irritated about a certain jargon and sometimes he thinks that the jargon is seen to be more important than the business results, which he finds frustrating and unacceptable.

From the perspective of other members of the management team MD is sometimes not visible enough in the organization. A discussion begins on "invisible" leadership in Omega and some people say that several leaders, and MD in particular, are invisible in the organization.

At the same time some people may be of the opinion that he sometimes is too visible, in the sense that he has increased the demands on the project leaders. PM2, the new personnel manger, comments on MD's behavior (when MD is present):

"MD is stubborn and works hard to reach the goals, which is good, but it is tiring.' [She turns to him and says:] 'You are like a terrier.'" (PM2)

Late spring of 1996 people in the organization, that is, both the members of the management team and other people involved in all projects, are really tired. MD realizes that he needs to do something, and as one activity he arranges for some social events to do something together besides all work.

H.9.6 Not Entirely Smooth Work in the Management Team

The work in the management team continues with the monthly meetings, same form it has had since MD took office. MD still perceives that some members of the team tend to focus on their parts of the business activities rather than the whole picture. In his opinion, there are also members of the management team that do not take their responsibility for the decisions made in the management team and blame decisions on the rest of the management team or on MD. Obviously MD is not happy with this situation and he says:

'In principle we could be a company on the Stock Exchange, but we do not act like that." (MD)

He is disappointed by the way some members of the management team act. At the same time some of the members (especially the regional managers) are not happy with the situation seen from their perspectives. The TQM-project is time-consuming for them, as well as for many other people at their regions, and they can see the outline of a reduction of responsibilities for the regions in the future.

Being a rather new member of the management team, PM2 (the personnel manager) points out the focus on prestige in the management team. PA comments that there is no holistic view among the members of the management team. MD expresses this in terms of an inability to accept differences in the management team and a tendency to find the weaknesses but not see the strengths or be constructive. In other words the atmosphere in the management team is not the very best at present.

There are many items on the agenda for the meetings in the management team and not always time enough to deal with them all. PM2 describes the feeling that after a meeting there are issues that have not been discussed enough in the group. She describes it as "15 items left for the last 20 minutes of the meeting". PA describes this like a frustration over issues on the agenda for the meetings in the management team that "never" disappear.

As the minutes from the meetings in the management team now are public, PA explains that some details from the minutes are screened. That is, not everything is included in the minutes; some details are sometimes left out as they are perceived as too sensitive. This does not increase clarity among the members of the team about what has been done. Sometimes sensitive information is included in confidential enclosures.

NR, who faces problems regarding a potential organizational move of the Northern Region (see page H-96), expresses her unhappiness with the work in the management team. She says:

"I give more than I receive. That can be ok, but it is definitely so that I add more value than I receive." (NR)

In December 1996 NR leaves her position as the manager for the Northern Region and moves to another unit in the Alpha Group.

One thing that has happened in the management team is that the number of issues on the agenda that are linked to IT in one way or the other has increased considerably. MD comments on the IT-related issues:

"They are very tricky. Often these issues start as very small issues, then they suddenly grow to very large issues by connecting to this and that and everyone wants to be involved. Then things grow too big and one has to reduce the issue into something small again and then it starts growing again and so on." (MD)

Some members of the team are concerned about a sense they have got that they do not have enough competence to deal with the IT-related issues in the management team. At the same time the amount of money spent on these issues is increasing steadily. PA wonders about one possible solution:

"Maybe we ought to have an IT-manager in the management team?" (PA)

In other words, FD who is head of the Finance and IS department is not considered an IT-manager as his background is in accounting and he is more familiar with "Finance" than "IS".

In order to increase the general level of IT-competence in the management team there is IT-training for all the members. They feel a need to learn more about the issues and to try some hands-on themselves, but they have problems finding a suitable level for the training program. MD explains that when there are proposals for investments in IT-equipment it is useful to have some knowledge about IT oneself. He says:

"It is not good enough to get behind with IT." (MD)

His words apply both to his own personal knowledge about IT and to the organizational use of IT to support and develop business activities. Now there has been a change in the management team in the sense that the IT-issues discussed are not only focused on delays in projects and the need for extended budgets in projects. There are also discussions of ideas for use of IT in the business activities and there are, for example, plans for an Internet-project.

H.9.7 ...but Smoother Work in the Board

The work in the Omega board continues with quarterly meetings. The board members are well aware that the businesses of Omega are different from those of the rest of the Alpha Group. They therefore stress that MD and the management team focus on what is best for Omega and not try to adjust to the rest of the group. The board usually accepts the proposals from the management team and gives them freedom to act according to their own judgements.

From MD's point of view the board members have no real understanding of the business activities in Omega, and they do not care much. The main thing for them is that Omega makes money and does not make any stupid mistakes, according to MD. He thinks that he and the other members of the management team in Omega are given a high degree of freedom for their actions.

There is a change in the work in the board in the sense that MD now lets the different managers for the units present issues at the board meetings to a greater extent. This is appreciated very much by the other members of the management team, as they perceive a reduced distance to the board. Some board meetings are also held in different regions, with the same purpose to reduce the perceived gap between the board and the organization. There are also examples of board meetings held in conjunction with visits to some of Omega's main suppliers. This is also seen as a way of involving the board members more in Omega's business activities.

The minutes from the board meetings are still confidential and thus include all details, in contrast to the minutes from the meetings in the management team which are public in the organization.

Regarding the number of IT-related issues in the board these are increasing here too, as in the meetings in the management team. There is a more positive and optimistic view on these issues. For example, at one board meeting when IT-issues are discussed in connection with a long-term plan for the organization the minutes read:

"We will use IS/IT in an active, creative and cost efficient way to support and develop our business. [...] The work with IS/IT should be characterized by a holistic view, standardization and realization." (minutes from board meeting)

Not only is the number of issues related to IT increasing, the attention paid to these issues is also increasing. For example, when a project for a new information system for the regions is presented at a board meeting in September 1996 the following questions are asked by the board members: How is the system

built? Is it possible to use scanners with the system? Could it be used for marketing purposes? Is the handling of customers speeded up? What about the training for the system? When and how is the system delivered? What about the schedule for the project? How extensive is the system? After a large number of questions the board approves the proposal and the IT-project can go ahead.

In August 1996 MD is called to a meeting with the board of directors for the Alpha Group. He is asked to give a presentation of the present state of Omega and the future plans. Usually he works entirely through the Omega board, but on this occasion the board of directors of the Alpha Group wants to have a presentation by MD. Here, he is in the same situation as his own managers from Omega when they present something for the Omega board. He prepares for the presentation very carefully and is quite happy after, in his own opinion, the successful presentation. Afterwards he comments on his preparation:

"95% of all overhead transparencies are never used, but it is just that much better for the 5% which you really use!" (MD)

H.10 Tendering for a New Contract – "Do or Die?"

It is now time for a new tendering process for a contract. This contract is even more important than the previous (and lost) one. Like in the previous tendering process, the managing director and several other members of the management team spend a considerable amount of time and effort in this process. The following paragraphs give a brief presentation of this tendering process.

The contract in focus this time is in the Western Region. In December 1995 there is an initial discussion in the Omega board of this contract. One of the board members stresses the importance of not underestimating the competitors in the tendering process. It is worth noting that the contract is brought up in a discussion at the board level at this very early stage.

In March 1996 the issue is discussed at a meeting in the management team. The manager for the Western Region, WR, presents a first plan for the project to tender for the important upcoming contract in the Western Region. There is an immediate focus in the management team and a steering committee is formed for the tendering process. MD, FD, BD, PL, WR and several persons from the Western Region form the steering committee. Furthermore, the project is divided into several sub-projects. The members of the management

team make the decision to appoint a professional project-leader for the tendering project.

A few months later, at a board meeting in June 1996, the chairman of the board asks MD about the likelihood of winning the contract in the Western Region. MD's reply is that the odds are rather good with a tender on the right level.

The planning of the tendering process continues and at a meeting in the management team in November 1996 more information about the tender is presented by WR. He describes that some parts of the information about the conditions for the tender will be available from January 1997, and that the complete information about the conditions will not be available until August 1997. The most important piece of information though, is that the final tender should be handed in one of the first days of December 1997.

The different members of the management team are now involved in submitting proposals for leaders of the sub-projects. First there are some problems in finding enough leaders for the different parts of the projects, but after a time all positions in the team that work with the tendering process are filled.

In December 1996 WR stresses the importance of immediately making some decisions regarding the overall direction for the tender in the Western Region. One aspect that is discussed at great length is whether Omega should tender for the contract on their own, or work together with a business partner. Cooperation would increase the chances to win the contract as the tender could be stronger and the number of competitors would be reduced by one. On the other hand tendering alone would increase the possible profits for Omega and the possibility to strengthen Omega's position in the Western Region.

After a careful evaluation the members of the management team decide, not without hesitation, to take the chance and tender for the contract on their own. They know that by this decision they increase the risk, but on the other hand they open for better profits from the contract. They are well aware that they cannot afford to lose this contract.

During the entire fall of 1997 there is focused work with the tendering process in the Western Region. Many persons at the headquarters are involved in the process, as well as WR and several others in the Western Region. There is a focused and concentrated work on a mission that they know can be fatal.

When they work with their tender, they discover several questions about the conditions for the tendering process, which in turn make the process even more difficult. Some of the questions can be answered, and some of them simply must be endured. They know from other contracts that the complexity of this type of contracts means that there are more or less always discussions about details and different interpretations after a contract is awarded.

In December 1997 the final tender is submitted on the final day. At the headquarters MD calls WR at the Western Region to make sure that the tender is handed in ok. He his relieved to hear the news that everything is ok and that the tender has been handed in. MD and the other persons at the headquarters who have been involved in the tendering process, which are quite a few people, celebrate that the hard work with the tender is finished. They celebrate very moderately though, as they have learnt from the experiences in the Southern Region not to gloat too soon.

The results of this tendering process are expected in January 1998. Now, they just have to wait and see – do or die?

H.11 An Epilogue – "A Happy (?) Ending and New Challenges"

In January 1998 Omega receives the good new that they won the contract in the Western Region. That is, the answer to the question about "do or die?" turns out to be "do". Given this outcome of the tendering process, MD and the other members of the management team are very happy that they chose to tender for the contract on their own. Now they are much more independent to do what they want than they would have been. Later there will turn out to be some problems with the contract, and the tendering process proves to be far from finished when the contract is won. As usual there are discussions on details in the contract and about different possible interpretations. This time the problems are rather difficult, but things are finally settled.

In the Southern Region part of the previously lost contract is offered to Omega and there are new opportunities to win back at least part of the lost contract. There are discussions and some progress although Omega still suffers significantly from the previous lost contract.

One result of the TQM-project is a major reorganization of Omega. There is an increased focus on the processes and many responsibilities are directed to the headquarters. That is, the regions now become much less independent, and the entire organization is becoming more centralized. Some of the regional mangers are disappointed while others are less concerned. ER, for example, belongs to the latter group, and says in a discussion on the new organization:

"Well, it seems like my job is going to disappear." (ER)

In the new organization ER is offered another central position. Several members of the management team leave Omega.

Regarding the IT-issues, the management team starts planning for outsourcing of a lot of the work. They decide to focus more on standard application packages and less on developing their own systems.

Finally, MD leaves Omega in August 1999 after about six and a half years.



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