

The Language of Change

The roles of methods in the work
of management consultants



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EFI, Box 6501, S-113 83 Stockholm, Sweden • Internet: www.hhs.se/efi/
Telephone: +46(0)8-736 90 00 • Fax: +46(0)8-31 62 70 • E-mail efi@hhs.se

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The roles of methods in the work of
management consultants

Andreas Werr



STOCKHOLM SCHOOL OF ECONOMICS
EFI, THE ECONOMIC RESEARCH INSTITUTE



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Preface

This report is the result of a research project carried out at the Center for Man and Organization (PMO) at the Economic Research Institute (EFI) at the Stockholm School of Economics.

This volume is submitted as a doctor's thesis at the Stockholm School of Economics.

The research project has been generously funded by the Swedish Council for Work Life Research (RALF). This support is gratefully acknowledged.

As usual, the author has been entirely free to conduct and present his research in his own ways as an expression of his own ideas.

Stockholm, in September 1999

Bo Sellstedt
Director of EFI, the
Economic Research Institute at the
Stockholm School of Economics

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Acknowledgements

One afternoon in the late spring of 1993, I found a message on my answering machine. Torbjörn Stjernberg, whom I had had as a teacher during my studies at the Stockholm School of Economics, wanted me to call him. I did so, and it soon turned out that this conversation was a job interview – although, a very easy one. He was wondering whether I would like to participate as an assistant in a research project about methods and tools for organizational change. Getting into research was nothing I had actively thought of, but the more I thought about it after my conversation with Torbjörn, the more interesting it became, so after a couple of days, I said yes. This was how the six-year journey, that has now come to an end as manifested in this thesis began, and, in hindsight it has truly been a worth-while journey.

The beginning of this journey in several ways reflects central aspects of the thesis process. Like my getting into research was more or less a matter of chance, the rest of the process, in spite of all efforts to preplan it, was also shaped by unexpected opportunities and obstacles. Like at the start of this process, the unexpected events were to a large extent linked to persons. This book, as the physical manifestation of this journey, is a good place to thank some of those, who created the opportunities and helped me tackle the obstacles encountered.

To begin with Torbjörn is a natural choice. Without his phone call that afternoon in 1993, this book would not have existed. Torbjörn has also been my closest collaborator and support throughout the journey, always willing to support and promptly read my drafts. His support and encouragement made this, at times truly confusing, journey of writing a dissertation somewhat easier to handle.

Two other guides on my journey through the strange land of research were Bengt Stymne and Horst Hart, who together with Torbjörn formed the thesis committee. Bengt, with his deep theoretical knowledge, analytical ability and curiosity and Horst with his creativity and enthusiasm, together with Torbjörn proved to be a good team. The meetings in the committee were always an event to look forward to. Even if they at times left me with more questions than answers, they were always a source of valuable ideas. Thank you for your support throughout this process.

My colleagues at PMO and the T-section, as well as other coffee drinkers in the corridor, were another source of inspiration and support. Discussions in the coffee room were my introduction to philosophy, sociology and the philosophy

of science. Here I could always get advice on what books I should read – whether I wanted this or not – or just chat about the latest news, when I had to get my mind off this thesis. I didn't manage to read all the books I was recommended, but some I read, and these were really helpful – thanks.

Special thanks must go to Johan. With his knowledge of the social sciences he was a continuous source of inspiration, and a patient discussion partner, when explaining to me for the third time, why and how some theory was really highly relevant to my research.

For the last one and a half years of the research process, I shared my time between the PMO group and the FENIX program. A number of interesting and stimulating discussions emerged in the meeting between these two research environments helping me to clarify my perspective and advance my thinking.

But even with the support of all these people, this thesis would not have been possible without the generous participation from a large number of individuals in the consulting and client companies studied here. Consultants in ABB-MAC, Ernst & Young Management Consulting and an anonymous consulting company, as well as an anonymous client company devoted numerous hours to answering my questions, carrying out simulations, or just accepting my presence as an observer during meetings. I am sincerely grateful for your support. Without it, this project would not have been possible.

Financially, this project has during its six years been supported by the Swedish Council for Work Life Research (Rådet för Arbetslivsforskning, RALF).

In producing the final version of this thesis, I had valuable help from Pär and Sheelagh, who helped me convert this into a readable text. I would also like to thank all those, who read and commented on different draft versions of this thesis. Your comments were very valuable in the finalization of this thesis.

Writing a dissertation with all this means in terms of reading, interviewing, thinking, teaching, etc. is a strange job. It took me a long time to understand. I can only imagine the difficulty my wife, Cajsa, has had in this regard. Still she has put up with me working both late nights and holidays in order to finally complete this “strange” project. Cajsa also continuously reminded me of what was really important, when I became too involved in work. Thanks for your understanding, I know it wasn't always easy.

The arrival of our daughter, Thea, finally helped me to put an end to this project. I just had to complete this project before she became able to ask me about what I was spending all this time on...

Stockholm in September, 1999

Andreas Werr

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Chapter One

Sketching out the issue

A day in a management consultant's life

Joe enters the marble hall of the downtown office building where Consulting Inc. has its national office. It is about 7.30 am and Joe is in a hurry. Having worked with Consulting Inc. for five years, he was recently promoted to senior project manager, and received the responsibility for an important project with one of Consulting's major clients. In a couple of hours he has a meeting with the project group in order to plan a central event in the process – the two day reengineering seminar, where, with the involvement of large parts of the client's organization, the new organization is to be designed.

During the morning, Joe has to sketch out an agenda for the reengineering seminar to present to the project group. He sits down behind his empty desk and turns on the computer. How did we do it the last time? Following this thought he searches the company database for the last project he was involved in. Soon he finds the file containing the agenda for the seminar from the previous project. But he is not satisfied with this. He has a vague memory about some new ideas for the seminar having been added to the latest version of "First", Consulting's method for these kinds of projects. He rolls his chair to the bookshelf behind him. At least two meters of it are occupied by white binders carrying the label "First". Binder number three carries the subheading "reengineering phase" and the reengineering seminar is described right at the beginning. On about fifty pages, instructions and checklists are provided. Joe skims them quickly. He notices some interesting changes. In particular a list of triggers for the brainstorming session catches his attention. "Why not try this" he thinks "I recall, that Mary talked enthusiastically about using these during our last project review meeting". In order to check this out, he pops in to Mary's office on the other side of the hallway. She happens to be there, and gives him some reflections on the use of the triggers.

Back in his office, Joe is now ready to design his own seminar. After having taken another look in the "First" binder and the list of activities described there, he starts writing his own agenda. "What adaptations are needed for this specific client?" is his major question. Barely finished with the agenda, Claude enters through Joe's office door. He has just arrived from Paris, and will be supporting Joe as an industry expert in the project.

Joe gathers his papers and they rush down to the street where a taxi is waiting. On the way Joe quickly briefs Claude: “We had a short introduction phase here – quite well defined problem. But then we entered a more tedious mapping phase. The active times in the support processes were especially alarming. Here, have a look at these process maps, and you will understand.” Joe hands over a binder to Claude, that he glances through. “Today we are planning the reengineering seminar. I pretty much stick to the standard two-day design. I am going to use the triggers from the new version of the method. Particularly the triggers one, three and five might be interesting in this case.” Claude, still studying the maps, nods supportively.

At the client, the project group is already gathered around the conference table. Joe puts on a slide presenting the four basic phases of “First”. He briefly runs through the context of today’s meeting by describing the foregoing activities as well as the remaining ones. Then he puts on a slide headed “agenda for reengineering seminar”. This is to a large extent identical with the agenda Joe had found in the “First” method, with some minor adaptations. The rest of the meeting is devoted to explaining the activities to the project group and making some minor adjustments according to their comments.

Back to the office and Joe is already late for his next meeting. The “First” competence group is having an evaluation meeting for the new version of the method. This meeting gathers all users of the method. The different phases and activities of “First” are talked through. Joe has had some good experiences with the questionnaires in the introduction phase. One of his colleagues also presents an interesting interview guide for preparing the reengineering phase. “This might be something for my project” he thinks.

After the meeting Joe heads off to the airport. He is scheduled for a flight to London, where he is to hold a seminar for newly recruited consultants on the initial phases of the “First” method. While sitting on the plane, he takes up his binder “First – introduction phase” which includes both descriptions of activities and their underlying logic, as well as a set of slides presenting these in bullet form. Taking a sip of his Whisky he ponders “What example case should I present tomorrow in order to illustrate the logic of the phase?”...

Management consulting – a question of methods?

The above case is not authentic in the sense that it describes the precise actions of a specific consultant during a specific day. Rather it is a synthesis of a number of observations made as well as stories heard during the multifaceted empirical research underlying this thesis. The above day could very well have been described by one of the consultants focused in this study, working in a large consultancy such as Andersen Consulting, Ernst & Young Management

Consulting, AT Kearney, McKinsey & Co. or the Boston Consulting Group. The focus in the above description of Joe's working day has been on his use of methods. These were shown to be an ever-present element in his daily activities appearing in a wide array of situations and roles. But how important are these methods for these large consultancies, and how do they work?

The large, international consultancies have experienced a rapid expansion in the past years. The leaders among them have increased their revenues by 20-30% annually as compared with an overall increase for the management consulting business at large of about 10% (The Economist, 1997:3). According to the same source there are large pressures pushing consulting companies towards ever larger size:

The pressures for size are formidable. To attract multinational clients, consultancies now need offices in the world's most important markets and expertise in a wide range of disciplines. To attract the right kind of recruits, they must be able to offer them a chance of a global career. To persuade clients to part with their money, they have to devote a lot of resources to selling. But above all, it is the need for speed and knowledge that shifted the balance decisively in favor of size. (The Economist, 1997:5)

The large company's resources as well as its potentially larger experience and knowledge are also praised by the companies themselves as a major strength, like in the below quotation from Andersen Consulting's 1997 annual report:

Because of their experience and access to knowledge capital from all over the world, the firm's professionals can take a broad view across multiple industries and help their clients choose the best strategic options.

(http://www.ac.com/overview/annual97/over_ann97/strategy.html, 23.7.98)

In order to live up to these claims of superior knowledge, these companies invest vast sums in the development and dissemination of knowledge. AT Kearney spends \$ 60-70 millions a year on centers of excellence focusing on the development of knowledge around different themes. McKinsey invests \$ 40 millions a year on formal training alone, not to mention the money spent on knowledge development, and Andersen Consulting spends 10% of its revenues on training in its own, corporate university (The Economist, 1997:10-17).

Large parts of the activities of knowledge generation and transfer are in some way linked to methods – standardized approaches and checklists for how to carry out a specific activity. As described in the introductory case, they are ever present in the management consultant's work life. Methods provide a point of departure and aid for the consultant's design of the change process and its activities. They are used to facilitate the communication with the client, and work as an efficient code in the communication with fellow consultants. They also support the creation, storage and dissemination of knowledge, etc.

Against this background, it can be argued that methods underpin the large, multinational consulting organization. Without methods, this type of organization would probably not exist. Tisdall (1982) tells the story of Bedaux and his consulting business, which grew to a large, worldwide consulting organization as early as the 1920s. This business was based on a concept and method for work evaluation that made it possible to recruit and train hundreds of consultants who operated in many companies and countries simultaneously.

Also the innovation of hiring junior consultants directly from universities, that the English consulting firm PE-Consulting contributed to the consulting industry in the 1940s, was based on the existence of methods. The concepts and toolbox of scientific management made it possible to train and make productive inexperienced but bright individuals. Furthermore, McKenna (1995) attributes the survival and growth of one of today's most well-reputed consultancies, McKinsey, to the existence of a standardized approach:

...McKinsey's greatest contribution to the institutionalization of his firm was the "general survey outline" which he drafted in December 1931, to give a young, inexperienced consultant a model to follow when, as McKinsey specified, they were asked to prepare a complete study of a company that was in financial difficulties. (McKenna, 1995:56)

In today's large, successful management consulting companies methods are a backbone of the knowledge system, as illustrated by Andersen Consulting's approach to thought leadership:

The strength of Andersen Consulting's global capability with enterprise resource planning is embodied in the wide breadth of methodologies and tools offered to assist our clients with their implementations as part of our approach to help organizations align technology, people and process with strategy.

Andersen Consulting has developed processes and tools that provide a high quality, cost-effective means to plan, design and implement solutions for clients. Our Enterprise Business Solution Centers continuously refine these tools and have tailored an implementation methodology specific to each enterprise resource planning product. Deliverable templates and standards are available to jump-start client projects. ([Http://www.ac.com/services/entsol/ents_thought.html](http://www.ac.com/services/entsol/ents_thought.html), 21.7.98)

This clearly shows the importance of standardized methods in Andersen Consulting's activities related to knowledge creation, storage and dissemination, i.e. the activities handling the consulting companies key resource – knowledge.

Being a part of Andersen's commercial presentation, the description of "Thought Leadership" also reflects the belief in formalized methods by the consumers of consulting services, i.e. managers. Managers' consumption of management methods has increased over time (Pascale, 1990) and is today widespread (Rigby, 1994; 1998). Managers' belief in these methods as a way

towards improved management practice is continuously enforced by the management literature. Huczynski (1993) identifies the possibility of “practical application” of a management idea as a recurring characteristic and an important explanatory factor for the success of these ideas. A practical illustration of this belief in methods is given in the introduction to one of the best-selling management books during the 90s – Hammer and Champy’s (1993) “Reengineering the corporation”:

In this book we demonstrate how existing corporations *can* reinvent themselves. We call the techniques they can use to accomplish this *business reengineering*, and it is to the next revolution of business what the specialization of labor was to the last. America’s largest corporations – even the most successful and promising among them – must embrace and apply the principles of business reengineering, or they will eclipse by the greater success of those companies that do. (Hammer and Champy, 1993:2)

The authors of this best-seller thus define the choice between prosperity and bankruptcy as an issue of applying a certain set of techniques – in this case the techniques of Business Process Reengineering (BPR). This seeming belief in methods among managers buying consulting services is another force encouraging consulting companies to develop and maintain detailed methods (c.f. Furusten, 1995).

Methods thus play a central role in the work of large consulting companies, as well as in the work and minds of managers. An assumption underlying all these beliefs in methods is that they are actually applied in practice; that they are to some extent followed. Without this underlying assumption, methods would not be able to facilitate communication, support the creation and storage of knowledge, or provide an easy start for the junior consultant. But it is exactly this assumption that has been strongly questioned both by consultants themselves as well as by researchers studying the activities of consultants and other change agents.

Tisdall (1982) in her study of the British management consulting industry concludes that:

Management consultants regard techniques or ‘approaches’ as having a valuable role in helping businesses help themselves. But any idea of a universal solution has been largely discredited in the current pragmatic business environment. It is well recognized that concepts, no matter how elegant, must be adapted to the particular needs and resources of the moment, just as the computer system, or advanced technologies (p. 116)

Similarly, in studies of the application of standardized methods in change processes, Berg (1981), Pettigrew (1985), Riesling (1988), Stolterman (1991), Fristedt (1995) and Alvesson (1993) all found a large discrepancy between the change agent’s actions in practice and that prescribed by the standardized

method in use. In all cases it was pointed out, that a direct application of the method was not possible in the specific case.

But given this problem of application, can we still believe in the potential of methods in fulfilling the above-mentioned roles of enabling the large consulting organization and guiding the actions of both consultants and managers in the change process? Do we have to search for alternative explanations for the popularity of methods and the amount of resources deployed in the production of methods? A number of such alternative explanations exist focusing on the method's role as a symbol in addition to being a container for functional knowledge. Alvesson (1993) spells out five such roles for formalized knowledge and "knowledge talk", of which methods are an example, in knowledge intensive firms:

- a) a means for creating community and social identity through offering organizational members a shared language and promoting their self esteem
- b) a resource for persuasion in, for example, PR work and interactions with customers
- c) providing the company with a profile (and intended image targeted at the market)
- d) creating legitimacy and good faith regarding actions and outcomes
- e) obscuring uncertainty and counteracting reflection. (Alvesson, 1993:1011)

This set of roles gives a somewhat different picture of the consulting companies' investments into formalized methods and the motives for and effects of these investments. The list also identifies a number of risks associated with the use of methods, such as point (e) indicating that methods might obscure uncertainty and counteract reflection. Hayes and Abernathy (1980) even go as far as explaining the decline of the entire US economy during the 70s by managers' preferences for general methodology rather than individual and specific experience:

...American managers have increasingly relied on principles which prize analytical detachment and methodological elegance over insight, based on experience, into the subtleties and complexities of strategic decisions. (Hayes and Abernathy, 1980:15)

This latter picture of the method thus questions the initial view of the contributions of methods, which is often presented in order to justify the large resources spent on them. But is this latter, more critical picture a more accurate picture than the previous one? Does it complement it or is it conflicting with it?

The above reveals a somewhat inconclusive picture as well as a lack of knowledge when it comes to understanding the commercially important phenomenon of methods in management consulting. But it is not only the knowledge of methods in management consulting that is scarce, but rather the

whole field of management consulting has been studied far less than justified by its economic and societal impact (Brulin, 1997; O'Shea and Madigan, 1997).

Against the above background, the research endeavor to be pursued in this thesis focuses on understanding:

The roles of methods in the work of management consultants.

I hope that this thesis can contribute to a more nuanced and deeper understanding of this phenomenon, the contours of which I have sketched out above. These contours will hopefully get increasingly clear and sharp during this journey, which is now to begin. In the next section, I will provide the itinerary for what is to come.

An outline of the thesis

Above, the scene for this study has been set and the overall question driving this research effort has been presented and motivated. After the following road map of the study, chapter one also contains a somewhat more precise description of the research object in terms of some initial definitions and delimitations of the key concepts in the problem formulation, i.e. "methods" and "management consulting".

In *chapter two* a first theoretical outline of the field of interest is presented. The focus of the chapter is to review the knowledge of the use of methods in the work of management consultants. As this phenomenon is found to be largely unstudied in the research literature, the review is broadened to literature on the use of methods in IT systems development as well as the work of management consultants in general. This broadened review provides a number of preliminary insights into the possible roles of methods in management consulting, but the overall, somewhat inconclusive picture sketched out above to a large extent remains.

This scarcity of knowledge of the use and roles of formalized methods in management consulting is taken as a motivation for broadening the search for relevant theory with which to underpin the present study. In *chapter three* the literature review is broadened to theories focusing on the use of formalized knowledge in practical action. In contrast to the question posed in chapter two, this is a classical problem that has stimulated the thoughts of scientists since the ancient Greeks. The chapter is concluded with the formulation of a tentative model identifying the mechanisms underlying the potential influence of formalized methods on consultants' actions.

Following the theoretical background, where one conclusion was a lack of knowledge of the roles of formalized methods in management consulting, a pilot study on the availability and use of methods in five large consulting

companies is presented. This study, presented in *chapter four* identifies roles of methods in three different areas – in the consultant’s work with the client in a project, in the individual consultant’s problem solving and in the knowledge system of the consulting company.

The empirical map of the terrain, together with the theoretical points of departure identified in chapters two and three, are a basis for the more detailed formulation of research questions presented in *chapter five*. Here the basic research design is also presented and motivated. Based on methods having roles in three quite separate areas, a research design consisting of three largely independent empirical studies is presented.

Chapters six through to nine report the findings from the three empirical studies. *Chapters six and seven* focus on the method’s roles in the consultant’s project work with the client. The empirical focus of the study is a Business Process Reengineering (BPR) project. Data were collected through observations during project group meetings as well as recurring interviews with the consultant and the project group members. The analysis in this study is carried out in two steps. As a first step (chapter six), the analysis focuses on the interplay between the consultant, the project group members and the method in the different phases of the project. As a second step of the analysis (chapter seven), the interaction between the consultant, the method and the client in realizing different key activities in the change process is analyzed.

The focus of the second empirical study reported in *chapter eight* is the individual consultant’s problem solving, and the method’s role in this process. The empirical focus of the study is the consultant’s behavior when designing a project proposal. This process was studied through a simulation, where a number of consultants were asked to sketch out a proposal for a standardized case. During the simulation, data on the collection of information, the consultant’s thinking (verbal protocols) and the proposed solutions were collected and analyzed. Against the background of this data, the conceptual model for the links between methods and consultants’ actions, which was presented in chapter three, is tested.

The third and last empirical study, which is reported in *chapter nine*, looks deeper into the roles of methods in the overall knowledge system of consultancies. The empirical focus of this study is somewhat more varying than in the preceding cases. The core is an in-depth study of a large project involving several consultants in one company. Recurring interviews with two of these consultants were carried out. This picture is complemented by data collected through interviews with consultants from other companies. A conceptual model for the roles of methods in consulting companies’ knowledge systems is presented as a conclusion in this chapter.

Finally, *chapter ten* contains a summary and discussion of the findings in the previous chapters. Based on the findings in the empirical studies, a reframing of methods towards seeing them as “language” is suggested. This metaphor is shown to capture a majority of the roles of methods in the work of management consultants identified in the preceding cases. Seeing methods as language is thus suggested as a more accurate conceptualization than the view of methods as guides for action, which dominates much of the current literature. The chapter concludes with suggestions for further research.

Some initial definitions and delimitations

In the above outline of this study, two key concepts were introduced without a closer definition or discussion. These were “management consulting” and “methods”. In the following I will pinpoint the meaning of these concepts in more detail. In this context, some initial delimitations of the study in terms of the empirical focus are also outlined.

Management consulting

Numerous definitions of the concept “Management Consulting” exist, and nearly every author in the field presents her own definition. Kyrö (1995) has made an ambitious effort to integrate these different definitions, and I will therefore in the following build on her research. In her effort to define management consulting, Kyrö pursues two parallel tracks – one which she calls “scientific”, investigating the concept of management consulting on the basis of existing academic theories and one that she calls “practical”, focusing on the definitions used by interest organizations for management consultancies as well as in the non-scientific literature. Based on this, two different integrating definitions are produced (Table 1.1)

The similarities between the two definitions in Table 1.1 are quite large, even if the “practical” definition is somewhat more precise than the “scientific”. Among the similarities, the following stand out as the central characteristics of “management consulting” and are regarded as the ingredients of this study’s definition of management consulting.

Management consulting as a support to management

Both definitions in Table 1.1 delimit management consulting as an activity with the aim of supporting management in its activities. This excludes such activities as the provision of narrow specialist or technical knowledge. It also excludes the type of consulting that is often referred to as “extra pair of hands” consulting, where consultants are hired to ease the workload of the personnel or the manager in the client organization.

Management consulting as a collective effort

Secondly, agreement between the two definitions in Table 1.1 exists around management consulting being an interaction between management/client personnel and consultant. The “practical” definition is especially clear on this point. Management consulting is not about the consultant solving the problem for the client, but rather about helping the client solve his own problem. This sets focus on the *process* of consulting and the consultant client interaction in this process. To some extent this excludes extreme expert consulting approaches in which the consultant unilaterally defines and solves the problem (Schein, 1988).

The concept of “client” has here been used in a broad and unspecific sense designating all representatives of the client company, thus ranging from management, who hired the consultant, via the employees involved in the work with the change process, to those merely being affected by it. For the moment, this is a sufficient specification. Further on in this study, the concept will be more thoroughly defined.

A scientific definition of management consulting	A practical definition of management consulting
In the process of management consulting, the management consultant helps the organization to solve its problems. The process is future oriented, intentional, and conscious on the part of both consultant and client. It is a change process with the need to succeed, collective by nature, and conducted in the interaction process between consultant and client using a diverse, integrative scientific knowledge base. Knowledge is needed both about the past and about the future to build up new reality. (Kyrö, 1995:154)	Management consulting is advising and assisting in the process of management in interaction with those with management responsibilities, focusing on improving the performance of the client organization and helping managers in identifying problems and opportunities, recommending practical action and assisting managers in implementing the recommendations. The future-oriented, integrative change process, intentional on the part of both parties, is based on diverse knowledge about the past and future behavior of the organization and the environment. (Kyrö, 1995:173)

Table 1.1. Two integrative definitions of “Management Consulting” (Kyrö, 1995)

Management consulting as a planned and future-oriented change

A third area of agreement concerning the nature of management consulting is that it focuses on planned, intentional, conscious change aiming at creating a better situation in the future, i.e. being future-oriented. Management consulting can thus be viewed as an instance of the tradition of planned change.

Goodman and Kurke (1982) describe planned change in the following way:

There is some a priori theory and methods that are brought to bear on some target (individual attitudes, organizational processes) in order to reach some goal (humanization of the work place, organizational efficiency). (Goodman and Kurke, 1982:4)

This highlights the characteristics of intentionality, consciousness and future orientation – the attainment of a defined goal is the main purpose of the planned change process. The above description of planned change also highlights the importance of formalized knowledge, i.e. theories and methods, in attaining the set goal. These are described as an integral part of the planned change process (Goodman and Kurke, 1982:9).

Management consulting as an integrative effort using a diverse set of knowledge

Finally, the definitions of management consulting agree on the fact it is difficult to narrowly define the knowledge base of consulting. Rather, it is described as based on a diverse set of knowledge, with a focus on integrating this diversity. The International Council of Management Consulting Institutes (ICMCI) defined the knowledge base of management in terms of knowledge of the economic environment, management activities and management processes (see Table 1.2).

Economic environment	Management activities	Management processes
<ul style="list-style-type: none"> • Economic • Legal • Political 	<ul style="list-style-type: none"> • Planning • Organizing • Leading • Controlling • Directing 	<ul style="list-style-type: none"> • Objective setting • Organizational analyzing and development • Budgeting and financial control • Motivation and people development • Use of management information systems • Performance measurement • Business development

Table 1.2. The knowledge base of Management (ICMCI, 1991, in Kyrö, 1995:167-168)

But the diversity and “fuzziness” of the knowledge needed in consulting does not, as was shown above, exclude theories and methods. Rather, according to the planned change tradition, they constitute an integral part of the knowledge base in management consulting.

Against this background, *management consulting* will in the present study be regarded as characterized by the following:

- *a support to management,*
- *a collective effort,*
- *a planned and future-oriented change, and*
- *an integrative effort using a diverse set of knowledge*

But this is not a sufficient characterization for this study. In order to accurately pinpoint the empirical focus of this study, the concept of “management consulting” has to be qualified further. A first missing aspect in the above definitions is the character of the provider of the management consulting service. A second aspect that demands some further specification is the actual content of the consulting process.

*Qualification 1 – type of management consulting company:
Large, “one-firm concept” organizations*

The focus of this thesis is a specific aspect of management consulting, namely the use of methods. Consequently, this study is empirically limited to instances of management consulting where methods are an important ingredient in the activities of management consultants.

In order to identify these instances, a categorization of different types of consulting companies in terms of their way of operating is needed. Looking at the management consulting business, three different kinds of consulting companies can be identified. Sole practitioners, consulting houses and “one-firm concept” organizations.

Sole practitioners mainly base their actions on their individual superior knowledge gained through extensive experience from practice or academic research. Their marketing is mainly based on their personal reputation.

Consulting houses gather experienced individuals under the roof of a single company, but integration between the individual consultants is low. The consultants are to a varying degree responsible for both recruiting and carrying out their own projects, and they are hired mainly on the basis of their personal reputation rather than as a result of the organization’s reputation. Every consultant has his own, individual, experience-based way of working, and junior consultants without experience are rarely recruited into these firms. The working field of these organizations is national at most. In larger, international assignments, partnerships with other similar consulting organizations in the relevant countries are sought.

Finally, in “*one-firm concept*” consulting firms, the focus is on the organization as such rather than on the individual consultant. The concept of these firms is to

be perceived as one firm all over the world. In these firms, extensive effort is put into the generation of organizational knowledge in terms of methods, knowledge databases, extensive training, etc. Rather than relying on his own experience, every consultant should be able to rely on the collective experience of the whole organization. These consulting organizations are mainly hired based on their company names. Work within them is also more divided than in the former type of companies. Senior consultants are responsible for marketing and the acquisition of clients, whereas junior consultants carry out the bulk of the work in the projects. This approach to management consulting requires a more unitary way of working, which is reflected in a widespread existence of methods for the consulting process. The recruitment of the “one-firm concept” consultancies is mainly focused on graduates from the top business and engineering schools. The operating field of these companies is national or international. The large, US-based management consultancies, such as McKinsey & Co., Andersen Consulting and BCG exemplify this category of management consulting firms.

Against this background, the main focus of this study is on the “one-firm concept” consultancies and especially the large representatives of this group. These consultancies are both the most frequent users of methods and those who work most consciously with these, both internally and externally. This thus qualifies the focus of this study to:

Management consultants in *large, “one-firm concept” consulting organizations*

Qualification 2 – Content of the change process: Business Process Reengineering

The potential area of management consulting is very broad, both in terms of content and ways of working. In order to ensure the comparability of different results within this study, and limit the potential domain of study somewhat, a delimitation was also made in terms of the content of the management consulting processes to be studied. The study focuses on the most popular management concept of the 90s, Business Process Reengineering (BPR). The reason for choosing this approach was its popularity at the start of the study in 1993. BPR was then spreading rapidly in the business community and most of the larger consulting companies created their own variants of the approach. McKinsey created “Core Process Reengineering”, Andersen Consulting “Value Driven Reengineering” and BCG elaborated on its “Time Based Management” concept (see also chapter four).

In the following I will very briefly present the basic ideas underlying the BPR concept. For a more comprehensive presentation, I refer the reader to the original literature such as Hammer and Champy (1993) and Davenport (1993)

representing the pioneers of BPR and Willoch (1994) for a Scandinavian version of these thoughts. For a more critical analysis of the concept, see e.g. Earl (1994; 1996), Mumford (1994), Vansina and Taillieu (1996) and Grint (1994). For a discussion of the problems when implementing BPR, see for example the special issue of the “Journal of Organizational Change Management” on BPR, (1998, 11:3).

The main rhetoric underlying BPR is that the ongoing change in the business environment towards higher turbulence, increased competition, more demanding customers and shorter product life cycles has made the traditional, functional, bureaucratic organization obsolete. In order to survive in the new, demanding environment, radically new ways of working, leading to radical improvements of performance are required. Incremental changes, such as those propagated by the continuous improvement idea in Total Quality Management (TQM), are no longer sufficient. Hammer and Champy (1993) in their seminal book on the concept define reengineering as:

...the fundamental rethinking and redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed. (Hammer and Champy, 1993:32)

Radical effects are to be obtained through a focus on cross-functional business processes, which are to be radically redesigned, using the possibilities of information technology as an important enabler. Based on the redesign of the processes, the rest of the organization, i.e. organization structure, technology and people, should be redesigned to support the smooth execution of the business processes. The goals of BPR projects are normally defined as requirements of process performance, and most often include some measures of time. “Leadership” is described as a key success factor both for the change process as well as for the reengineered organization, where leadership is to be changed from controlling to coaching (Hammer and Champy, 1993).

Since the introduction of BPR in the early 90s, a large number of methodologies for carrying out BPR projects have been created, mainly by consulting companies. Based on a study of 25 mostly proprietary methodologies, Kettinger, Teng and Guha (1997) formulate a generic project stage-activity framework for BPR processes consisting of 6 phases and 21 activities (Table 1.3). BPR methods thus follow a classic, linear problem-solving cycle beginning with a preparation (Envision and Initiate) followed by an analysis of the problem (Diagnose). Based on the diagnosis, a solution is then designed (Redesign) which is implemented (Reconstruct) and evaluated (Evaluate).

Envision	Initiate	Diagnose	Redesign	Reconstruct	Evaluate
1. Establish management commitment and vision	1. Inform Stakeholders	1. Document existing process	1. Define and analyze new process concepts	1. Reorganize	1. Evaluate process performance
2. Discover re-engineering opportunities	2. Organize Re-engineering teams	2. Analyze existing process	2. Prototype and detailed design of new process	2. Implement IS	2. Link to continuous improvement programs
3. Identify IT levers	3. Conduct Project planning		3. Design human resource structure	3. Train users	
4. Select process	4. Determine External Process Customer Requirements		4. Analyze and design IS	4. Process cut-over	

Table 1.3. A generic project stage-activity framework for the BPR process (Kettinger, Teng and Guha, 1997)

The work intensive activities of mapping and redesigning the process are to a large extent carried out by reengineering teams staffed by individuals active in the processes to be changed. These reengineering teams are often led by a consultant, who is described as “coaching” the team. In this role, the consultant contributes to both the content as well as the process in the work of the reengineering team. This places the role of the reengineering consultant somewhere in the middle of the content vs. process consultant continuum often used in describing consultant roles (Greiner and Metzger, 1983; Schein, 1988).

The role of top management is described as crucial in the reengineering process. Reengineering is described as a “top-down” change approach. Its top-down character is made necessary by its radical nature. Designing and implementing radical solutions is said to require the active involvement of top management.

Looking at the described BPR approach to change in the light of the criteria for management consulting spelled out above, a good fit can be observed. BPR is about the organization’s survival and thus clearly a management issue. It sees the change process as a collective effort engaging both the consultant and the client. The consultant is merely seen as a coach or leader of the process, engaging the client members in a joint activity of problem definition and problem solving. Furthermore, BPR is clearly a planned, conscious and future-oriented activity as reflected in the existence of a well specified approach to the change process, and it is integrative in the sense that it is based on a holistic view of the organization taking into account its processes, structures, people and technology.

Against this background, a further qualifier is to be added to the definition of management consulting as used in this thesis. The management consultants focused in this thesis are:

Management consultants in large, “One-firm concept” consulting organizations
working with BPR projects

Method

The concept “method” is, besides “management consulting”, the second central concept delineating the object of this study. In the following process of defining the concept “method”, I will focus on two overlapping aspects – its form and content. Starting with the method’s form, I will turn to the meaning of the concept as defined by the dictionary. “Method” is by the Oxford English Dictionary defined as:

Procedure for attaining an object..., in wider sense: A way of doing anything, esp. according to a defined and regular plan; a mode of procedure in any activity, business, etc.

The first sentence, “procedure for attaining an object”, implies that every consultant has a method, which directly steers their action, as they all have an approach to solve the problems they are confronted with. The qualification of the procedure as “according to a defined and regular plan” is therefore important, as it excludes procedures that are unsystematic and influenced by chance, i.e. procedures that lack a clear idea of the ends to be attained, as well as the means to be employed. The definition’s qualification “defined and regular plan” also indicates that these goals, as well as the means, should be possible to communicate. The method does not have to be written down, but it should be possible to write it down in terms of goals, means and the link between these.

In this specific case, I will add one qualification to the above description. An important aspect of methods in management consulting is the fact that several consultants share them. Consequently, an additional aspect of the method’s form is that it is shared with others within the organization.

Against this background, the following requirements for a method’s form can be formulated:

A method is a procedure for attaining a goal that is:

- *predefined and stable*
- *systematic*
- *conscious and written down (or possible to write down)*
- *shared within a consulting company (or parts of it)*

These characteristics are potentially applicable to methods of all kinds. The specific character of methods in consulting is instead defined by their content. In the following I will therefore sketch out a framework for viewing methods in management consulting. In this effort, I will start from Hatchuel and Weil’s (1995) description of the structure of management techniques. They describe management techniques as based on three elements – a technical substratum, a management philosophy, and a simplified view of organizational relations.

The *technical substratum* comprises the “tools” and techniques of the method, such as numerical models, computer models, analysis tools, etc. Most often these tools are general in the sense that they have their origin in other areas than management, e.g. in mathematics.

The *management philosophy* “consists of the system of concepts that refers to the objects and objectives at which rationalization is aimed” (Hatchuel and Weil, 1995:98). The management philosophy implies a definition of efficiency and specifies which variables and relations that can and should be manipulated in order to obtain increased efficiency.

Finally, the *simplified view of organizational relations* focuses on the actors defined and implied by the method. This element of the method defines the different roles in the change process in relation to the method. It answers questions such as who is to do what? Who is the expert? etc. The actors defined by the method can either exist in the organization today, or have to be created, such as the timekeeper in the scientific management approach.

Apart from the above, few definitions of methods in management consulting exist, and I will therefore complement the picture provided by Hatchuel and Weil with two definitions of methods in the context of IT systems development. A good point of departure is Avison and Fitzgerald's (1988) definition of "methodology" in systems development:

We define a methodology as a collection of *procedures, techniques, tools* and *documentation aids*, which will help the systems developers in their efforts to implement a new information system. It will consist of *phases*, themselves consisting of *sub-phases*, which will guide the systems developers in their choice of the techniques that might be appropriate at each stage of the project and also help them plan, manage, control and evaluate information systems projects. A methodology represents a way to develop information systems systematically. A methodology should have a sound *theoretical basis*... (Avison and Fitzgerald, 1988:8, my italics)

This describes the systems development method as consisting of procedures, techniques, tools, documentation aids, phases and sub-phases as well as a theoretical basis. Fristedt (1995) lists a similar set of characteristics, with some additions. He describes the content of systems development methods as:

1. guidelines for the analysis and design of an IS,
2. guidelines for carrying out the development work supporting the systems developer in deciding what questions to ask, what aspects to focus on, which solution to design as well as which criteria to use in evaluating the system and
3. a system for notation, as well as a set of concepts related to this.

Based on these three definitions of methods related to organizational change, a number of elements or aspects of methods were identified. Putting these together, a list of six elements of a method emerges. According to this a method contains:

1. A *value basis*, that represents a theoretical position, and from which the other elements of the method can derive their legitimacy.
2. A *management philosophy* defining the purpose and aim of the change process.

3. A *procedure* describing the change process in terms of phases and sub-phases.
4. A set of *tools* and *techniques* that support the fulfillment of the activities described in the procedure
5. A *language/* system of notation for the description of the organization and its solution.
6. A view of *organizational relations and actors* defining the roles in the change process.

These different aspects of the method are not independent. Their interrelations have already been indicated above, but are identified more clearly in Figure 1.1 below.

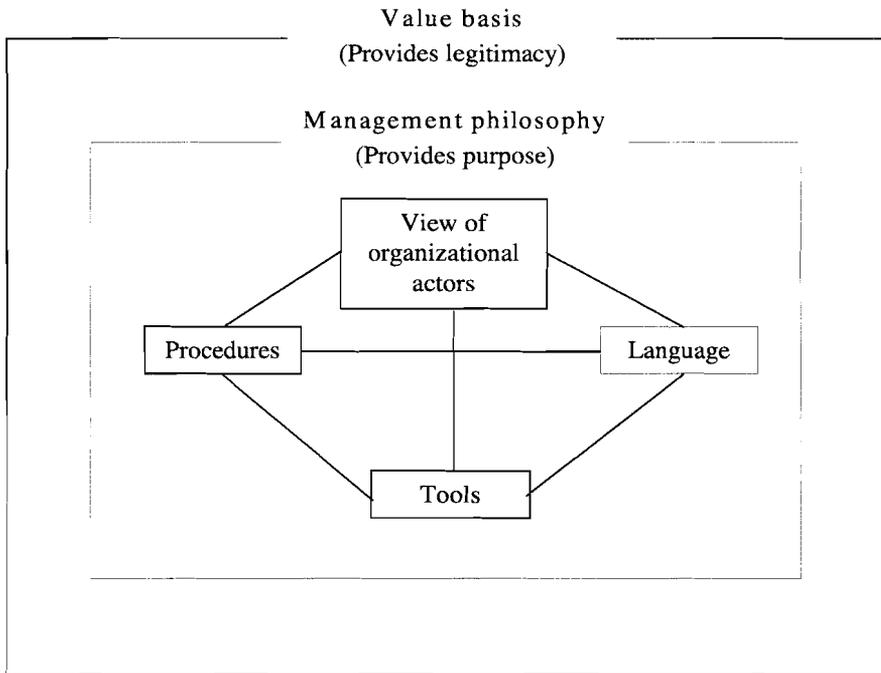


Figure 1.1. Elements of methods for organizational change

The central element in every planned change process is the vision of the future state aimed at by the change process. This is provided by the *management philosophy*, which defines the elements of the organization to be changed as well as the desired direction of this change. The management philosophy thus helps to determine how the organization looks today, what the problems in today's organization are and how they could be solved. The management philosophy also provides a view of how change can and should be accomplished. Hereby the management philosophy provides meaning and

purpose to the more operational elements of the method, i.e. procedures, view of organizational actors, language and tools. Only when linked to a philosophy, do the activities prescribed by e.g. a procedure become meaningful.

But in order for the management philosophy to gain legitimacy it has to be linked to some deeper theoretical position. This is here called the *value basis*, which presents a coherent and comprehensive theory of the world, including a value system that makes it possible to discriminate between good and bad.

In order to illustrate the above, the BPR approach will be taken as an example. The *management philosophy* underlying this approach takes its departure from the change of the environment, which makes the currently prevailing functional organization obsolete. Instead, it is argued, a new organizational principle is needed. This is found in the process organization. Hammer and Champy (1993) argue:

It is no longer necessary or desirable for companies to organize their work around Adam Smith's division of labor. Task-oriented jobs in today's world of customers, competition, and change are obsolete. Instead, companies must organize work around process. (Hammer and Champy, 1993:28)

The *value basis* underlying BPR can be described as economic, as the ultimate objective of BPR is the increase of organizations' efficiency in order to achieve competitive advantage. In striving for increased efficiency, humanistic values in terms of redundancies, etc. are neglected, which in some countries has rendered BPR a bad reputation among employees (Mumford, 1994).

The *procedure* describes, on a general level, which activities the change process should include, and which the prerequisites for, and results of the different activities are. In the example of BPR, Kettinger, Teng and Guha (1997) have synthesized a generic approach for BPR consisting of six phases and twenty different activities (see Table 1.3).

Tools are more specific aids than procedures and support the solving of concrete problems that arise in connection with the different activities specified by the procedure. Examples of tools within the BPR approach are different graphical and verbal techniques for mapping and measuring the processes in an organization.

The *language* provides a set of labels and notions (both graphical and verbal) that supports the procedures as well as the tools. The labels and notions economize and make more concise the communication between persons participating in the change process, i.e. following the specified procedure. Examples of such notions are "process", "lead times", and "process map" as well as the phases of the change process depicted in Table 1.3.

Finally, the *view of organizational relations and actors* specifies the roles in the change process, i.e. who does what and has which power. This element of the method contributes to the specification of the procedure. But the view of organizational relations and actors is also specified by the language, providing the terminology for describing the roles, as well as by the purpose and aim of the method, implying the winners and losers of the change process. In the example of BPR, a new organizational role is introduced, the process owner, responsible for the continuous improvement of “his” processes. To help in the reengineering work he has a reengineering team consisting of people involved in the processes in focus. The reengineering team carries out the bulk of the work in diagnosis and reengineering and can be supported by an external consultant. Top management, finally, is attributed a central role in BPR. Without the wholehearted support of management, no BPR effort is worthwhile (Hammer and Champy, 1993).

The four operational elements of the method described above are, as indicated, interdependent. The content of one element has consequences for the content of the others. A certain view of the organizational actors, e.g. as empowered individuals, puts specific demands on methods, tools and language. Given such a view of the employees, methods should prescribe participation, tools should be sufficiently simple to make this possible, and the language should be commonly available and understandable, in order not to lock out individuals from participating due to language problems.

The meaning of the concept “method” in the context of this study has thus been described in two ways – in relation to its form as well as its content. The “form” aspects of the method mainly fulfill the function of a definition, making it possible to determine what is a method and what is not. This is not the purpose of the description of the “content” summarized in Figure 1.1. Something may well be a method, even if it lacks some of the elements, such as tools. The identified elements serve the function of identifying crucial aspects of the method in order to provide an understanding of and language for the following investigation.

Summary – the research focus specified

The initially stated research focus has now been qualified in relation to its key concepts, methods and management consulting. The concept of management consulting was defined as having four main characteristics – being a support to management, being a collective effort, being planned and future-oriented, as well as requiring and integrating a large range of knowledge. The empirical focus of this study was further limited to a specific aspect of management

consulting, i.e. carried out by large, “one-firm concept” organizations, applying a BPR approach.

The meaning of the concept “method” in this study was approached from two perspectives – one concerning its form, the other concerning its content. In order for something to be a method, it was stated that it had to be predefined and stable, systematic, conscious and written down (or possible to write down) and shared within a consulting company (or parts of it). Furthermore, a framework for viewing and discussing the content of a method in management consulting was also outlined.

Based on the above, the research focus can be specified as depicted in Figure 1.2 below.

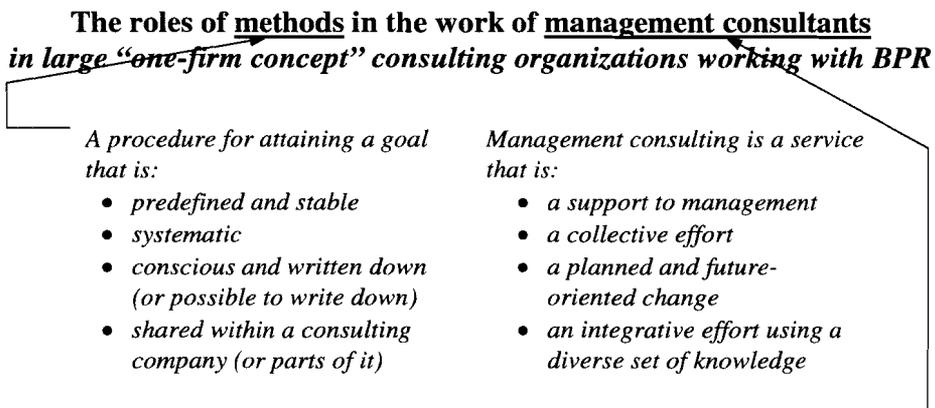


Figure 1.2. The research focus delimited

Chapter Two

What is known of methods in management consulting?

As established in the previous chapter, the focus of this study is the empirical phenomenon of the role of methods in the work of management consultants. As a basis for the following investigation, the current chapter reviews the literature in this field in order to present the current state of knowledge.

Methods in management consulting are a largely unstudied phenomenon. Surprisingly few studies exist on the actions of management consultants, and even fewer treat the use of methods in the consulting process.¹ The below review will be extended beyond the core question of methods in management consulting into neighboring domains, in which some tentative knowledge can be found.

The phenomenon of methods in management consulting is most prevailing in what can be called the normative consulting literature, i.e. literature written for consultants, often by consultants. Consequently the review is started in this area. However, this investigation ends up with more questions than answers, revealing a quite paradoxical view of methods. On the one hand they are presented as guides for action, on the other hand successful consulting is described as experience-based, intuitive and flexible.

Against this background, the literature review is extended to two related issues. The first concerns the use of methods within IT-systems development, where the use of methods has been studied more extensively. This review reveals a large belief in the potential of methods, but also a very limited direct use of methods in practice. The second issue focuses on management consulting and the empirically based efforts to understand the nature and origin of consultant's actions. The main conclusion from this literature is the experience-based and intuitive character of the consulting process.

¹ In focusing on the work of (management) consultants, I neglect the literature on methods and management fads more generally (e.g. Furusten, 1995; Huczynski, 1993). Studies on the relation between management fads and methods, and managers are included in this review only if this relation is mediated by consultants.

Finally, the findings from these three reviews are summarized in a number of recurring themes. The chapter concludes with an elaboration of the need for further research.

An ambivalent view in the normative consulting literature

Management consulting is generally viewed as a rational problem solving process involving structured methods as a natural element. Against this background, it is not surprising that methods for the consulting process play an important role in the normative consulting literature, i.e. the literature that is aimed towards consultants and often written by consultants.

Most handbooks for consultants provide a set of structured methods and models in order to support the consulting process (e.g. Greiner and Metzger, 1983; Gallessich, 1983; Golembiewski, 1993; Kubr, 1982; European Innovation Programme, 1995; Schein, 1988). In addition to these books, there is a vast practically-oriented literature providing methods for different specific change concepts such as TQM or BPR. This literature is often referenced in the consulting literature as a source of complementary knowledge.

The recurring view in this practically-oriented literature is that methods provide valuable knowledge for consultants who want to improve their practice. Knowledge of methods for the consulting process is generally seen as a prerequisite for more successful consultation. In the introduction to “The European Handbook of Management Consultancy” (European Innovation Programme, 1995) the purpose of the book is described in the following way:

This book [...] attempts to bring the relevant techniques together into a structured unit to assist the consultant in executing the consultancy assignment more efficiently. (European Innovation Programme, 1995:xviii)

But to some extent, most of this practically-oriented literature also acknowledges the existence of a kind of knowledge and expertise that is different from formalized methods, that is more intuitive, experience-based and thus tightly linked to the individual consultant. This kind of knowledge is viewed as complementary to the formalized methods. Golembiewski (1993) illustrates this standpoint very well in the introduction to his 800-page “Handbook of Organizational Consultation”:

It remains true, that a consultant’s best instrument is her or his “*warm body*” – which provides data about the surrounding world, and about the reactions of people to that world as well as to the consultant. Increasingly, however, our knowledge of consulting grows, requiring a mental storage system well stocked with ideas, *approaches*, *research findings*, and ethical guides. (Golembiewski, 1993:v, my italics)

This indicates that consulting is about both the individual and her “warm body” as well as about formalized knowledge in the form of approaches and research findings. In weighing these two elements against each other with respect to their importance for the consulting process, the individual and experience-based elements normally “win”. Golembiewski goes on to claim:

The art of consultation implies applying ethical value sensibilities in blending what we know scientifically; such knowledge is never complete, nor will it ever provide cookbook directions for consultation. (Golembiewski, 1993:v)

This thus indicates that the personal, experience-based expertise of the consultant, described as “ethical value sensibilities” by Golembiewski, dominates over formalized methods, represented here by “scientific knowledge”, as the expertise is needed for the method’s application.

Here the paradox identified in chapter one appears again. On the one hand the literature reflects a strong belief in the ability of methods to guide the consultant’s behavior towards more efficient action. On the other hand, consulting is described as an “art” thus leaving only a limited role for formalized knowledge. Greiner and Metzger’s (1983) view of consulting as first and foremost “a human enterprise” can further illustrate the paradox:

Consulting is a human enterprise. Whether the specific problem being addressed by the consultant is a new accounting system, or the need for strategic planning, the essence of consulting still centers on the human qualities of consultants interacting with human clients. (Greiner and Metzger, 1983:28)

Still, their book contains an entire section on “Models and methods”. These are described as “a conceptual and pragmatic framework within which to address the most common types of consulting projects” (Greiner and Metzger 1983:89). Here again, the view appears, that methods can actually be used in order to improve practice, at the same time as management consulting is described as a mainly interpersonal activity which only to a limited degree can be supported by formalized problem-solving knowledge. This somewhat ambivalent view on the nature of the knowledge critical in management consulting is also reflected in the requirements of admittance to the professional organizations in the consulting industry. These mostly require both formal education as well as experience, even if Kyrö (1995:209) observed a tendency of experience to gradually replace formal education.

To summarize, the treatment of methods in the practically-oriented consulting literature is somewhat paradoxical. On the one hand methods are viewed as unproblematic guides for the consultant’s action, with a potential to improve this action. On the other hand, the characterization of the consulting process as an “art” or a “human enterprise” introduces some doubts as to the roles of methods. Furthermore, in some of the literature it is claimed that methods need

some kind of experience or special knowledge to be used. Against this background, Kubr (1982:8) characterizes the consultant as a link between theory and practice helping managers in the application of managerial methods and techniques.

The practically-oriented consulting literature thus generates more questions than answers with regard to the roles of methods in management consulting. The basic view conveyed in the literature is that methods provide knowledge that can lead to improved practice, but in what way this takes place is unclear.

Against this background, I will in the following broaden the literature search on the roles of methods in management consulting in two directions. Firstly, I loosen on the restriction of “management consulting”, thus searching for efforts to understand the use of methods in neighboring fields. One such field, in which methods have been extensively studied, is IT systems development. Secondly, I loosen on the restriction of “methods”, and focus on the literature increasing our insights into consulting and its activities. Consulting is here seen in a broad sense, including both management and IT consulting.

Methods in action – lessons from IT systems development

Formalized methods are an important phenomenon in the domain of IT systems development, and as such they have received some attention in research. Most of this research has focused on evaluating these methods in order to improve them, but a small yet increasing number of studies have focused on the actual use of methods in practice. These studies are the focus of the following section, as they add to our understanding of the possibilities and limitations of methods in action.

A large belief in methods...

Methods have a prevailing position in the field of IT systems development. Since the 1960s, when structured methods were introduced in systems development, hundreds of different methods have emerged. The belief in the ability of methods to improve the process as well as the results of systems development is large. Structured methods were introduced with the promise of faster and cheaper development processes producing products adapted to customers' needs as well as being easy to maintain (Fitzgerald, 1996). Methods were viewed as a way to create orderly processes that could be managed. By being a reflection of best practice, methods were also viewed as a way of continuously taking into account what had been learnt from earlier projects (Sumner and Sitek, 1986).

In most of the literature on methods in systems development, structured methods are seen as the solution to all kinds of problems in the development process as well as its results:

The literature has traditionally viewed them [methods] as axiomatically appropriate to improving both the process and product of systems development, with their use being typically seen as valuable. (Fitzgerald, 1998:317)

This strong belief in methods reflects a view where methods are seen as knowledge directly applicable in action. Methods are seen as representing knowledge of the “best” way of carrying out a development project, and the more closely methods are followed the larger the chances of success will be. Ideally, methods should be followed “rigorously and in totality” (Fitzgerald, 1997:201). This highly rational view of the systems development process and the ability of methods to support this is well illustrated by Necco et al. (1987), who view a lack of structured methods as a major problem:

...there is a need to formally describe the current process to develop CBIS [Computer Based Information Systems] in an organization, identify and evaluate alternative approaches to develop CBIS, plan for the improvement of the process to develop CBIS in the organization and review the results being achieved to modify the plan accordingly. Unfortunately, the development of CBIS in many organizations today appears to be more of an art than a science... (Necco et al., 1987:474)

The benefits attributed to the use of structured methods in this tradition are numerous, ranging from a structuring of the process for better manageability, to supporting the client’s formulation of her needs. Fitzgerald (1996; 1998) lists a number of potential advantages of methods, that underpin the large belief in their potential and that are reproduced in much of the systems development literature:

1. *Conceptualizing development processes as rational and scientific:* Methods support the handling of the complex problem of systems development by subdividing the activity into a number of well-defined phases. The process is thus conceptualized as linear and rational.
2. *Facilitating project management and control:* Through the conceptualization of the process as phased, it is made amenable to project management and control. The different phases make possible a follow up of the process, as a review of progress becomes a natural activity at the end of each phase. Hereby, the method also reduces uncertainty among developers.
3. *Providing a framework of activities:* Methods provide a taxonomy of the activities necessary in the development process. This supports the elimination of redundant and irrational activities, and reduces the risk of oversight of the necessary activities.

4. *Enabling division of labor*: The structuring of the development process into a number of activities and phases also makes possible a division of labor. This opens up for the differentiation of pay rates for activities requiring different skill levels.
5. *Systematization of knowledge*: Methods are a way of turning the knowledge of an individual into “objective” knowledge controlled by the organization. This reduces the organization’s dependence on individual actors and supports the storage and exchange of knowledge. It also shortens the learning curve of less skilled developers.
6. *Standardizing the development process*: Through its ability to provide knowledge of how to carry out the development process, methods support the standardization of this process thus facilitating the interchangeability of developers.

Sumner and Sitek (1986) furthermore regard a structured method as an important support for achieving a better understanding of the client’s needs – an important success factor in systems development. By providing techniques for mapping for example information flows, the method is claimed to support the client’s formulation as well as communication of his needs. According to ter Hofstede and van der Weide (1992) the formalization of an approach into a formalized method also reduces the ambiguity of concepts used, thus facilitating effective communication.

Similar contributions of structured methods in systems development were found among practicing systems developers in two empirical studies by Fristedt (1995) and Stolterman (1991) respectively, where systems developers’ views of and use of methods was investigated through interviews. In these studies, methods were generally seen as helpful by the systems developers. Their main contribution to the process was viewed to be the structuring of the process, which helps the systems developers to focus on the right activities and solve the right problems (Fristedt, 1995). The structuring role of the methods was also viewed as helpful, when it comes to administration and resource allocation in the projects (Fristedt, 1995; Stolterman, 1991). Methods also enable reviewing the results of the process (Fristedt, 1995). The structure provided by the method not only supports the internal work of the developer, but also his interaction with the future users of the system. The common set of notions, as well as the structured approach, facilitates the participation of the system users in the development process as well as the communication between developer and future users (ibid.).

All the above contributions of methods are summarized by Wastell (1996) into two broad functions of methods. Firstly, methods structure the process in order to support control and management of the development process. Secondly,

methods support the systems developer in her problem-solving process. Both these broad functions presuppose a more or less detailed following of methods in action.

... but a limited direct use in practice

In spite of the almost axiomatic positive view of methods, their use in practice has in numerous empirical studies been shown to be limited (Fitzgerald, 1996; 1997; 1998; Fristedt, 1995; Hardy et al., 1995; Leonard-Barton, 1987; Sauer and Lau, 1997; Stolterman, 1991; Sumner and Sitek, 1986). Although their potential users most often acknowledge the benefits of methods as listed in the previous section, the provided methods are not observed to be widely used in practice. In those cases in which systems developers reported to use a structured method, this was mostly not used as propagated above – in a rigorous and comprehensive way. Rather, when used, methods were adapted to a specific situation. Fitzgerald (1998) concludes in his survey-based study on the use of methods in systems development that

...methodologies are not seen as a panacea for problems in systems development. Even those using methodologies rank them low in terms of their contribution to successful development....

Methodologies are neither applied rigorously, nor uniformly, even when training in their use has been provided. This divergence in the development process in organizations purporting to use the same methodology lends support to the view that a unique methodology-in-action is created for each development project. Methodologies are not applied in the same way by developers. Indeed, they are probably not used in the same way by the same developer on different development projects. (Fitzgerald, 1998:326)

Similar patterns of the use of methods emerged in Stolterman's (1991) and Fristedt's (1995) more qualitative studies reporting a less active use of methods than would be expected from the developers' mainly positive attitudes towards methods. Stolterman found, that unlike as prescribed by the step-by-step problem-solving process of the method, the systems developers formed first ideas of solutions very early in the diagnostic process, rather than waiting until this was completed, and all the relevant information was available. These early ideas of solutions were then regarded as guiding the following analysis process, which was described as verifying and adjusting the initial solution, rather than actually designing this solution (c.f. Rhenman, 1968).

More generally, systems developers in both Stolterman's (1991) and Fristedt's (1995) studies viewed the rigid following of the method as a risk to the project's success. Instead, the adaptation of methods to the specific situation and the systems developers' preferences was viewed as a key success factor (see also Hardy et al., 1995). This activity of adaptation to a large extent

depended on the systems developer's "experience", as this helped the developer to know how to adapt the method. According to Hardy et al (1995), methods give little support to the important process of adaptation, thus leaving it up to the experience of the method user. This establishes the systems developers' "experience" as a key success factor in systems development (Stolterman, 1991; Fristedt, 1995). Consequently Stolterman (1991) characterizes the process of systems design as an intuitive, experience-based process.

The systems developer's limited use of methods is most often explained either by a lack of knowledge of methods and their advantages (Sumner and Sitek, 1986) or by resistance in the technology transfer process (Leonard-Barton, 1987; Kozar, 1989). In the case of resistance, the argument is that the costs for starting to work according to a structured method occur in the short run, whereas the advantages occur in the long run.

Whereas these explanations of the limited use of methods are based on the view that the introduction and use of methods is always desirable, a number of more critical explanations of the limited use of methods have emerged during the 90s. Fitzgerald (1996) lists the following arguments against the use of methods as possible explanations for their limited use.

1. *Generalization without adequate conceptual and empirical foundation:* A lack of rigor in the design and development of methods may lead to methods promising more than they can actually achieve.
2. *Following methods takes time:* Following methods in detail can become an end rather than a means. Rather than shortening the development process and increasing its efficiency, methods prolong the process and increase its costs as developers put more effort into following methods than the actual development work.
3. *Unrealistic conceptualization of the development process as rational:* Observations of the design process indicate that it seldom follows a linear process, but rather is an iterative and less orderly process. This may lead to a perception of methods as less helpful in supporting the design process.
4. *Assumptions of universal applicability:* Methods risk introducing a false perception of rigor into the development process. Such an idealized view of the process omits the fact that individual learning originates from failure and may thus hamper learning.
5. *Omits developer-embodied factors:* As noted above, an inherent goal of methods is to reduce the influence of "artistry". But several studies of the success factors in development projects have identified characteristics of the individual designer as central for success.

These arguments question methods from two different directions. Firstly, the validity of the knowledge represented by methods can be questioned. As the development of methods is not always as rigorous as may be desired, methods may not always represent the best way of developing systems. This thus calls for more rigorous procedures in method development in order to increase method use. Secondly, the conceptualization of the development process underlying methods is questioned. Viewing the development process as a rational, linear process may, it is argued, be a misconception of its character. As the view of systems development as a rational process is an assumption underlying the general idea of methods (see e.g. Schön, 1983) this is a somewhat more severe problem, which questions the legitimacy of methods altogether.

Against the background of these potential flaws of methods, their limited and selective use may, rather than being a problem, be a conscious and well thought through decision as argued by Fitzgerald (1997):

...methodology non-usage was not treated lightly or in an arbitrary fashion, and certainly ignorance was not a factor, as has been suggested in the literature [...]. There was a high level of pragmatic consideration given to the matter, and the need to be adaptive depending on the contingencies of the specific situation was widely recognized. (Fitzgerald, 1997:205)

This questions the axiomatic view of the positive effects of methods on the development process. It indicates that the rigid following of methods rather than solving problems may produce problems. Wastell (1996) found a number of counter productive effects in a detailed case study of the implementation of a method. In the case, the method was followed rigidly, which led to increased costs and reduced communication with users. Against this background, Wastell (1996) concludes that:

Claims for the efficacy of methodologies are typically based on scant critical evidence of whether and how these methods work in practice; they seem to have more of the qualities of religious convictions than scientific truths. (Wastell, 1996:30)

This indicates a need for further research into the detailed use of methods in practice, as many of the above listed positive effects of methods are not based on empirical studies of method users' practices. Further research is also legitimated by the findings from the limited existing studies, which indicate that the use of methods may actually be harmful to practice.

Understanding consultants' actions – some hints from research on consulting²

After having reviewed the practically oriented consulting literature on methods as well as the literature on methods in IT systems development, I will now turn to the second extension of the literature review, focusing on understanding the actions of consultants. The rationale underlying this focus is the axiomatic assumption underlying methods, that they contribute to practice by guiding practitioners' actions. As focused studies of the use of methods in management consulting are lacking, I hope to be able to draw some conclusions about this from studies contributing to our understanding of consultants' actions more generally. In this section I will mainly focus on empirical studies of consulting, thus neglecting the more practitioner-oriented literature dealt with in the beginning of this chapter.

Empirically-grounded efforts to understand, or even explain the actions of consultants, are rare. This is clearly surprising, given the phenomenon's already large and growing commercial importance (O'Shea and Madigan, 1997). Still, some research has been carried out, which will be reviewed in the following. The empirically-based efforts to understand consulting activities have taken a number of different points of departure. One way of structuring these studies is according to their empirical focus. Three different foci can be identified:

1. *Consulting as a problem solving activity:* The studies in this category focus on understanding the experienced consultant's problem solving process and the knowledge involved in the process in order to be able to transfer this knowledge to less experienced consultants.
2. *Consulting as joint reality construction:* These studies aim at understanding consultants' actions in relation to the client system in order to establish the basic nature of the consulting process. These studies question the view of the consulting process as a problem solving process and instead describe it as a process of reality creation.
3. *Consulting as an organizational effort:* These studies view consulting from the perspective of the consulting company at large. Consulting companies in these studies are generally regarded as interesting examples of knowledge intensive firms (KIF's) and are not studied for their own sake.

² In the following review, I will not focus rigidly on management consultants, but broaden the focus to other kinds of consultants, mainly IT consultants. As has been argued in Werr, Stjernberg and Docherty (1997) the border between these two types of consultants is hard to maintain, as a trend of convergence between the two can be observed.

The points of departure, as well as the major conclusions, in relation to understanding the actions of management consultants will be elaborated below. The categorization of the studies is not always clear-cut. The observant reader will thus find some studies appearing in several categories.

Consulting as an individual problem solving activity

The stream of research summarized under this heading focuses mainly on the content and character of the consultant's problem solving activities as well as the knowledge involved in it. Underlying most of these studies is a desire to identify the logic of the organization design process carried out by experienced consultants to improve the general knowledge of how to carry out a successful organizational diagnosis in practice.

Rhenman's (1968) and Karlsson's (1975) studies of consultants' problem solving behavior represent a first example of this stream of research. Both study experienced consultants' organization design processes through simulations, where consultants were confronted with a case, based on which they were to produce a draft of an organizational structure. The consultants' thoughts, comments and motivations during the simulation process were recorded and provided the basis for the analysis.

From the perspective of this thesis the conclusions from the two studies of the character of the problem solving process and its determinants are interesting. Karlsson (1975) explicitly delimited his study to the content of the design process, thus neglecting the problem-solving process, but Rhenman (1968) made some efforts to understand the characteristics of the actual problem solving process. He describes the problem solving process as mainly intuitive, which is reflected in the consultants' inability to account for the rationale underlying their choices. The problem solving process, it is claimed, is badly understood as a sequential analytical process, in which different means to an end are first identified, and then weighed against each other in order to choose the most effective one. Instead, the process is described as iterative and driven by hypotheses:

The organization designer does not first exclusively focus on an analysis of the situation in order to then "calculate" some kind of solution. Instead he iterates between a study of the situation and reflections about the organization plan. Hypotheses of solutions are formed and often lead him back to the description of the situation. The proposed solution "poses questions". (Rhenman, 1968:154, translated from Swedish)

In formulating these hypotheses, as well as testing them, the consultant's "experience" is described as a key factor. This experience influences the consultant's focus of interest, provides norms for the evaluation of different alternatives, suggests solutions to identified sub-problems and thereby makes

possible shortcuts in the problem solving process. All this takes place mainly as an intuitive process.

Risling (1987, 1988), in his action research-based study of management consulting further contributes to our understanding of the knowledge involved in management consulting. The purpose of Risling's study is to formulate a theory of consultation that is helpful to the practitioner. In his study, he found,

...that a completed consultation can be legitimated by organization theory. On the other hand, organization theory cannot dictate practical activity, it cannot justify daily practical conclusions. Instead the correctness of these depends on subtle nuances and speedy intuitive decisions. (Risling, 1988:168)

Again, it is found that the practical use of abstract knowledge – in this case organization theory – is problematic, and that practical action to a large extent is dependent on intuitive decision making. Still, methods were found to play an important role in some consultants' practice. Based on a division of consulting into three levels of abstraction – theory of the organization, methods and models over the consultation process and the substantive events in the practical consulting activity – Risling (1988) claims that

...this study shows that consultants often give priority to method over theory and practice. The consultant has then obtained a model or an application to which the participants have to adapt and according to which data is strictly analyzed. (Risling, 1988:169)

Risling is highly negative to this sort of practice which is rigidly determined by the consultant's abstract models. According to Risling, conscious consultation, which in his study designates "good consultation", is about combining theory, method and practice rather than giving one of these elements priority over the others. This is an important point of departure for the alternative theory of consulting sketched out in Risling's study. This theory is based on a view of consulting as reality construction rather than, as in the cases above, mainly problem solving. Risling's alternative will be briefly elaborated in the next section.

Finally, the intuitive character of consultants' actions and the problems related to the direct following of methods are further confirmed by Brulin's (1987) interview study in a number of different Swedish consulting companies. He found that many consultants perceive the mass of management methods as unnecessary. They don't need all these concepts, they claim. What they regard as the essential knowledge base is instead "feeling, psychology, intuition and experience". Alvesson (1993) broadens this conclusion not only to consultants, but also to professional, knowledge intensive firms in general. In these he finds little evidence of the use of theoretical knowledge, of which methods are an example:

My impression is that, for example, psychology and management consultants often work with a broad set of different tasks. A greater part of their work has little to do with narrow expertise and more to do with experience in adapting to new situations. For consultants it is important to be (and to be perceived as) committed, persistent, able to cope with uncertainty and strain, to have interpersonal skills, to communicate, develop and maintain contacts, etc. Perhaps subjective orientations and person-bound talents such as these are more significant than formal knowledge and specialized work role experiences and skills in most consultancy organizations. (Alvesson, 1993:1005)

Consulting as joint reality construction

The second stream of research on consulting to be presented here focuses on studying and understanding the consultant's actions in relation to the client system, in which intervention takes place. The basic question to be answered is "what is the basic nature of the consulting intervention?" The motivation for posing this question in the literature is not primarily to improve consultants' practice, but to increase the understanding of the underlying character of the consulting process.

This strain of research is represented by a number of studies, based on varying methodological approaches ranging from interviews with consultants and clients (Czarniawska-Joerges, 1988b) to studies of reports produced in consulting projects (Bloomfield and Vurdubakis, 1994). A common point of departure for most of these studies is the questioning of the technical rationality underlying the traditional view of the consulting process. According to a technical rationality, the consultant is seen as a problem solver, presupposing the existence of a well-defined problem to be solved. Instead, in the tradition of research reviewed in this section, problems are rather seen as constructions manufactured by the client and the consultant in a joint process.

Thus, a constructivist perspective is used in these studies to understand the characteristics of the consulting process. Risling's (1987; 1988) study, which has already been mentioned above, is one example. Based on a claim that a technical, problem-solving view of consulting is unrealistic, given the difficulty of defining the problem in a complex reality, Risling instead suggests viewing consulting as reality creation. The main contribution of the consultant in this framework becomes the labeling and framing of the problem (Risling, 1987). Theoretical notions, as provided by methods, are important points of departure for the discussions with the client, in which a new version of reality is crafted.

Czarniawska-Joerges (1988b) in her interview-based study of management consultants in the public sector elaborates on this view. She identifies labeling and the classification of the client's situation as a key activity for the consultant. Metaphors, labels and platitudes are the building blocks, with which the problem situation in the client company is crafted – most often in cooperation

with the client. In this crafting process, the consultant's contribution is the linking of the available building blocks to the client's situation in a way that produces new insights. The consultant's intuition is described as an important skill in this activity. Against this background, Czarniawska-Joerges identifies the following possible contributions of management consultants: The consultant shows possibilities and motivates, determines the needs of the client, facilitates the formulation of the organization's own ideas, provides ideas and metaphors, creates turbulence, provides expert knowledge and leaves behind tools in the form of labels, metaphors and platitudes.

A constructivist approach to the understanding of the consulting intervention can also be found in other studies, e.g. Røvik (1992), Bloomfield and Vurdubakis (1994) and Bloomfield and Best (1992). Røvik in his study, again on the use of management consultants in the public sector, observed that the diagnosis provided by a consultant contributes to clarity by labeling the problem. This labeling reduces the complexity of the issue by focusing on a single aspect alone, but it was also observed to limit the potential solutions proposed. The consultant's construction of the organizational problem and its solution has also been illuminated in Bloomfield and Best's (1992) and Bloomfield and Vurdubakis' (1994) studies of IT consultants' practice. Bloomfield and Vurdubakis (1994) in their study of IT consultants' reports claim, that in these,

[t]he possibly disorderly problem of IT management is made tractable through the imposition of a textual order as embodied in the techniques of project management. (p. 468)

...

It [IT] becomes the means through which a calculating subject (management) can know, posit, and instrument organizational activities. Ideally such activities are to be controlled 'at a distance' – that is, without centralisation and the inflexibilities it entails, so as to ensure conformity with business objectives. (p. 469)

While the above-reviewed studies of consultants as reality creators depart from studies of the consulting process, and its artifacts (reports), another type of studies departs from the specific character of consulting services as being intangible and ambiguous both when it comes to the evaluation of consultants' actions as well as the results of these actions (Clark, 1995). Against the background of this lack of objective judging criteria, the consultants' management of the clients' impression of them and their actions becomes important. Consequently, Alvesson (1993) claims it is central for consultants, as for all knowledge intensive organizations, which are the focus of Alvesson's study, to *appear* knowledgeable. Therefore, Clark and Salaman (1996b) claim that the key knowledge in consulting is

...the consultants' ability to identify and manipulate the symbols of knowledge in the course of giving authoritative performances. This is achieved through the consultant telling strong stories. ... [T]he impact of consultants is dependent upon beliefs about them being able to offer something of value to clients. These beliefs are formulated not by an objectivistic and functionalist knowledge-base but by the manipulation of myths and symbols through language. (Clark and Salaman, 1996b:176)

This also highlights the importance of the consultant's social skills, as one way to reduce the uncertainty created by the intangibility of the consulting service is to create a trustful, friendship-like relation between consultant and client (Alvesson, 1992).

Much of the above-reported research sees managers as uncertain and insecure, thus creating the need for their reassurance through the consultant's activities of reality creation (Sturdy, 1997). But this is, according to Sturdy, an incomplete account of the logic of management consulting. Providing the clients with reassurance is just one of four dialectic processes going on between consultant and client. The *second* process is concerned with reinforcing the client's uncertainty, which is the other side of the reality construction process, as this not only defines, labels and delimits existing problems, but also elaborates on them, as well as creates new problems. It is this process, which accounts for the consultants' continued business. However, Sturdy observes, clients are not as vulnerable as the above may suggest. Today's managers are often skeptical towards consultants, and put increasing demands on them. This questioning of the consultants' expertise and authority constitutes the *third* process and points towards the fact that the consulting business in its turn is also stressful and uncertain for the consultant (see e.g. Alvesson, 1992; Orlikowski, 1988). The perceived security of consultants is just evidence of this underlying uncertainty and a way to handle this.

The consultants' efforts to handle this uncertainty finally triggers the *fourth* process, leading to a renewal of the client's uncertainty. In order to avoid the client's questioning, the consultants in their work with the client stick to conservative and risk adverse suggestions, aiming at serving the client what he wants in order to ensure future business. Both Brulin (1987) and Bloomfield and Vurdubakis (1994) found that consultants usually confirm rather than question their clients' perceptions and implicit theories. In these efforts to serve the client in order to reduce the stressful character of the consulting process, consultants developed and elaborated on concepts and methods, in turn creating uncertainty among their clients (c.f. the second process described above).

Summarizing the above with reference to what has been learned about the actions of consultants, a number of observations stand out. Firstly, the consulting process is again described as mainly intuitive. In this case, intuition

was about adapting available concepts to a client's reality in order to create a desirable (unambiguous and actable) picture of the problem situation. Secondly, even if methods in the process were not explicitly mentioned, it appeared that they provided the fuel for the reality creation process in the form of labels, metaphors, etc. Thirdly, attention was also drawn towards the uncertainty perceived by consultants in the client projects. This uncertainty circled around the client's short-term satisfaction with the project.

According to this view of consulting, the consulting process thus changes character from a problem solving process to a problem construction process. In this process, language plays an important role. A new language contributes to seeing things from new perspectives (Czarniawska-Joerges, 1988b). In the process of problem construction, political and practical skills become more important than "technical" knowledge and skills (Sturdy, 1997).

Consulting as an organizational effort

The third stream of research contributing to an understanding of management consultants' actions leaves the individual focus, which has been prevailing in the previously reported studies, and focuses instead on the organizational level. In this research, consulting companies are seen as interesting mainly as examples of knowledge intensive firms (Starbuck, 1992), which are seen as archetypes for the companies of the future.

Two studies will be presented in more depth as examples of this stream of research. The first study (Alvesson, 1992) focuses on a Swedish IT consulting company, Enator, and aims more generally at shedding light on a much talked about, but less well-understood phenomenon – knowledge intensive firms. The second study (Orlikowski, 1988) has a more precise focus. Taking the example of a large, US-based IT consulting firm tied to a "big six" accounting firm, referred to as "the Firm", Orlikowski tries to understand the consequences of the introduction of computerized tools into the production process of the IT consultants. As the company studied by Orlikowski relies heavily on a proprietary systems development method, this study is also revealing when it comes to understanding the role of methods in the consulting company.

The pictures given by these two studies to a large extent overlap. One central, common observation in both studies concerns the mechanisms of control. In both organizations, the organizational culture, or climate as Alvesson prefers to call it, is a central control mechanism. Alvesson observed that the climate in Enator was consciously used as a control mechanism. Values, norms, philosophy, etc. were consciously designed by management and clearly stated. The overall working style of individuals was thus influenced by the

organization, with the strategy setting some outer boundaries for which projects to accept. The culture played some role here in guiding day-to-day action:

... the organizational culture is viewed as the main frame of reference and a reservoir of feelings, meanings, social and emotional ties, which are reflected in the day-to-day project work. (Alvesson, 1992:211, translated from Swedish)

Similarly, in the organization studied by Orlikowski, a strong homogeneity between the different consultants' views of work related issues, as well as of their way of working in projects was observed. Control mechanisms were to a large extent unobtrusive, affecting the consultants' assumptions, beliefs, criteria and symbol systems. Orlikowski concludes that

...the nature of the consulting engagement prohibits excessive bureaucratic procedures and overt monitoring, so the coordination of consultants must be done unobtrusively, yet effectively. The Firm has established structures that control consultants by careful screening at recruitment, indoctrination, training and a personal stake in the Firm's financial success. (Orlikowski, 1988:421)

An important vehicle in creating and maintaining this common culture was in both organizations found to be different forms of education and training activities. Alvesson reports in some length on a project leader education for new consultants, which is said to be more about teaching the company philosophy than about providing an understanding of detailed approaches and tools. The education of new consultants is generally described in terms of socialization, and an important purpose is conveying the "company's style". All this supports the creation and enforcement of a common view of how business is done in the organization. Orlikowski observes a similar pattern. In the company studied by her, new consultants are put through an extensive introductory education followed by on-the-job training. The focus of this training is to teach and enforce the company's approach to systems development formalized in the method referred to as "Modus".

The culture was regarded as an important asset, as it made work predictable and, as especially claimed by Orlikowski, made the exchange of personnel between projects possible. In both studies however, some problems of this homogeneity in culture were identified. A central norm in the Enator culture was the norm to be positive, and to be careful when naming critique. Alvesson saw this as a risk, as it may lead to an unwillingness to identify problematic areas and to do something about them. Another identified problem was that the strong culture could make it difficult for the employees to objectively judge the psychological contract with their employer. The culture in the company emphasizes the positive aspects of the job, whereas the problematic aspects are downplayed. Orlikowski's concerns are not primarily with the content of the culture, but rather with the existence of a strong culture *per se*. She sees the risk

that a unified way of perceiving problems and approaching business hinders reflection, creativity and the creation of client-specific solutions.

A method called “Modus” played a central role in the organization studied by Orlikowski. This method, which contained both a philosophical orientation to the production process as well as processes and techniques, had a central role in both the creation and the maintenance of the culture. This method, developed as a formalization of experiences from projects, was by consultants described as their “bible”. Most consultants had internalized the method, making it second nature to them. They often had difficulties to distinguish between the method and their approach manifested in action. This pattern fits well with the conclusions in Stolterman’s (1991) and Fristedt’s (1995) studies.

The adherence to and internalization of the method in “the Firm” was obtained through several mechanisms. Firstly, the policy of “the Firm” was to exclusively hire junior consultants directly from the top universities. These persons had little or no experience of systems development work, which made them less likely to be critical towards the method. Secondly, there was a strong norm within the organization, enforced through both traditional and on-the-job training, supporting the adherence to the common method. Thirdly, the introduction of productivity tools, i.e. IT tools for the systems development process set physical restrictions on the consultants’ way of working, forcing them to follow the method (or inventing complicated ways of tricking it).

Against this background, the attitude towards methods in “the Firm” was largely positive. The method was seen as a key factor in the company’s success, providing a common view of the consulting process and a language for describing the process. A standardized approach was seen as facilitating knowledge transfer and quality control. Furthermore, it made possible the exchangeability of parts, making the organizational system more flexible, and reducing its dependence on individuals. Related to this was the concept of “leveraging” which was made possible by a standardized approach. Hereby, a large amount of the project work could be carried out by relatively inexpensive junior consultants, increasing profits for the significantly fewer senior consultants (c.f. the advantages of methods listed by Fitzgerald (1996; 1998) above).

Conclusions – Recurring themes

The effort to sketch out the state of knowledge of the roles of methods in management consulting has led me through a number of different empirical as well as theoretical fields. The investigation started with a review of the practically-oriented consulting literature, which revealed a view of methods relatively little reflected upon. In a search for deeper insights, the literature

search was subsequently broadened to two neighboring fields. The first was the field of methods in IT systems development, the second empirically-based efforts to understand the actions of consultants.

In spite of the diverse empirical, as well as theoretical, bases of the above-reviewed literature, there are a number of recurring themes. Even if they do not answer the question as to which roles methods play in management consulting these themes can help form expectations of the areas in which we can expect methods to play a role and what these roles may be. These themes can be summarized under the headings “methods improve practice”, “methods as a shared framework for action”, “successful action is more than methods” and “methods as construction resources”. These themes will be briefly described below.

Methods improve practice

A first recurring theme underlying the more practitioner-oriented literature on management consulting, as well as the view of methods in systems development, is an assumption that methods can support more efficient action. By following the steps of the method and applying the tools and techniques provided, the practitioner can act more efficiently, given that the method is based on a sound empirical and conceptual foundation. More specifically, methods in this context are regarded as helpful mainly in order to structure the process, support control, administration and resource allocation and help the consultant focus on “what is important”. The clear and explicit structure of the process provided by methods also makes it possible to continuously follow up the progress of the consulting or systems development project. Another advantage of the structure to the project provided by methods was the set of notions that followed with the structure, labeling different phases, activities, etc. These notions provided a shared means of communication to those involved in the process, which facilitated the client’s participation, as well as the communication between consultant and client.

Methods as a shared framework for action

Whereas the practically-oriented management consulting literature mainly treated methods as a support to the individual consultant, the studies of methods in IT development, as well as consulting companies more generally, indicated that the roles of methods may go beyond this support of the individual. Methods may be important enablers of the large consulting company and its potential advantages.

The roles linked to the workings of the large consulting company were indicated by Fitzgerald (1996; 1998) and well illustrated in the reviewed studies

of consulting companies. The main contribution of methods in this context was to support the creation and maintenance of a common perception of the consulting task and process among the organization's members. In the companies studied by Alvesson (1992) and Orlikowski (1988), the main control mechanisms were found to be unobtrusive, i.e. consisting of the organization's "culture". The common culture provided a shared way to perceive reality as well as a standardized structure for the work in individual projects. Homogeneity in these aspects was regarded as important for the success of these large companies, as it supported coordination, the interchangeability of consultants, and thereby made "leveraging" possible.

Formalized methods were found to play a central role in creating and reproducing the homogeneous culture within the organization. The method as a common way of working was spread through education and enforced in project work. For many consultants the method had become second nature – it had been deeply internalized.

Successful action is more than methods

The above roles of methods to a large extent picture the consulting and systems development processes as rational, linear and analytic problem solving processes that can be guided by methods. The underlying rationale is that methods provide instrumental knowledge for carrying out the process more efficiently. As argued above, this can be questioned based on empirical studies of the nature of both the consulting as well as the systems development processes.

A recurring theme in both the practical and the research-based consulting literature is that consultants' actions are to a large extent intuitive and guided by "experience" i.e. partly tacit knowledge, rather than analytical and guided by explicit, theoretical knowledge. This directs the focus away from methods to the consultant's intuition and "feel" for the situation. Methods are seen as useless for directly guiding action. A recurring theme in all the studies mentioning methods or other types of "theoretical" knowledge, was that these had to be adapted to the specific situation, which was made possible through the consultant's experiences. A rigid use of methods was associated with a number of risks as identified by Fitzgerald (1996). One risk was that the following of methods may become an end rather than a means, thus slowing down the process rather than increasing its efficiency. Furthermore, there was a risk that methods would convey a false conception of security to their users, making them less receptive to learning. Finally, the "rational" focus of methods downplayed the "developer-embodied factors" in systems development that repeatedly have been shown to be key success factors.

Methods as construction resources

Given the intuitive and “non-analytical” character of the consulting process, a number of studies questioned the view of the consulting process as problem solving. Instead, they suggested viewing the process as a reality-definition process, in which problems are constructed before they can be solved. The main task of the consultant thus becomes the labeling and framing of the client’s problem situation. According to this perspective, the actions of consultants are seen as steered by another logic. Key skills for the consultant now are an ability to appear trustworthy and knowledgeable to the client, and to frame the situation in a way that is perceived as desirable. In this process, social skills and the consultant’s “style” are emphasized. Structured methods, even if not explicitly mentioned in these studies, are also potentially supportive in this process. By providing concepts and logic they become a resource in both the consultant’s as well as potential client’s reality creation processes.

The need for further research

The above literature review has revealed that methods as a phenomenon in management consulting are to a large extent unstudied. In the practically-oriented literature, they are a recurring and central ingredient, but their treatment is somewhat paradoxical. On the one hand, methods are presented as instrumental knowledge, directly applicable by the consultant in order to guide action in a specific situation. Like in the case of systems development methods, this role is almost axiomatic and thus not further discussed. On the other hand, management consulting is repeatedly described as an intuitive, experience-based endeavor, thus questioning this instrumental role of methods. This paradoxical treatment of methods, that has also been observed in relation to IT systems development methods, calls for an empirical investigation as to whether and especially how methods are used in management consulting. According to Wastell (1996) there is a large discrepancy between the theoretical world of methods and action in practice. Although the arguments for methods are often compelling, their realization in practice is problematic, thus requiring further research as to the links between methods and practice.

The above review of the literature in neighboring fields of research – i.e. systems development and consultants’ actions – indicated a possible solution to this paradox. In these studies, a number of roles for methods were identified, indicating that the view of methods as guides for action prevailing in much of the practically-oriented literature may be a misconception of methods. These additional roles, identified as providing concepts for the creation of problems and solutions in the consulting process, as well as in enabling the large consulting company, may be an explanation to the popularity of methods in

spite of their observed non-usage in practical action. But, as these roles have been identified based on studies in other fields than management consulting, or without an explicit focus on formalized methods, they must be regarded as tentative and subject to further investigation concerning their applicability in management consulting.

To summarize, the need for this study thus derives from the somewhat paradoxical treatment of methods in the practically-oriented management consulting literature, as well as an identified lack of empirical studies of the phenomenon in the research on consulting. Some preliminary insights on the roles of methods could be gained from neighboring fields (mainly IT systems development), but their validity has to be verified and elaborated on empirically.

However, before turning to empirical investigations, the next chapter will deepen the theoretical foundation of this study. A recurring view of methods found in the studies reviewed above, was that methods in management consulting supported practice. Some studies viewed methods as direct guides for action, others indicated their contributions by more indirect means such as through providing a structure or concepts for the consulting process. Against this background, a deeper understanding of the use of methods in management consulting requires a framework for discussing and understanding the actions of consultants, as well as the role of different kinds of knowledge in these actions. Such a framework is presented in the next chapter, based on a knowledge base concerning the actions of “practitioners” more generally. I will also draw on the extensive theory existing on the classical question about the link between theoretical knowledge and practical action.

Chapter Three

Using formalized knowledge in practical action – a theoretical investigation

The investigation into the current knowledge of the roles of methods in management consulting in the previous chapter showed that a dominant view of methods, in large parts of the literature, is that methods provide a guide for more effective action. This view prevailed both in the systems development literature, as well as in the practically-oriented consulting literature. At the same time, empirical evidence in this literature and the empirical studies of management consulting indicated reasons to modify this view. The studies showed that methods only had a limited role in directly guiding action. Instead, other guides for action such as experience were hinted at.

This makes the question of the link between abstract knowledge and practical action a central one for this study. In order to understand methods in management consulting, an understanding of the role of formalized knowledge in practical action is needed. In this chapter, I will therefore sketch out a theoretical framework for understanding consultants' actions as well as the roles of formalized methods when it comes to guiding these actions.

The aim of this chapter is to provide a framework for the discussion and analysis of the empirical material of this study. This framework will be established in three steps, each step getting closer to the empirical phenomenon. As a first step, two different traditions for viewing action and its determinants are presented – the theoretical tradition and the practical tradition. Based on conclusions from chapter two it is argued that one of the traditions – the practical tradition – is better suited to contribute to the understanding of the phenomenon in focus here. This effort to set the phenomenon into perspective is therefore followed by an identification of different types of knowledge within the practical tradition of knowledge. This discussion is primarily based on Aristotle. Finally, I turn to Schön's ideas about the reflective practitioner in order to gain further and more concrete insights into the actions of practitioners.

Two ways of understanding action

According to Molander (1997), two different perspectives on knowledge in the actions of practitioners can be identified. The first perspective, the theoretical tradition of knowledge, views action as a realization of abstract knowledge. The second perspective, the practical tradition of knowledge, views knowledge and experience in action as embedded in the body of the actor. This perspective on knowledge also acknowledges the social nature of knowledge as embedded in a professional culture. Depending on perspective, action is thus in the first perspective viewed as guided by an analytical activity and in the second perspective by an experience-based reflective interaction with reality.

More specifically, the *theoretical tradition* of knowledge in the research on knowledge in action is based on the following premises:

- A dualism between subject and object. Knowledge is knowledge of something separated from the subject;
- Application is seen as a separate activity; It is possible to have knowledge without being able to apply it;
- The conviction that knowledge reflects or depicts reality (possibly with some distortion);
- The conviction, that knowledge can be formulated into words and mathematical language;
- A longing for eternity in the sense of longing for the eternally valid and universal knowledge (together with the conviction that this cannot be fulfilled). (Molander, 1997:68, translated from Swedish)

This view of knowledge is similar to the view that Schön (1983) describes as “technical rationality”, and which is characterized by the three dichotomies means vs. ends, research vs. practice and knowing vs. doing.

This view is to be contrasted against the basic assumptions of the *practical tradition* of knowledge:

- A more or less strong dissociation from the dualism between subject and object; Knowledge is based on participation and dialogue with other people and in knowledge is included a living with material, tools, etc.;
- Unity of knowledge and its application,
- The conviction that knowledge is knowledge in action, living knowledge in the world; Knowledge does not depict the world, but leads from question to answer and from task to accomplishment within different human activities;
- The conviction that knowledge is inherently “tacit”, even if words and mathematical language many times can be helpful tools;
- A sound basis in living traditions. (Molander, 1997:68, translated from Swedish)

Looking at the basic assumptions of these two different perspectives on knowledge, the theoretical tradition, or technical rationality according to Schön (1983), dominates in the common-sense view of the work of practitioners. The dominance of the theoretical tradition is according to Schön obvious not least in the educational system for practitioners:

Here the order of the curriculum parallels the order in which the components of professional knowledge are “applied”. The rule is: first, the relevant basic and applied science; then, the skills of application to real-world problems of practice. (Schön, 1983:27)

Furthermore, the whole idea of methods in consulting, as presented in chapters one and two, to a large degree represents the theoretical tradition of knowledge, with its assumptions of the ability to formulate abstract knowledge of an object or process in a way that is separated from the application of the knowledge.

But in spite of its dominance, the theoretical tradition of knowledge is highly questioned on the basis of empirical studies of the work of practitioners. These studies reveal patterns of knowledgeable action that are difficult to account for from the viewpoint of a theoretical tradition of knowledge. A good example of this, which will be presented in more detail below, is Schön’s (1983) study of “the reflective practitioner”. Other studies implying a questioning of the theoretical tradition of knowledge are the work of Josefson on the knowledge of nurses (e.g. Josefson, 1988; 1992) and Göranson on knowledge in relation to the development of expert systems (e.g. Göranson, 1988). A common theme in these studies is the observation that action cannot be understood as a following of abstract rules, but rather has an intuitive and experience-based character (c.f. chapter two). These studies thus represent more of a practical tradition of knowledge.

Against the background of this questioning of the explanatory power of the theoretical tradition of knowledge, I will in the following focus on the practical tradition of knowledge when it comes to building a framework for knowledge in action. This endeavor will be based on the work of Schön (1983). Before formulating this more detailed framework for understanding the actions of management consultants in general and the influence of methods on action in particular, I will provide the reader with some more general categories, namely different kinds of knowledge and their links to action.

Different kinds of knowledge

The study of the nature of knowledge, and the distinctions between different kinds of knowledge has a long history dating back to the ancient Greeks. An important difference between different kinds of knowledge is their link to action. The purpose of this section is to briefly present a map of different kinds

of knowledge in order to better understand the character of methods, and as a next step, their link to action.

The roots to discussions of different types of knowledge can be traced back at least to the Greek philosopher Aristotle who suggested a division of knowledge into two general types: (a) theoretical knowledge which is described as eternal and non-instrumental, and (b) practical knowledge, which is concerned with action in our daily lives. Based on Aristotle's knowledge categories, I will in the following briefly sketch out a map of different kinds of knowledge.

Theory³

Theory as a kind of knowledge can be verbalized and traced back to certain basic and eternal principles or causes. Consequently, the object domain of theory is limited to necessary and eternal beings, encompassing mathematical entities, heavenly bodies and divine beings. Theory is neither productive nor practical, and thus totally "useless" in an instrumental sense. This kind of knowledge is not driven by any utilitarian interests, but rather by man's wonder and desire to escape ignorance.

...through theory we do not acquire a knowledge-content which can then be exploited in the practical business of life; the spheres of theory and of practice are incommensurable, through theory, we are made receptive to being – which is beyond time – and to an order and harmony which are quite beyond our own powers of construction or inference. (Dunne, 1993:238)

Against this background, theory can never comprise "human affairs", as these are in constant flux and too unstable to be described in terms of theoretical knowledge other than very sketchily. The domain of "human affairs" requires a different kind of knowledge, which in Aristotle's typology is named "practical knowledge". This kind of knowledge comprises those things which are within the rational power of human beings to change. Theoretical knowledge is thus of little interest for understanding instrumental action. This is instead better covered by what is called "practical knowledge". Aristotle subdivides practical knowledge into two sub-categories: *techne*, which is knowledge for *making* (something), and *phronesis*, which is knowledge designated for *acting*.

Techne

Techne is the type of knowledge that supports production, i.e. the specific activity, which aims at producing a specific product or outcome. The knowledge possessed by a skilled craftsman is an example of techne. A skilled craftsman

³ The description of Aristotle's types of knowledge, is mainly based on the work of Dunne (1993).

both masters his craft and understands and can verbalize the principles underlying the production of an object or a situation.

Techne is thus not only the basis for the craftsman's ability to produce a certain good, but also for his ability to provide a rational account of his procedures, i.e. an account that links the product back to its purpose. Techne is the kind of knowledge through which we rationally understand the world:

Not only is techne in itself the rational source of the order that human agency brings to the world, it is also the primary model in terms of which we can understand the intelligibility that we find already existing in the natural order. (Dunne, 1993:251)

Techne thus supports the ordering of the world. It supports the labeling and identification of delimited objects that through this procedure become possible to control and change. We can control and change an organization, but this is impossible with "nature" as a whole. Consequently, techne is objectifying, making the world an object possible to control and change (Molander, 1993⁴).

Techne is more than mere experience. Having techne not only means being able to act in a certain way, it also means having knowledge of why actions should be carried out in that way. Techne can be found in the general and universal. It is a kind of knowledge that can be verbally transferred to others. Even if techne thus has its roots in experience from action, it can be abstracted from the specific situations in which it was generated:

Techne arises from experience through some process of induction and generalizing insight; but it can, it seems, become sealed off from the experiential base and remain concentrated on generalizations. (Dunne, 1993:282)

The general character of techne leads to problems in situations where chance plays a dominant role. Techne as a form of knowledge is most purely found in professions in which the influence of chance is limited, i.e. that are predictable and stable so that a preconceived image of an object or a future state can be imposed on a material or situation. In situations in which the influence of chance is stronger, a more flexible and responsive attitude towards the object or situation to be formed is required. "Sensitivity or attunement rather than mastery or domination" (Dunne, 1993:256) is what is required here. This kind of knowledge is captured in phronesis, that will be described below. Techne thus deals with the general. As soon as it comes to handling specific cases, techne is no longer sufficient, as individual cases are idiosyncratic.

⁴ Rather than talking about techne, Molander (1993) talks about "förfogandekunskap" (availability knowledge). But this to a large extent shares the characteristics of techne as identified above.

Phronesis

Phronesis is the second kind of practical knowledge identified by Aristotle. Phronesis is knowledge for action. It is this kind of knowledge that is manifested in praxis.

Praxis...has to do with the conduct of one's life and affairs primarily as a citizen of the polis, it is activity which may leave no separately identifiable outcome behind it and whose end, therefore, is realized in the very doing of the activity itself. (Dunne, 1993:244)

Phronesis characterizes a person who knows how to live well. This kind of knowledge is obtained as well as expressed in collective action together with one's fellows. Phronesis is entirely based on experience, and cannot be formalized and abstracted from practice. Phronesis as a kind of knowledge is intimately connected with the carrier of the knowledge – the actor. Through the reflection of phronesis in the individual's actions, it constitutes the individual. Actions disclose the actor both to himself and to others. Consequently action and actor are intertwined to a much higher degree than are producer and product.

Phronesis is important for setting the goals for action. It gives the actor an orientation and supports her formation and justification of goals. This kind of knowledge provides the boundaries within which to apply *techne*. Phronesis thus has an important role when it comes to acting in a specific situation and the use of abstract ideas in this specific situation.

Phronesis itself, then is not a knowledge of ethical ideas as such, but rather a resourcefulness of mind that is called into play in, and responds uniquely to, the situation in which these ideas are to be realized. (Dunne, 1993:272)

Phronesis is thus constituted by receptiveness to the specific in situations, rather than by general rules and formalized knowledge. As opposed to *techne*, phronesis is not objectifying, it does not aim at creating a fixed picture of reality in order to control it, but rather aims at creating an understanding of reality which provides direction. Molander describes his concept of orientational knowledge, which is close to phronesis as follows:

Oriental knowledge is based on the relation between subjects and between the subject and the whole. These "entities" are not objectifying, the relations are "dialogic" meanings characterized by the hermeneutic circle. Oriental knowledge provides a direction, but does not provide pieces of reality. (Molander 1993:189, translated from Swedish)

Phronesis is thus seen as essential for action and a prerequisite for the use of the techne-like knowledge. Techne is always applied within the boundaries of a goal and purpose provided by phronesis.⁵

A complementary categorization

A complementary and somewhat more detailed categorization of practical knowledge is provided by Göranson (1988). He identifies three types of practical knowledge – practical knowledge, knowledge of familiarity and propositional knowledge.

Phronesis is in Göranson's categorization subdivided into two categories of knowledge – practical knowledge and knowledge of familiarity. These two mainly differ in respect to how they are acquired. *Practical knowledge* is described as “knowledge which contains experiences obtained from having been active in a practice” (Göranson, 1988:16). *Knowledge of familiarity* is obtained through the study of examples within a specific field of practice. This type of knowledge often has a long tradition and is transferred through the interaction with experienced individuals.

The concept of techne is by Göranson termed “*Propositional knowledge*”. This kind of knowledge comprises the part of a profession that can be expressed in general theories, methods and rules, and that can be learned through theoretical studies. The practical knowledge, as well as the knowledge of familiarity, are both prerequisites for the use of the propositional knowledge. It is through the former, that the propositional knowledge is interpreted. Göranson (1988) describes the relation between the three different types of knowledge in the following way:

There is a close relationship between propositional knowledge, practical knowledge, and the knowledge of familiarity. We interpret theories, methods and regulations through the familiarity and skills we have gained by taking part in a practice.... (Göranson, 1988:16)

...if we remove all practical knowledge and knowledge of familiarity from an activity we will also empty it of propositional knowledge. (Göranson, 1988:17)

Göranson also describes the relation between the techne-like knowledge (propositional knowledge) and the phronesis-like knowledge (practical

⁵ This view has been debated as idealistic by several researchers within the social sciences. Habermas e.g. claims that techne has expanded and to a large extent taken over the role of both theory and phronesis in today's society. Techne, with its instrumental goals, has become taken for granted, leaving little room for the questioning of goals on moral or ethical grounds, which according to Aristotle was the main purpose of phronesis. What we observe in today's society, it is claimed, is a very limited form of phronesis working under the premises of techne. (see e.g. Berglund, 1995; Habermas, 1984).

knowledge and knowledge of familiarity) as complementary, establishing phronesis as the central kind of knowledge for action. All use of *techne* requires the availability of *phronesis*.

Summary – Two underlying dimensions of knowledge form

The above categorization of different kinds of knowledge is summarized in Figure 3.1. My main interest in this investigation has been practical knowledge, i.e. knowledge for action, as opposed to what Aristotle called “theoretical knowledge”. The practical knowledge is divided into two qualitatively different kinds of knowledge, *techne* and *phronesis*, which were elaborated on through the concepts of Göransson (1988).

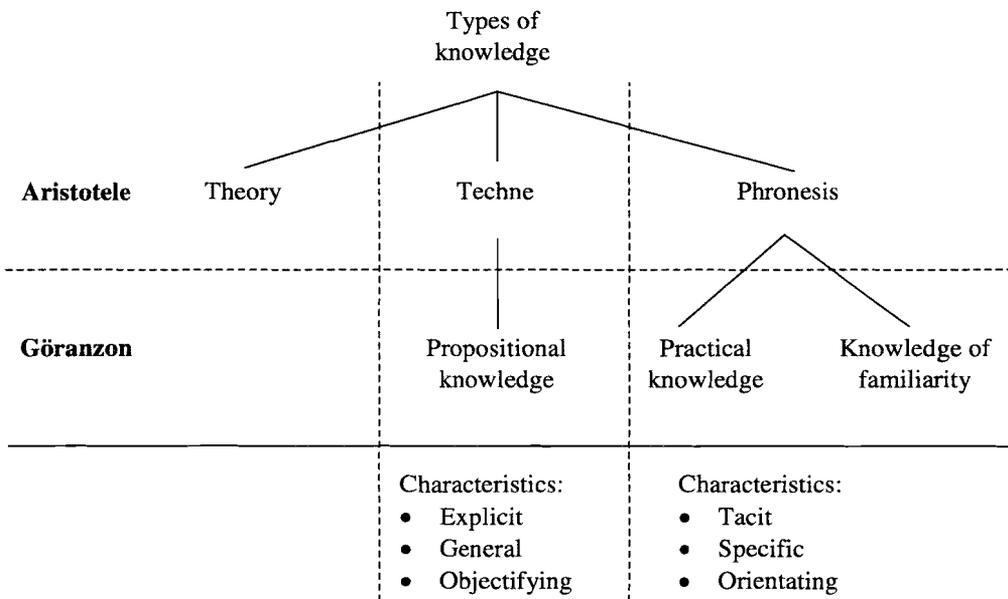


Figure 3.1. A map of different concepts of knowledge introduced in this chapter

In the above descriptions of different types of knowledge, two dimensions concerning the form of knowledge can be identified as separating *techne* from *phronesis* – the level of articulation of knowledge and the level of abstraction. The level of articulation concerns the ability to capture the respective types of knowledge verbally. A characteristic of *techne* is that it is often possible to verbalize, which makes it easy to transfer. *Phronesis* on the other hand was described as “obtained and expressed in collective action” and thus hard to transfer by verbal means. This dimension of the form of knowledge is captured in the dimension *articulate - tacit*. Articulate knowledge can, as in the case of *techne*, be captured verbally and is thus easily transferred between individuals.

Tacit knowledge on the other hand is more problematic to capture in verbal form.

Polanyi (1967), the founder of the concept of tacit knowledge, defines tacit knowledge as “knowing more than one can tell”. An example of tacit knowing is our ability to recognize faces. We can do it, but it is hard to tell exactly how. Similarly, the actions of experts often have a tacit dimension. A chess master will have difficulties to capture his expertise and transfer this verbally as a set of rules. Rather, tacit knowledge is transferred through “indwelling”, the process in which the novice enters the thoughts and moves of the master, trying to understand the master’s way of thinking. In the case of the chess master, this might imply the learning from and replaying of the master’s chess games. The transfer of tacit knowledge thus requires the sharing of experience between master and novice, which is best obtained through extended face-to-face interaction (Nonaka, 1994). Important to note is that the dimension articulate - tacit really is a continuum rather than a dichotomy. According to Polanyi (ibid.), all articulate knowledge contains a certain amount of tacit knowledge.

The second dimension emerging from the differences between the two knowledge types concerns the level of abstraction of knowledge. *Techné* was described as a general knowledge, whereas *phronesis* was described as handling the specific and idiosyncratic. These differences are represented in the *abstract - specific* dimension. Abstract knowledge designates knowledge that has been detached from its direct empirical and experiential basis and thus consists of generalizations, which order the world and thus are objectifying (c.f. the description of *techné* above). Specific knowledge, on the other hand, is directly embedded in the experiential basis from which it emerged. It has the character of a holistic understanding of a complex reality that orientates action. Against this background, abstract knowledge has a wider applicability than specific knowledge, but it is also less rich than the specific knowledge thus creating problems when it is to be used in practice. Specific knowledge on the other hand is rich, but this richness also makes it harder to transfer. (Lillrank, 1995)

Having established the existence of different types of knowledge, their characteristics and their relation to action, I now turn to the question of how formalized methods relate to these different knowledge types. The purpose of this investigation is to gain insights into the link between methods and action.

Methods – a form of techné requiring phronesis

One way of approaching the question of the character of methods in terms of different kinds of knowledge is to look deeper into what is actually meant by methods. In chapter one, the concept has been examined at some length. Based on the dictionary’s definition of “method” it was described as a systematic,

preplanned, approach with clearly formulated means and ends. It was also described as written down or at least possible to write down (see chapter one).

Against this background, the concept of “method” as viewed in this thesis, is a form of *techne* or propositional knowledge. Given this conclusion, a number of characteristics for methods can be deduced from the overall characteristics of *techne*. These are:

- Methods provide abstractions and general principles rather than information about idiosyncratic situations.
- Methods can be easily communicated. They are possible to articulate and can thus be transferred between persons by verbal communication.
- Methods are through their provision of general concepts and models objectifying, i.e. creators of reality.
- Methods lack meaning in situations where chance plays a large role i.e. in situations where the variation to be handled is large. One reason for this is the general character of methods.

Methods can for these reasons hardly be especially successful in guiding a consultant’s actions in a change process. Chance in terms of unpredictable events plays a much too large role in these kinds of situations (see e.g. Schön, 1983; Alvesson, 1993). Successful consultant action besides *techne* thus requires *phronesis*. It is this kind of knowledge which enables action to be adapted to a specific situation, and thus the adaptation of the general method to the requirements of the situation.

The use of the term “adaptation” can lead the reader’s thoughts towards a rational problem solving process, in which the general method is considered in the light of the idiosyncratic situation. But this is not what I imply. The choice of action will, according to the characteristics of *phronesis*, in many cases be an intuitive and subconscious process. *Phronesis* does not consist of general rules, but rather of a virtue, that is, a tacit kind of knowledge, to react in a suitable way in the specific situation. In reacting, the practitioner can start from rules and principles, but skillful action is much more than mechanically following these rules. Janik (1988) characterizes the process of applying rules as guided by genuinely tacit knowledge going beyond *techne*. Knowledge of rule following can thus be gained only through experience and repetition. According to Göranson (1988), this experience can be gained in different ways – through own actions or through the study of examples of the practice of others. Depending on the way this knowledge is acquired, it leads to the different kinds of *phronesis* – practical knowledge, gained through own actions and knowledge of familiarity, gained through the study of others’ actions, i.e. examples. (Göranson, 1988)

This implies that efficient action requires that *techne* (methods) is complemented by *phronesis* (experience). *Techne* without knowledge of its use (*phronesis*) leads to chaos (Göranson, 1988). Josefson (1988) even goes as far as talking about theoretical “information” rather than knowledge in order to designate theories taught in formal education. In order to go from information to knowledge, the practitioner needs experience acquired through action in the field of practice.

This creates a picture where the experience-based *phronesis* is viewed as primary to *techne*, i.e. methods, when it comes to understanding practitioners’ actions. *Phronesis* contributes to the setting and justification of goals and thus orients the actor in the specific situation.⁶ *Phronesis* as a “knowledge of orientation” “gives a direction and understanding of what is important” (Molander, 1993:180). The method, as a form of *techne*, can thus hardly directly determine action in “messy” situations characterized by chance, as action in these situations primarily requires *phronesis*. *Phronesis* with its ability to support the flexible use of general rules, rather than the rules themselves, is also what constitutes the expert practitioner:

...inventiveness is dialectically linked to mastery of conventions. This, I submit, is what expertise is all about: the ability to master a set of rules in such a way as to be in a position to extend them when circumstances warrant it. (Janik, 1988:57)

This implies that formal rules and methods representing *techne* gradually lose their importance, as the actor becomes increasingly skilled. According to Dreyfus and Dreyfus (1986), rules and theories are important for the beginner trying to learn a practice. But as this beginner becomes increasingly proficient, the importance of rules decreases and action becomes intuitive and more flexible. The expert knows intuitively what action to take without having to consult the rules. But when asked about the basis for her actions, the expert can only present the rules she learned initially. This thus gives a faulty picture of the character of the actions of experts and contributes to the persisting belief that expert action can be captured in formal rules. It also reflects and contributes to the reproduction of the dominance of technical knowledge in today’s society, in which only formalized, technical knowledge is regarded “real” knowledge (Berglund, 1995; Habermas, 1984; Josefson, 1988).

⁶ According to Habermas’ (1984) critique of the validity of Aristotle’s knowledge types in today’s society, many goals are to a large extent taken for granted and derived from the realm of “*techne*” (e.g. the goal of organizations to make profit (Berglund, 1995)). Still I claim that there persists a need for setting and discussing goals also in a consulting process, which requires a *phronesis*-like knowledge. However, these discussions of goals are not as unprejudiced as Aristotle assumed, but rather take place within a set of predefined goals.

The reflective practitioner

The above investigation of knowledge in practice has been quite general and in large part free from links to the empirical world. It mainly aimed at providing a basic understanding of the issue, as well as some basic categories for reasoning about it. In the following section, I will become more concrete, and arrive at a preliminary frame of reference for understanding the role of methods in the actions of consultants. In this endeavor, I will mainly base my reasoning on Schön's (1983; 1987) empirical efforts to understand the actions of practitioners. These go one step further than the above efforts, as he provides an idea of the process in which *techne* and *phronesis* meet – the process of reflection in action.

Professional activity, of which management consulting is an example, is according to Schön guided by a technical rationality, i.e. *techne*. The basics of this rationality are the division of means and ends, of research and practice, and of knowing and doing. The pursuit of professional activity is seen as the application of a number of tools to a well-defined problem. The knowledge of the practitioner, from this perspective, is thus about choosing the right method for the defined problem and to use this method in the right way. This view has been richly illustrated in the previous chapter.

This creates a picture of practitioners' actions as problem solving, which is the basis for legitimizing methods in general. As has been argued in chapter one and two, the basic view behind the idea of methods is their ability to formalize and thereby improve the quality of the problem solving process.

However, according to Schön, the picture of the practitioner as problem solver does not reflect reality. Reality is much more complex than the technical rationality implies. The point of departure for the technical rationality is the existence of a clearly defined problem situation and clear ends. The practitioner can contribute to the attainment of these ends by providing and applying the right means in the form of methods. But neither clear ends nor well-defined problem situations are normally found in the domains of practitioners' actions. These domains are rather characterized by uncertainty and ambiguity. Schön describes these as a "confusing mess", which makes the use of *techne* problematic (Schön, 1983:42).

This discrepancy between the technical rationality, on which methods are based, and the much more complex reality can be handled in two ways. One strategy is to disregard the fuzzy and uncertain problems, and instead focus on applying methods in well-defined and certain situations. Acting according to this strategy implies a risk of misreading situations in order to make them fit the methods and models at hand. Unfortunately, the well-defined problems are rarely the

most important ones. A second strategy is instead to enter the domains of “confusing messes” which often include the most central problems. In this case it is important to be aware of the limited usefulness of solutions based on a technical rationality, and thereby on methods.

The limited usefulness of the general and abstract technical rationality in practical, messy situations, can partly be understood in terms of the differences in limitations in the world of thought in which methods reside, and in the practical world in which action takes place. The world of thought is limited by what can be said in a legitimate way. The main boundaries are set by institutionalized conceptions of ethics, aesthetics and truth. The world of practice is limited by what can be done. This is determined by the economic, political and technical reality, in which action is to take place (Berger, Berger and Kellner, 1974; Brunsson and Olsen, 1993).

Tichy (1974) illustrates this gap between what can be said and what can be done in a study of the values and actions of change agents. When asked about what they were actually doing, different change agents presented quite similar pictures. When asked about their values for the change process on the other hand, they presented very different pictures. The gap between the consultant’s perceived actions, and the values striven for in the change process was especially large for consultants with Organization Development (OD) values, i.e. strong humanistic ideals. These consultants were described as having

...a value oriented change approach as reflected in their goals, but they are generally employed by organizations not for these values, but to help with problems effecting efficiency and output. (p.179)

Consequently, OD consultants often had difficulties in realizing their values in practice, as business life, on the level of action, seems to be dominated by a narrow logic of efficiency. This is confirmed by Schön (1983:336), who characterizes industry as a prototype for the technical, bureaucratic rationality.⁷

Against the background of a lack of realism in the assumptions of the technical rationality when it comes to understanding the actions of consultants, Schön (1983) suggests an alternative perspective for understanding these actions and the role of knowledge in them. This perspective is based on extensive phenomenologically-inspired empirical studies of the actions of practitioners, the main empirical example being the architect’s interaction with a student. Schön describes this alternative view in the following way:

⁷ This illustrates the critique of among others Habermas (1984), sketched out in footnotes 5 and 6, claiming that in modern society, and especially in business life, a technical rationality is dominating, leaving little room for a questioning of underlying goals through phronesis.

On this view, we would recognize as a limiting case the situations in which it is possible to make a routine application of existing rules and procedures to the facts of particular problematic situations. Beyond these situations, familiar rules, theories and techniques are put to work in concrete instances through the intermediary of an art that consists in a limited form of reflection-in-action. And beyond these, we would recognize cases of problematic diagnosis in which practitioners not only follow rules of inquiry but also sometimes respond to surprising findings by inventing new rules, on the spot. This kind of reflection-in-action is central to the artistry with which practitioners sometimes make new sense of uncertain, unique, or conflicted situations. (Schön, 1987:35)

In the above, Schön hints at two types of activities for practitioners. The first concerns “a routine application of existing rules and procedures...”. This activity has in other places (e.g. Schön, 1983) been described as problem solving, and is limited to relatively well-defined situations. The second activity hinted at is about “respond[ing] to surprising findings by inventing new rules on the spot...”, thereby requiring the person to “...make new sense of uncertain, unique, or conflicted situations” . This second type of activity Schön (1983) characterizes as problem setting, and is a prerequisite for problem solving in the often messy, ambiguous and complex situations in which practitioners act. Transferred to the domain of management consulting, one of the main contributions of the consultant is to structure and give meaning to the situation. This view of consulting as a process of reality construction has already been presented at some length in the previous chapter two.

This indicates that “technical” methods have a secondary role in many of the situations practitioners have to deal with. Instead, experience-based types of knowledge are emphasized. In the above quote from Schön, references are made to an “art”. Schön further describes the practitioner’s strategy for action in the messy situations of real life as “trial and error” or “muddling through”, which involves artistry and intuition (Schön, 1983:43. See also Hillier, Musgrove and O’Sullivan, 1984; Akin, 1984, who analyze the architectural design process). The type of knowledge underlying action in the “messy” situations is termed “knowledge in action”, and is described as intuitive and difficult to articulate, which indicates some similarities with phronesis.

Reflection in action – making sense of messes

An important aspect of the practitioners’ knowledge is the process of reflection in action. This is the creative activity, in which the practitioner approaches an unknown, unfamiliar situation and makes sense of it, i.e. sets the problem. In this process of framing the situation, the scene for understanding and action is set:

When we set the problem we select what we will treat as the “things” of the situation, we set the boundaries of our attention to it and we impose upon it a coherence which allows us to say what is wrong and in what directions the situation needs to be changed. (Schön, 1983:40)

The framing process to a large extent takes place as a reflective conversation with the situation. But the practitioner does not interact directly with the physical reality, but rather with a model of it. Experiments are carried out in a virtual world. Here the consequences of viewing reality from different perspectives can be tested. This testing Schön describes as framing and reframing, which means testing ideas and being receptive to the situation talking back. It presupposes an ability to abstract the idiosyncratic and constantly changing situation to a model of it, on which experiments can be carried out. It is this ability to build models and carry out experiments, that represents the artistic aspects of the practitioners’ practice.

An example of this experimentation on a representation of reality rather than on reality itself, is given by Schön as he describes the interaction between an architect and his student. The framing and reframing of the design problem, i.e. the experimentation with different views of the problem, is carried out through sketches on a sketchpad. On the sketchpad, the architect can test different approaches to a problem, and let the situation talk back to him in order to be able to reframe the initial conception of the problem.

This process of making sense of a messy situation, i.e. framing it, is supported by several kinds of knowledge – both *phronesis* and the more technical kind of knowledge (*techne*). Schön mainly draws attention to the experience-based kinds of knowledge, by claiming that the practitioner in the process of framing mainly draws on experiences from earlier assignments. By using these experiences as metaphors for the current situation, similarities are discovered that provide a point of departure and direction for framing, and that help evaluate the results of different ways of framing.

The contribution of the more technical knowledge to the process of framing and reframing, that takes place in reflection in action, is elaborated by Molander (1993), who introduces theories and rules into Schön’s framework of problem setting, reflection in action, and conversation with the situation. Molander claims that:

Theories and rules, which you find in for example textbooks and handbooks for different areas of practice, are generally formulated. This makes it possible to build a “theory world” and (by thought) *experiment* in it in the same way as you can experiment through sketches rather than acting directly in the real world. From the practitioner’s perspective, these theory worlds are not depictions of a reality as such; rather, they express views of what can be created. The value of theories and rules is here based on what they have accomplished in previous applications. Experiences of this are part of the

repertoire which provides the basis for knowledge in action. (Molander, 1993:157, translated from Swedish)

This indicates a role for the technical types of knowledge also in Schön's framework. This role is not in leading action, but rather in supporting the activity of reflection in action in which sense is made of "confusing messes". This view will be elaborated on in the following, based on a closer look at Schön's perception of the reflection in action process.

Four constants as the basis for reflection in action

Different practitioners approach similar problems in very different ways. Understanding these differences has been one of the purposes of Schön's efforts to understand practitioners' actions. Schön (1983:270-275) suggests that these differences to a large extent can be understood in terms of differences in four constants for reflection in action. These constants are relatively stable points of departure for the reflection in action process. They both enable and limit the reflection in action process. These constants are:

1. The *media, language and repertoires* that are used to describe reality and conduct experiments. In the case of the architect the sketchpad and the pen is one example. In the case of the consultant it may, as has been indicated in chapter two, be language, i.e. central concepts and notions (see e.g. Czarniawska-Joerges, 1988b) as well as graphical models, diagrams and techniques for describing the current as well as future situations.
2. The *appreciative systems* that are brought to the problem setting, evaluation and reflective conversation. This appreciative system helps the practitioner distinguish between good and bad, beautiful and ugly, etc. In the case of the consultant, the appreciative system comprises the value basis from which the consultant can distinguish a good solution from a bad one, an efficient company from an inefficient one, etc.
3. The *overarching theories* through which practitioners make sense of phenomena. These theories are not "technical" in the sense that they provide rules for action. Rather they are described as supplying "language, from which to construct particular descriptions and themes from which to develop particular interpretations" (p 273). Schön exemplifies this constant with the psychoanalyst's knowledge of psychoanalytic theory. In the case of the management consultant, the overarching theory may comprise the consultant's underlying theory of how organizations function or his conception of the character of the consulting process.
4. The *role frames* within which practitioners set their tasks and through which they bound their own institutional settings. This perception of their own role constitutes the actor herself as well as her relevant actions. The perceived

role frame also influences what knowledge is seen as useful in practice, as well as the content of the reflections undertaken in action. In the case of the management consultant, the role frame defines the consultant's role in relation to the client organization. Examples of role frames recurring in the consulting literature are the expert and the process consultant roles.

These four constants apply to the individual and explain differences in reflection in action at an individual level. But, as practitioners are part of an organization, they also tap into the organization's collective knowledge in reflection in action. According to Schön, managers as a category of practitioners deeply embedded in an organization, draw on as well as contribute to an organizational knowledge in reflection in action:

The reflection in action of managers is distinctive, in that they operate in an organizational context and deal with organizational phenomena. They draw on repertoires of cumulatively developed organizational knowledge, which they transform in the context of some unique situation. And as they function as agents of organizational learning, they contribute to the store of organizational knowledge. (Schön, 1983:265)

Even if the concept of constants thus is an individual one, it is linked to an organizational level in the sense that the knowledge underlying the constants is partly organizational. Similarly, the reflection in action process takes place at an individual level, but its results contribute to the confirmation or change of an organizational knowledge (Schön, 1983:265ff.).

A very similar, although less detailed conceptualization of the individual design process in architectural work, is presented by Hillier, Musgrove and O'Sullivan (1984). Like Schön (1983) they identify an activity preceding problem solving, which they call the prestructuring of a problem. This is described as an important step, which to a large extent limits the outcome of the following design process. This prestructuring of the problem is in turn seen as explained by two kinds of constraints – external as well as internal:

We have to recognize, therefore, that before the problem is further specified by the gathering of data about the problem it is already powerfully constructed by two sets of limiting factors: the external constraints (...) and the designers cognitive capability in relation to that kind of problem. (Hillier, Musgrove and O'Sullivan, 1984:257)

External constraints in the context are exemplified by demands from the client of the design process, whereas the internal constraints are of a more cognitive nature. These internal constraints, in my interpretation, have the same character as the above-described constants in Schön's framework.

Based on the description of the constants for reflection in action, it becomes possible to elaborate on Molander's (1993) view of the role of theories and rules in Schön's framework. Comparing the definition of methods in chapter

one with the constants presented above, a number of similarities emerge indicating that methods, at least potentially, play a role for consultants' actions by influencing the reflection in action process.

More specifically, methods were in chapter one described as consisting of a number of elements, these being a value basis, a management philosophy, a view of organizational actors, tools, procedures and a language (see Figure 1.1). These elements to a large extent overlap with the constants named by Schön.

- The element "*value basis*", which was described as, among other things, providing a value system for judgment has similarities with the constant "*appreciative system*".
- The element "*management philosophy*" of the method is described as a theory, which supports the process of making sense of messy situations. This element is thus similar to the "*overarching theory*" in Schön's framework.
- The method's element "*view of organizational actors*" defines the actors in the organization as well as the change process, and thereby also the role of the practitioner, which makes it similar to the constant "*role frame*".
- The method's "*language*", finally, providing both verbal and graphic labels and notions as support for the practitioner's activities to a large extent overlaps with what Schön calls "*media, language and repertoires*".

This overlap between elements of the method and the constants guiding the reflection in action process gives reason to refine the picture given earlier in this chapter, depicting methods as a form of knowledge quite isolated from phronesis, that was regarded as determining action.

Given the method's potential influence on the constants for reflection in action, methods have a strong potential for influencing consultants' actions – not directly as implicit in the technical rationality, but indirectly through their influence on the consultants' constants for reflection in action. However, methods are only one potential influence on these constants. The consultants' earlier experiences and the examples collected through these are other bases for the constants. This implies that these constants to a large extent have the character of tacit knowledge. Methods can provide parts of the building blocks for the constants, but they do not determine them. Similarly, the reflection in action process is not determined by the constants, but rather uses these as resources. Putting these resources to work mainly involves experience-based tacit knowledge.

The above is illustrated in Figure 3.2, depicting the process of the consultant making sense of a "messy" reality. This reality is made meaningful and converted into a manageable problem through the process of reflection in

action, in which some aspects of reality are chosen and put together to form a picture of reality, that makes sense. This process, that in the figure is depicted as a surface, onto which reality is reflected, uses the constants as resources, which in their turn are influenced by methods as well as the consultant's experience.

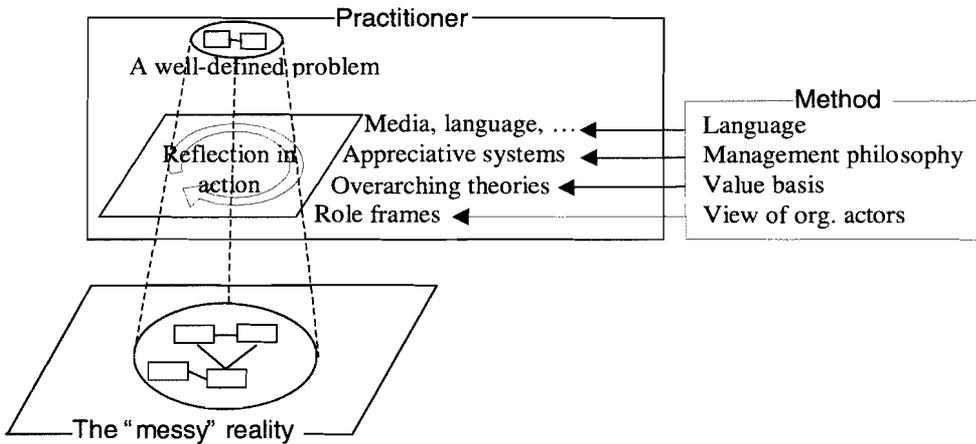


Figure 3.2. The method's role in making sense of messy situations

As indicated in Figure 3.2, the consultant's method can be seen to influence his perception of reality. In the following it is also assumed that there exists a link between the consultant's perceptions of the situation and her actions, thus establishing the method as a potential influence not only of thought, but also of action. This is a well-established assumption in large parts of social theory, such as the cognitive tradition (e.g. Sims and Gioia, 1986) or the interpretive/phenomenological tradition (e.g. Sandberg, 1994, Burell and Morgan, 1992, who provide overviews of these research traditions). I will thus not go deeper into this issue here. Rather I will go somewhat deeper into one consequence of the link between perception and action, namely the tendency of the consultants' perceptions to become self-fulfilling. Weick (1979) e.g. emphasizes this by introducing the concept of "enactment", which he describes in the following way:

Enactment could be described as efferent sense-making. The modifier *efferent* means centrifugal or conducted outward. The person's idea is extended outward, implanted, and then rediscovered as knowledge. The discovery, however, originated in a prior invention by the discoverer. In a crude but literal sense, one could talk about efferent sensemaking as thinking circles. Action, perception, and sense-making exist in a circular, tightly coupled relationship that resembles a self-fulfilling prophecy... (Weick 1979:159)

The point to be made here is that the influence of methods on consultants' actions, according to the above model, is potentially strong, as the self-fulfilling

character of the consultants' mental models partly hinders the disconfirmation of the consultants' constants.

Summary and Conclusions

I began this theoretical investigation of the role of formalized knowledge in practical action by identifying two traditions of understanding practical action. The theoretical tradition mainly saw action as a realization of abstract knowledge, such as methods. The practical tradition, on the other hand, focused on the actor's embodied knowledge in understanding action. As empirical studies of the action of practitioners repeatedly have shown the theoretical perspective to be naive, and lacking explanatory power, I chose to pursue my investigation within the practical tradition of knowledge.

Within the practical tradition of knowledge, a number of different types of knowledge have been identified as important for understanding action. Based on Aristotle's typology of knowledge, the two practical types of knowledge, *techne* and *phronesis* were focused on. *Techne* is characterized by its generality and communicability, whereas *phronesis* is often tacit and supports action in idiosyncratic situations. Two dimensions of knowledge form were identified to capture the differences between the discussed kinds of knowledge – the tacit - articulate dimension and the abstract - specific dimension.

Methods, being a type of *techne*, were found to have a potential strength in being easily communicated as they were articulate. At the same time, methods were problematic when it came to guiding action in complex and idiosyncratic situations as they were general. In these situations *phronesis*, the kind of knowledge being concerned with the specific, was instead seen as a central mediator for the use of methods. Given the complexity of most consulting situations, this strongly questioned the role of methods as direct guides for action in management consulting.

Against this background, I turned to Schön for a more detailed understanding of the interplay between *techne* and *phronesis* in the actions of practitioners. Schön identifies two basic actions in this context – problem setting, requiring *phronesis*, and problem solving, allowing the application of technical knowledge. Problem setting is seen as a prerequisite for problem solving. Important for problem setting is the reflection in action process. A closer look at this process and especially its determinants – or constants – as Schön prefers to call them, reveals a potential to reintroduce the method as an important element in understanding consultants' actions. By identifying an overlap between some of the elements of the method and the constants in the reflection in action process, it was hypothesized that methods could have an influence on action also in uncertain and messy situations.

This possible guidance of action was not the only role of methods identified. Linked to the formalized character of *techne* (and thereby methods) that makes this easy to communicate, two other roles were hinted at. The first role is the method's support of the actor's justification of his actions in an understandable and acceptable way. By providing an easily communicated view of both means and ends, and the link between these, methods provide the basis for a rational account of action, as well as a rational understanding of the world at large (Josefson, 1988; Dunne, 1993). Even if the experienced practitioner acts intuitively and directly, she will, when asked about her actions, revert to the initially learned general rules and theories as these are the only she can articulate (Dreyfus and Dreyfus, 1986).

The second role, like the above, is linked to the fact that general and formalized rules are easy to communicate. This makes rules and theories (*techne*) ideal as a way of teaching newcomers a practice. Learning rules and methods is often the first step in learning a practice (see e.g. Dreyfus and Dreyfus, 1986; Molander, 1993; Janik, 1988).

The above investigation of the link between different types of knowledge and the practical action of consultants has led to a somewhat deeper, but still preliminary, understanding of methods' roles in directing the practice of management consultants. A weak link between the method and action in practice was found along with other roles linked to the method's formalized character, which made it easy to communicate. But in spite of this, this chapter reveals more about what methods do not do than about what they do in the consulting process. This body of theory is thus insufficient in providing a comprehensive answer to the question guiding this research. In the following I will therefore turn to the consultants' actual practice in order to – hopefully – get a better picture there.

Chapter Four

*An empirical map of the terrain – methods in management consulting*⁸

In chapters one to three the phenomenon of methods in the work of management consultants has been delineated through others' studies (chapter one and two) as well as theoretical reasoning (chapter three). It has been argued that methods are an important element in the large, "one-firm concept" consultancies in focus in this study, and this argument has been supported by scattered evidence from a number of different sources. Still, there is some uncertainty as to the extent of the use of methods as well as the consultant's perceptions of the contributions of methods in their companies.

In order to obtain an empirical map of the phenomenon as described and delimited in chapter one, a first overview study of five consulting companies was carried out. Three questions are focused in this chapter – the content of the methods found in the different companies, the form of the methods and finally the consultants' perceptions of the contributions and limitations of methods. Large similarities were found between the studied companies, which all had highly structured and detailed methods for carrying out BPR processes.

Concerning the consultants' perceptions of the method's roles in the change process, three areas of potential support for methods were identified. These concerned the consultants' interaction with the project group and the project group members' work, the individual consultant's problem solving, and the knowledge creation, storage and transfer within the consulting company.

Methodological approach

In order to gain an overview of the empirical phenomenon as described and delimited in chapter one, an interview study covering a number of organizations was carried out. Given the character of the study as a pilot study, breadth was prioritized over depth. In choosing the companies, the delimited definition of management consulting as "management consulting in large, "one-firm concept" consulting organizations working with BPR" was guiding. Based on this, five organizations were chosen for further study: ABB-MAC, Andersen Consulting, the Boston Consulting Group (BCG), Ernst & Young Management

⁸ This chapter is partly based on Werr, Stjernberg and Docherty (1997).

Consulting and McKinsey & Co. All organizations, except ABB-MAC, are large, US-based management consulting firms with offices in Sweden, with McKinsey, Andersen Consulting and BCG representing the three largest management consultants in Sweden (see Table 4.1). Ernst & Young MC, ranked number nine in 1995, was chosen as it was a rapidly growing organization, in which the method was not only an internal tool, but also a product sold directly to clients.

ABB-MAC (ABB Management and Process Consultants) being a Swedish, mainly internal consultant affiliated to Asea Brown Boveri (ABB) is somewhat of an outlier in this group. Still the choice was made to include it in this study, as it followed a clear method in its approach to consulting. This method was not developed in-house but licensed from a US consultancy. Consequently, even if ABB-MAC was a relatively small, Sweden based organization, it was through its use of the method, part of a larger network of consultants using the same method (see Table 4.1 for some overview figures on the studied organizations).

	Rank*	Billing 1995 MSkr.	Employees 1995	Consultants 1995	Billing per consultant TSkr.
McKinsey & Co.	1	449	163	106	4236
Andersen Consulting	2	422	312	310	1360
BCG	3	155	68	44	3525
Ernst & Young MC	9	69	44	37	1851
ABB-MAC	18	38	43	34	1118

*The Rank represents the companies' rank in the Swedish management consulting industry, with regard to their billings in 1995.

Table 4.1. Some numbers on the studied consultancies in Sweden (Konsultguiden, 1996)

The interviews with the consultants were conducted in a semi-structured way focusing on mainly four areas:

1. The content of the method for process improvement (the value basis, management philosophy, procedures, tools, language and view of organizational actors (cf. chapter one)).
2. The form of the method (level of detail, structure, incorporated tools, etc.).
3. The application of the method as reflected in the consultants' description of a recent project.

4. The mechanisms for creating and updating the method⁹.

In each company I tried to get answers to the above questions from consultants with different levels of seniority. In three of the five organizations (ABB-MAC, McKinsey and Ernst & Young MC) I interviewed three consultants ranging from quite newly recruited, to very experienced. In Andersen Consulting I interviewed two consultants on different levels and in BCG one on an intermediate level. It is important to underline, that the use of interviews for data collection confines the data to what the consultants say they do rather than what they actually do. According to Brulin (1987) this is a potential problem of validity, as consultants are regarded as highly skilled at presenting a picture of reality that serves their purposes. In the interviews underlying this study, I have tried to reduce this problem somewhat, by asking the consultants for concrete examples of their ways of working, thus trying to obtain their theories in use rather than their espoused theories (Argyris, 1982; Argyris and Schön, 1996).

Availability and usage of methods in five consulting companies

Based on the above empirical material, I will in the following briefly present the character of the methods for process improvement used in the five studied companies, as well as the consultants' own perceptions of their use of methods in their daily work.

McKinsey & Co.

Methods for process improvement. McKinsey's process improvement projects are normally quite large, with a minimum duration of six months. Even their scope is large, typically covering the fundamental redesign of the core processes of the client organization.

The method used for these process improvements is "Core Process Redesign" (CPR). The CPR approach has recently been formalized on a detailed level. The method now defines actions, deliverables etc. on a week-to-week (team meeting to team meeting) basis in the initial program phases.

An important ingredient in McKinsey's way of approaching problems is hypothesis-driven problem solving. In this approach, the consultant early on establishes a hypothesis of a problem solution. Then data is collected in order to prove this solution is right or wrong.

View of, and usage of methods. The main conviction steering the view of methods is that of the uniqueness of the specific change process. Consequently,

⁹ The interviews were carried out in late 1994 and early 1995 and thus reflect the state of affairs at this point in time.

the standard procedures provided by methods always have to be adapted to fit the specific situation characterized by a certain history, problem, culture, etc. In order to ensure the fit between the method and the client's situation, change projects start with a strategic review, supported by a formalized approach and checklists. This assessment forms the basis for choosing an appropriate method.

Although the method does not solve all problems, it is by the consultants seen as an important support in several ways. First of all it provides an overall structure to the change process, which improves the chances of success. Taking shortcuts in the method is in some cases claimed to have led to less than optimal results.

The usage of methods is also said to support McKinsey's ambition to involve the client in the process as much as possible, in order to create ownership and competence on the way to a learning organization. A clear method provides a "road map" to the client, which makes her active involvement possible.

Methods and tools also play an important role in supporting work in the cross-functional project teams at the client. A clear method is said to eliminate barriers such as prestige and power between persons, functions and hierarchical levels. The method provides a "neutral" way of proceeding, which bridges conflict, and challenges peoples' traditional ways of thinking.

The Boston Consulting Group (BCG)

Methods for process improvement. BCG's process improvement assignments are usually quite extensive, often involving five to six consultants over a six to twelve-month period. BCG introduced a concept for process improvement, TBM (Time Based Management, see Stalk and Hout, 1990) in 1986-87. TBM is based on lessons learned from the Japanese regarding ways to achieve quality and speed in both production and product development. With TBM, BCG made an effort to adapt these Japanese principles to western contexts.

A detailed method for managing TBM projects was introduced for internal use in 1990. It consists of five main phases, each supported by detailed checklists for what has to be done in each phase. In addition to the overall TBM approach, BCG has a large toolbox to support the analysis and solving of specific problems, as well as the implementation of these solutions. Examples of tools are benchmarking, segmenting, market analysis, pricing policy, etc.

View of and usage of methods. Even if there exists a detailed method for TBM, BCG maintains that it is not followed in any rigid way. Instead, the need for adaptation to the specific client situation and for creativity is emphasized. The individual consultant's creativity especially is seen as an important factor, which it is essential not to hinder through a detailed method. Consequently, the

TBM method is described as a source of inspiration, a basic framework for the change process, where one can get ideas for handling or avoiding problems.

In this role of providing a basic structure for the change process, methods are said to create the necessary “slack” for creative thinking. As the elementary problems can be handled with advice from the method, intellectual capacity is freed for creativity in solving the more advanced problems in the process.

One of BCG’s goals when working in a change process is the transfer of methods and tools to the client. It is said to be important that these methods are adapted to the specific needs and culture of the client company. The TBM method plays a role as a basis for developing formalized, client specific methods that can be used by the members of the client company.

Ernst and Young Management Consultants

Methods for process improvement. Ernst & Young Management Consultants (E&Y MC) in the US became interested in, and started development work in, the BPR area at an early stage. A BPR approach was adopted already in 1991, as it was the first management philosophy giving central importance to IT as a business enabler. E&Y MC had an important role in the development of BPR, as one of the seminal books on the subject was published by an E&Y MC consultant (Davenport, 1993). E&Y MC is still one of the international leaders in the BPR field.

Ernst & Young Sweden has only recently begun working with large process improvement projects. A Nordic adaptation of the international Ernst & Young BPR method “Navigator” is used to support the work in these assignments. The method, called BPR-Norden, has been designed in collaboration with the Nordic BPR “guru” Björn-Erik Willoch.

This detailed method for conducting BPR projects is meant for both internal E&Y MC use in consultant-led change processes, and to be licensed to clients who want to conduct BPR projects on their own. The license includes the method and continuous training and support during its implementation. The method, which has a modular structure to facilitate adaptation to each project’s specific needs, specifies a highly detailed approach to BPR.

View of and usage of methods. The method plays a central role in E&Y MC’s business, as it is its main product. E&Y MC sells a method, a certain approach – with or without consulting support. The adherence to the method in consulting projects is thus seen as a question of quality. In spite of this, methods must be handled with some care in regard to their adaptation to specific situations.

Knowledge-transfer from consultant to client is an important ingredient in E&Y MC’s concept of change. This is especially true if the client is licensing the

method. In these cases, the method plays a central role in competence transfer from consultant to client, as it codifies the experience and knowledge of E&Y MC (even if it is complemented by training and some consultant support).

Also, in mainly consultant-driven projects, the method is said to play a major role. Firstly, the structured, formalized method is regarded as a way of gaining legitimacy and trust in the eyes of the client, especially in connection with marketing activities. Many clients, but not all, are said to value the existence of a method, as this is regarded as reflecting the consulting company's professionalism.

Secondly, the consistent use of a method within Ernst & Young MC's projects is described as a guarantee for a consistently high minimum level of quality. The purpose of using a method is not primarily said to be to reach excellence, but to avoid pitfalls. In order to reach excellence, any method is viewed as insufficient. Here long-term experience and deep industry knowledge are more important factors.

For the consultant, especially the less experienced one, the method is said to be an important support. It provides a backbone for the whole consulting process, which gives both the consultant and the client a sense of inner security. By providing shared reference points, the method also supports communication between members in the project team. Methods are also said to play an important role in the generation and storage of knowledge within the consulting company. The BPR-Norden method is periodically updated in order to reflect the learning in the company in regard to how to run BPR projects.

Andersen Consulting

Methods for process improvement. Andersen Consulting's projects vary significantly in scale and scope – from a few months with one consultant to five-year projects involving two-hundred consultants. Each project in practice often consists of two parallel, integrated processes – one focusing on the organizational and human side of the change, the other on the technical, i.e. information systems development. In the following I will focus mainly on methods for the first type of process.

Methods for the technical aspects of the change process have long existed, and guided and coordinated action within Andersen Consulting. On the human side, on the other hand, the availability of methods has been more limited. Based on a conviction that change processes can be realized in a structured way, i.e. that peoples' reactions to change can be predicted and planned for, Andersen is striving towards more structured approaches for handling the human aspects of change.

In order to achieve this, a large number of tools has been developed for specific tasks in the change process, such as designing education programs, assessing organizational resistance to change, etc. These building blocks are stored in a global tools database. The tools are integrated by methods for different kinds of projects. Andersen's method for process improvement is called Value Driven Reengineering.

View of and usage of methods. With its roots in IT consulting, Andersen Consulting has a tradition of "method driven" working. Its "Method One" was said to have been a thorough, integrated guideline for developing IT systems. Today, the approach to methods is more flexible. It is emphasized that methods have to be chosen and used with judgment, based on the specific client situation. Methods alone don't produce success. Their use must be guided by the consultant's experience.

Methods, nevertheless, are seen as an important support to the consultant running a change process. They provide an overall structure to the change process, which can be used as a guide by the consultant. By providing this structure, which of course doesn't have to be followed exactly, a method also supports the consultant's reflection on the change process, as it provides a checklist of actions that *could* be included. Hereby, methods lessen the risk of missing any vital steps. The method is also said to facilitate the communication between consultant and client, as it provides a structured way of communicating the background and structure of the change process.

The method also supports the exchange and sharing of knowledge between consultants. Experiences leading to new methods, or adaptations of existing ones, are through the use of methods easily and rapidly spread. In this context, methods also provide common concepts and structures, which facilitate the communication within the consulting company.

ABB-MAC

ABB-MAC has its roots in the internal corporate staff of Asea Brown Boveri's Swedish branch. It now operates as a management consulting firm taking on assignments from other companies than just ABB companies, even if ABB companies are still the main clients.

Methods for process improvement. Since 1993, the company uses the Rummler & Brache Group (RBG) method for its process improvement projects (Rummler & Brache, 1990). ABB is a licensee of the method, and its Process Management consultants are certified by RBG.

The RBG method is a detailed, step-by-step instruction of how to run a process improvement project. It consists of sixty-seven consecutive steps, each defined

in terms of time needed, purpose of the step, potential pitfalls, description of actions, roles and responsibilities and detailed checklists and templates for information gathering.

View of and usage of methods. An important value basis in the work of ABB-MAC is the involvement and active participation of the client. This is the result of long experience with analysis and implementation work, gathered in the ABB T50¹⁰ program. The method is said to support involvement by providing the members in the project team with a “map” of the change process. Before the project group starts work, they always get an introduction to the principles underlying the method and to some of the central techniques used, such as process mapping.

The provision of a transparent map of the process to the members in the project team is said not only to enhance the team’s possibilities of actively participating in the process, but also to raise their confidence, as the process follows a well-tested approach. The knowledge of the “map” also provides the project group members with a feeling, that the process continuously advances, which has positive effects on commitment and motivation.

Nonetheless, the method gives the most support to the consultants. They view the method as an important support in the planning and execution of projects. The method provides a stable backbone for the project and works as a checklist for both important and minor details, so that no activities are forgotten. Several consultants said that they referred to the method before each major new step in a project. The method’s support is said to be more important for junior consultants than for more experienced ones, who often have a more flexible attitude towards the method.

The overall structure of the method is said to be followed in most projects. All the activities are at least considered, even if their elaboration varies between projects, depending on the specific problem situation and time frame. Short cuts in relation to the method have been tried, but in several cases led to sub-optimal performance. The need for the omitted step was realized later.

In spite of this, it is emphasized that consultants have to have a flexible attitude towards the method, as it has to be adapted to each specific project. The method, though helpful, is not enough in order to achieve success. Some basic consulting skills – especially interpersonal skills – are needed as a basis. The method can thus make a competent consultant better, but will not compensate

¹⁰ T50 is a company-wide change programme within ABB Sweden aiming at a lead time reduction of 50%. For a description and analysis of the program see e.g. Shani and Stjernberg (1995).

for a consultant lacking basic skills. The RBG method is also complemented by other tools, especially for handling soft issues, such as group dynamic training. ABB-MAC consultants emphasize that an exaggerated belief in methods could be a risk, as it might generate a false feeling of security among the consultants. It is important not to forget that there are several success factors not covered by the method (e.g. social relations).

The method is also said to have a more internal role in providing a language for the exchange of experiences gained during change processes. Internal discussions concerning projects thus usually apply the terminology of the method.

The use of methods in management consulting

Departing from the above descriptions of the consultants' views of the use of methods in their work, three different areas for the support of methods can be identified. Firstly, the method is repeatedly seen as helpful in the consultants' interaction with the client as well as the work in the client company more generally. Key words for the method's support in this area include communication and knowledge transfer. Secondly, the consultants refer to the method as supporting their individual work within the consulting process, helping them not to forget anything, as well as solve diverse problems. Finally, the method was viewed as an important part of the internal workings of the consulting company. The method's contribution to the handling of knowledge within the consulting company was especially emphasized. The method's contributions in these different areas will be described in more detail in the following.

The use of methods in the client project

As the investigation into five consulting organizations indicates, the client's learning is a central element in consultant-supported change processes today. The data gathered during the interviews with the consultants give reason to believe that structured and detailed methods for change, play an important role in facilitating this learning.

In the previous chapter, the character of the knowledge represented by methods was investigated in some detail. It was concluded that methods represent "techne", which has the advantage of being easily communicable, but has the disadvantage of being of limited use in the complex problem situations ("messes") that dominate most practitioners' day-to-day work. Thus, it was claimed that methods are important for the beginner acquiring a practice. But it was also argued that methods alone are not enough, as skillful action also requires a second kind of knowledge – phronesis. This kind of knowledge was

largely tacit and therefore most easily learned through action, preferably together with an experienced practitioner. Consequently, knowledge transfer from consultant to client both requires the transfer of articulate knowledge (methods) but also some joint action, that makes it possible to transfer some of the consultant's tacit knowledge concerning the application of the method in the specific situation.

The method as facilitating communication and competence transfer

The consultant sees himself to a large extent as a resource of knowledge concerning different aspects of the change process. Transferring parts of this knowledge to the client is described as a key activity by the consultants and involves both the transfer of articulate knowledge, such as methods, and of tacit knowledge, which requires active involvement in the process from the client's side.

The method is an important vehicle in this transfer of knowledge. A method is often the first thing the novice learns in his journey towards expertise (Dreyfus and Dreyfus, 1986). In this case, the method contains important information about what constitutes a good company, which variables are possible to manipulate in order to become a good company, which tools are available to support the change, which sequence of steps will lead to the desired situation, etc. (see descriptive framework for methods in chapter one). The transfer of a detailed method is thus a first step in the transfer of knowledge to the client.

A second step is the transfer of the more experience-based "phronesis", through which the method is adapted to the specific situation. The transfer of this knowledge requires the client's active participation in the change process. All the studied companies seek this participation by making consultant and client work closely together in the change process. Even here – in supporting the client's action, and the consultant client interaction – consultants identify a potential contribution of the method.

Collaborative action requires that those collaborating have some common view of what to achieve and how to achieve it. There is a need for at least partly shared views and a common language for communication. Formalized methods for change provide both an easily communicated view of the change process and a set of defined notions, which support the communication in connection with the process.

The method as facilitating collaboration and coordinated action within the client company

The above role for methods, that of providing a common view of the change process, not only affects consultant - client interaction. Consultants also

acknowledge a role of methods in supporting the interaction within the client company. Many change projects today are cross-functional, requiring the collaboration of people from a number of different divisions, functions, subsidiaries etc. All these people have different views of the organization and the change process. Methods can provide a starting point for articulating differences between these views and ultimately for the creation of a shared view among the people working with the change process, creating some predictability in an otherwise complex situation (as discussed by e.g. Björkegren, 1989). Several of the interviewed consultants mentioned that the method, as a “neutral” approach, could have such a role of bridging different organizational, functional or professional subcultures in order to produce unified action, as well as challenging peoples’ traditional ways of thinking.

The method as conveying professionalism and inducing trust

Several of the interviewed consultants emphasized the role of the method in the marketing and sales activities of the consulting organization. In these activities, methods in their form of formalized, structured and easily communicated approaches to the change process, were by many clients seen to reflect professionalism and thus create trust in the consultant.

The belief in formalized, “technical” knowledge as represented by methods (see chapter three) is very strong in today’s modern society, where the only knowledge accepted as “real” knowledge is formalized, technical knowledge (Josefson, 1988). This thus creates an important position for methods in the consultants’ activities of legitimizing their practice. However, as pointed out by the consultants, all managers are not fond of methods. According to Watson (1994), there is a growing skepticism among managers against management methods and concepts, which is fuelled by the management methods’ faddish character. Consequently, the open use of methods towards the client is described as a question of the client’s preferences. In some cases the method is emphasized as the basis for the consultant’s actions, in others it is to a large extent concealed, conveying the impression that the chosen approach is idiosyncratic and designed exclusively for the specific client.

The use of methods in the individual consultant’s problem solving

A widely acknowledged role for the consultant is to take the responsibility for the change process and thus guide the members of the client organization in their actions (see e.g. Greiner and Metzger, 1983). Change processes in general and BPR processes in particular, due to their scope, are complex processes involving a large number of different activities (see chapters six and seven). The consultants can thus need some cognitive support in designing as well as following up the change process. Such support can be provided by the method.

The method as cognitive support to the consultant

The individual consultant faces unstructured and complex situations where neither the problems nor the solutions are apparent. The development work may require creativity and innovativeness as well as a deep understanding of the technology and the business processes. A method offers a framework within which the creative processes may take place. It can provide a methodical, consistent and self-evaluating guide, which ensures that important steps in the change process are thought of, and which creates some “cognitive slack” to support creativity.

Methods should, on the other hand, not be used rigidly, but be adapted to the specific situation, which is pointed out by all consultants. The rigid usage of a method may well be a risk, as the types of solutions feasible or relevant may be embedded in the method (Docherty and Dilschmann, 1992). The constant use of a specific method may thus result in negative learning in terms of reduced creativity and routine problem-solving behavior. Cooley (1980) reported that British companies' recruitment of design engineers was highly directed towards the evaluation of the methods and tools that they had used in their work and the duration of this use. Their creative ability was regarded as probably stunted if they had used certain methods or tools for too many years.

The use of methods in the consulting company

The interviews with the consultants indicate that methods are seen to play a role, not only in the consultant - client interaction and in the individual consultant's work, but also in the internal affairs of consulting companies. The added value for a consultant working with a consulting company, rather than on her own, is at least twofold. The first potential advantage for consultants joining a company, rather than working on their own, is the access to the accumulated experience of a large number of consultants. A single consultant in a consulting company can benefit from the continuous learning of hundreds of consultants. A second advantage is the access to highly specialized knowledge in a number of different areas, which can easily be integrated into the various projects. These advantages are not self-realizing, but have to be consciously organized by the company. Individuals' knowledge has to be made common knowledge, and forms have to be found in which the assembly of project teams can be made in accordance to the expertise needed without regard to nationality, earlier experience of working together with the same people etc. Methods support the realization of advantages in both these areas by providing an organizational memory, facilitating the exchange of experience, and by enabling flexible staffing.

Methods as organizational memory

One way of making individual experiences available to an organization at large, is to let the experiences update a common method. This method can be seen as a form of organizational memory, representing the company's state-of-the-art practice. This role for methods is clearly illustrated by E&Y MC's approach of periodically updating its methods with the latest experiences from completed projects.

Similar approaches were mentioned by the other companies, where suggestions for improvements of the method were continuously collected from all over the world, and the development in the environment was monitored by "competence centers", responsible for the development and maintenance of the method. The updating *and use* of a formalized method for change was described as an important vehicle for continuous organizational learning in large consulting companies.

Methods as facilitating the exchange of experience

The method's role of providing a common view of the change process and a common language for communicating it, is important also within the consulting company. All exchange of experience does not pass by the method, but much of the individual learning is the result of discussions about projects among peers. In these discussions the notions used in the methods – different steps, documents etc. – were widely used according to ABB-MAC and E&Y MC consultants. In particular the different steps of the method provided a basic structure for the discussions about specific change processes.

Methods enabling flexible staffing

The second advantage of working in a consulting company, mentioned above, was the access to a large number of experts. In order to effectively make use of these experts, a common view of, and a shared language for, the change process within the entire company are important, as they create the necessary flexibility in the creation of teams. The existence of a "company view" makes it possible to rapidly get new teams functional. A common language and way of thinking about the change process greatly facilitates communication and unified action. This contribution of a method was emphasized especially by the largest, multinational companies, where project groups often are staffed with people from all over the world.

Conclusions

The interview study covering the use of methods in five large management consulting companies revealed large similarities between the companies

concerning both the content of their methods for BPR as well as their form. All companies had very detailed methods, which were similar to each other in terms of their overall project phases. These findings thus support the argument laid out in chapter one, claiming the importance of methods in the large consulting organization.

The analysis of the consultants' use of methods in their work revealed three distinct areas of contribution for methods – in the client project, in the individual consultant's work and in the consulting company. In the client project, methods were found to contribute in three ways, namely by facilitating communication and competence transfer, by facilitating collaboration and coordinated action within the client company and by conveying professionalism and inducing trust. Underlying in particular the first two areas of contribution and partly the third, was the method's characteristic of providing an articulate, easily communicable knowledge supporting the creation of a common language, as well as serving as a vehicle for knowledge transfer. This characteristic of the method has been discussed in some length in chapter three.

In the individual consultant's problem solving, the method was mainly found to serve as a cognitive support to the consultant ensuring that nothing was forgotten. However, it was repeatedly emphasized, that the method could not be followed rigidly, but rather required an adaptation to the specific case. Again, this fits well with the characteristics of methods identified in chapter three.

Finally, the method was found to support the internal affairs within the consulting organization. The method supported the generation, storage and utilization of the organization's collective knowledge. More specifically, the methods were found to facilitate experience exchange, provide organizational memory and finally enable flexible staffing within the organization.

Comparing the contributions of methods in management consulting identified above, with the picture of methods sketched out based on the literature review in chapters two and three, indicates a reasonable overlap, even if the present study highlighted and elaborated on some contributions and downplayed others. The method's contributions in the client project mainly were an addition to the literature review in chapter two, in which the method's contribution to the client was only very briefly mentioned. What is mainly missing in the consultants' reports on their use of methods, is their contribution to reality construction. This was not mentioned by the consultants. Still, I believe that the above study has a good validity in giving a holistic overview of the field of methods in management consulting. In the following chapter, this holistic picture will serve as the basis for a specification of more detailed research questions for this study as well as a design for it.

Chapter Five

Specification of research questions and methodological approach

Starting from the general research focus of this thesis – the roles of methods in the work of management consultants – a first set of investigations has been carried out. In chapters two and three, the literature was reviewed with the purpose of establishing an initial understanding of the phenomenon. In chapter four, the gained insights were complemented by an empirical investigation providing a broad, empirically-based overview of the phenomenon studied here. In this pilot study, methods were identified as an important element in three different areas of the work of management consultants, namely:

1. in the consultants' interaction with the project group, as well as the project group members' work,
2. in the individual consultant's problem solving and
3. in the knowledge creation, storage and transfer within the consulting company.

Against the background of this empirical map, the reviews of others' studies and theory in chapters two and three, I will in this chapter specify and operationalize the broad research focus into a set of research questions covering the role of methods in the above three areas of management consulting. As these three areas largely differ in regard to the empirical phenomenon to be studied, and thereby the methodological demands on studying them, I have chosen a methodological approach based on three distinct studies, each covering one of the identified areas of management consulting. Following the identification of research questions, I will discuss the methodological approach for the study in general as well as the partial studies in particular.

The method in three different domains of consultant activity

In chapter four, three different areas or domains were identified, in which the method was seen to contribute to the consultants' practice. These three domains were 1) the consultants' interaction with the project group, 2) the consultant's individual problem solving, and finally 3) the handling of knowledge in the consulting company. In the following I will go somewhat deeper into these three areas in order to formulate more precise research questions in each one of them (see Figure 5.1). In this effort, I mainly draw on the information presented

in the preceding chapters, but as the study of the methods in the three identified areas took place sequentially, the questions asked in each study were also influenced by the conclusions drawn in the preceding studies. Consequently, the below section also includes some preview of the results of the three studies.

Domain 1: Methods in the consultant - client interaction (chapters 6 and 7)

The role of methods in the consultant-client interaction in the change process was the first domain studied empirically. This study is reported in chapters six and seven. In the pilot study (reported in chapter four), the method's roles in the change process were described as facilitation of communication and competence transfer, facilitation of collaboration and coordinated action within the client organization, and support of the client's trust in the consultant.

The main contribution of the method in *facilitating communication and competence transfer* was the provision of a common framework and language, which was easily transferred from the consultant to the client. This framework and language not only provided *techne*, i.e. a general, abstract, formalized knowledge, but also contributed to the client's acquisition of *phronesis*, i.e. knowledge for action in a specific situation. This contribution was made possible as the method provided a structure for the change process, which enabled the client members to take initiatives in the change process.

The method's role in *facilitating collaboration and coordinated action within the client organization* was also to a large extent based on the method's ability to provide and communicate a common and "neutral" language for use in the change process. This common language was perceived to be able to bridge conflicts between members within the organization with different interests, perceptions, etc.

Finally, the method's ability to *convey professionalism and induce trust* between client and consultant was based on its structured and formalized form. Being able to present a well-structured, logical approach to the change process was said to create trust among many clients, although not all.

The different contributions of the method identified above to a large extent build on recurring characteristics of the method – its ability to provide a language, an explicit and logical structure of the change process, and its ability to store and transfer knowledge by these means. These characteristics were also identified as important in the literature review in chapters two and three. In chapter two, the method's ability to structure the consulting process was specifically highlighted. It was identified to both facilitate communication as well as provide the building blocks for the construction of reality in the change process. The method's strength of storing knowledge for easy communication

was touched upon both in chapters two and three, but mainly in relation to the internal working of the consulting company rather than the work with the client.

But even if the basic roles of the method in the consultant - client interaction identified in chapter four have been partly touched upon in previous studies, there is a lack of knowledge of their detailed working in the management consulting context, as well as of their potential, limitations and prerequisites. Given the type of data used in chapter four, i.e. interviews with consultants, it is also uncertain whether the contributions of the method identified are valid and complete. Consequently, a first question in the study of domain one (the role of methods in the consultant-client interaction) concerns the identification of and elaboration on the method's roles in the change process with the client.

The second, and main question, concerns the mechanisms underlying the realization of the identified roles, i.e. understanding how the roles are realized in different key tasks during the change process. The focus of this study – the roles of methods in the consultant - client interaction – points at three central elements in the change process – the method, the consultant and the client. Consequently, an understanding of the roles of the method is sought for in the interaction between these three elements. The analysis of the consultant - client - method interaction in the change process is structured according to key activities in change distilled from the literature on organizational change.

Elaborating on the second question, a third and final question is posed concerning the problems and opportunities arising from the consultant's use of method's in the change process.

The empirical study of domain one, treating the method in the consultant - client interaction thus focuses the following three questions:

- 1. What are the roles of the method in the change process?*
- 2. How do method, client and consultant interact in order to fulfill key tasks in the change process?*
- 3. What problems and opportunities arise in the consulting process in relation to the consultant's use of methods?*

Domain 2: Methods in the individual consultant's problem solving (chap. 8)

The second domain identified in chapter four as a field of contribution for the method, was the individual consultant's problem solving in the activities of the consulting process. The main contribution of the method was in this context identified as providing a structure and checklist, which served as a cognitive support in the consultant's handling of the change process. This role was also clearly identified in chapter two, where a recurring pattern in the practically-

oriented literature was the belief that methods could guide the consultant's problem solving.

The method's role of providing structure and checklists as a cognitive support to the consultant was also observed in the study of the method's role in the consultant-client interaction (chapters six and seven). But in all these instances it was also mentioned that the method cannot be applied directly in the change process. Rather it is of central importance to adapt it to the specific situation, which was to a large extent an activity requiring extensive experience. Furthermore, the main argument in chapter three was in support of experience-based action, thus questioning the possibility of the method to directly support the consultant in the change process.

The above review opens up two interrelated areas of inquiry. The first concerns the question whether the method influences the content and results of the consultant's problem solving process. The second question concerns the mechanisms through which this influence takes place, i.e. the interaction between consultant and method underlying the formation of a specific solution. In order to study these very broad questions, a specific aspect of the change process has been chosen for closer study – the formulation of a project proposal. This strongly involves the method as project proposals are usually based on the approach suggested by the method, as well as the consultants' experience through which the method is adapted to the specific situation. Furthermore, it was described as an activity of central importance by consultants. Based on this more limited empirical focus, the following two research questions for this second study, focusing on the method's role in the consultant's problem solving, are identified:

- 1. Does the method in use influence the consultant's problem solving and proposed solution in the proposal design phase?*
- 2. Through which mechanisms does the method influence the consultant's problem solving? Is the model presented in chapter three (Figure 3.2) a satisfactory approximation of these mechanisms?*

Domain 3: Methods in the consulting company's knowledge system (chapter 9)

The third domain for the method's role in management consultants' work was identified to be the consulting company and its knowledge system¹¹. Three roles

¹¹ The knowledge system comprises all the organizationally available knowledge in the consulting company. It is made up by a number of knowledge elements, their interrelations as well as their dynamics (see also chapter nine).

for the method in the consulting company were identified in chapter four – providing an organizational memory, facilitating knowledge exchange and making possible flexible staffing. The method’s ability to provide an *organizational memory* derives from its formalized and therefore easily communicated character, which has been discussed in detail in chapter three. The method’s ability to *facilitate knowledge exchange* and make possible *flexible staffing* is again based on the common language provided by a method, which facilitates communication (for knowledge exchange) and the establishment of shared frames of reference (for flexible staffing). This was identified as an important area for contribution of methods in chapter two.

Furthermore, indications of this contribution of methods can also be clearly observed in the study concerning the method’s role in the individual consultant’s problems solving (chapter eight). This study concludes that the method is not directly applied or “adapted” in an analytical process, but rather, action is taken intuitively, often without a conscious reference to the method. Still the method was seen to influence the problem solving process, thus leading to similar processes and solutions among consultants using the same method. The conclusion drawn from this was that consultant and method are part of the same organizational knowledge system. However, insights about the more specific configuration of this knowledge system as well as its dynamics could not be gained from the second study. This is therefore the focus of this third study.

The understanding of the role of methods within the consulting company is about understanding the consulting company’s knowledge system. Consequently the first aim of this study is to identify the elements of the knowledge system, i.e. the different types of knowledge used by the consultants in their day-to-day work. Given the identification of these elements, the second question concerns the interrelations between the knowledge elements – how do they support or hinder each other in providing a basis for action for the consultant? Finally, the third question concerns the temporal dynamics of the knowledge system, i.e. its development over time. More specifically this development is viewed as an interaction between development at an individual level (knowledge transfer and individual learning) and at an organizational level (documentation and method development). Summarizing this, the third empirical study (reported in chapter nine), focusing on the method’s role in the consulting company’s knowledge system, aims at shedding light on the following three questions:

1. *Which kinds of knowledge do consultants use in their day-to-day work?*
(*What are the elements of the knowledge system?*)

2. *How are the elements in the knowledge system interrelated?*
3. *What are the dynamics of the knowledge system:*
 - a) *How is the knowledge available in the organization appropriated by the individual?*
 - b) *How is knowledge generated in projects transferred to the rest of the organization?*

Summary – the research questions guiding this thesis

Departing from the three domains of consulting activity, in which methods were found to play a role in chapter four, eight research questions were posed as guides for the research effort to come. These research questions are summarized in Figure 5.1 below.

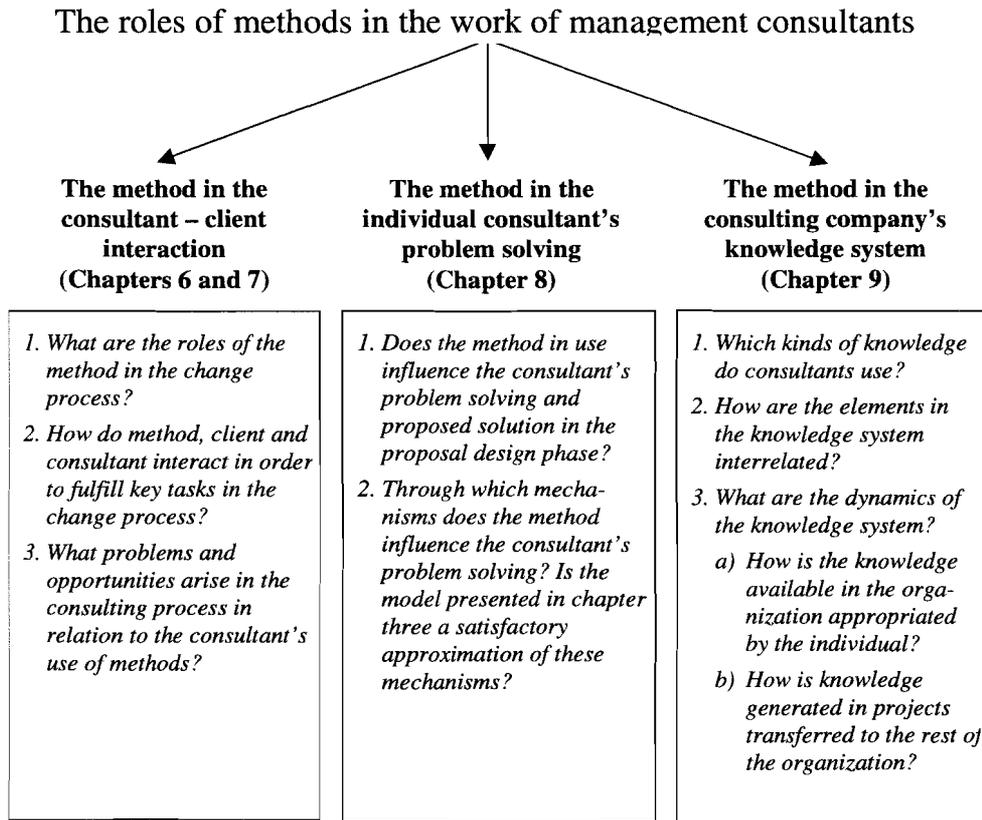


Figure 5.1. The research questions guiding the investigations in this thesis

Methodological approach

Taking perspective

In chapter three, two basic traditions of viewing knowledge in practical action were identified – the theoretical tradition and the practical tradition. According to the theoretical tradition, knowledge was viewed as something external to and separable from the actor. This tradition was based on a firm belief that knowledge could be represented in abstract and formalized theories. In the practical tradition, on the other hand, knowledge and actor were regarded as closely related. Consequently, general and abstract theories were regarded with some skepticism as to their ability to represent knowledge.

In chapter three, a choice was made in favor of the practical tradition of knowledge, as this was regarded as having a larger explanatory power in relation to the issues in focus in this study. This choice does not only have consequences for the theoretical frame of reference, but also for the methodological choices to be made in the following.

The two traditions of knowledge discussed are closely related to two central and opposing traditions within the social sciences – the explanatory social sciences and the interpretive social sciences (Helenius, 1990). The *explanatory social sciences* represent a positivistic epistemology and aim at the identification of general (often causal) relations within collected data. These data are unproblematically viewed as a direct representation of reality. Linked to this unproblematic view of reality is also the assumption that subject and object (e.g. researcher and study object, actor and knowledge, etc.) are readily separable (Alvesson and Sköldberg, 1994). The questions asked within the explanatory social sciences are often specific and directly derived from previous research, thus reflecting a cumulative view of science. The explanatory social sciences show a preference for exact, if possible quantitative data (Helenius, 1990) (see Table 5.1).

The *interpretive social sciences*, reflecting an anti-positivist epistemology (Alvesson and Sköldberg, 1994) do not believe in the search for general, directly observable empirical patterns, at least not as the final goal for the research. Instead, the interpretive social sciences assume that the reality as empirically observed is a manifestation of some underlying structures. These structures, which require the researcher to go beyond the directly observable data through interpretation, are the focus of the interpretive social sciences. These structures are not regarded as general truths, but rather as possible explanations with the purpose to increase our understanding of a phenomenon. Against this background, as well as the inseparability of subject and object, the results of the interpretive social sciences are regarded as historical, in the sense

that they are highly context-specific, anchored in a certain place and time. The questions posed within the interpretive social sciences are generally broader and more general. This is naturally also reflected in the data preferred, which is rich, broad and often qualitative. Methodological pluralism is also encouraged (Helenius, 1990) (see Table 5.1).

	Explanatory social science	Interpretive social science
Focus	Search for general (causal) relations directly observable in the data	Search for underlying meaning structures requiring going beyond directly observable data
Status of findings	Ahistorical	Historical
View on reality	Unproblematic – an objective world exists out there	Problematic – the world is “created” by individual actors
Relation subject - object	Separation of subject and object	Subject and object are regarded as inseparable
Type of questions	Well defined, reflecting a cumulative view of science	Open, “searching”
Type of data collected	Exact, focused, often quantitative	Rich, broad, often qualitative

Table 5.1. Assumptions underlying the explanatory vs. the interpretive social sciences

On the level of underlying assumptions as presented in Table 5.1, the explanatory and the interpretive social sciences are each others’ opposites. But these differences become less and less visible, the closer the concrete research activities in the form of, for example, data collection one gets. Looking at the transcript of an interview, it is often hard to tell whether the researcher belongs to the explanatory side or the interpretive side. These differences are important mainly in relation to the interpretation of results – what is their actual status and purpose? Do they describe reality “as it is” or are they to be regarded as indicators of an underlying structure which may be able to explain a very specific phenomenon and deepen our insights about this? (Helenius, 1990)

Given the above positioning towards the practical tradition of knowledge, the choice of the perspective of the interpretive social science is natural, and, given the arguments in chapter three, promises to be the most rewarding. (See also Helenius, 1990 and Alvesson and Sköldbberg, 1994, for a critique of the explanatory approach to social sciences). Against this background the understanding of specific cases is in focus, which, given the view of reality as constructed by its inhabitants, requires an understanding of the reality of the individuals involved.

In creating these understandings, i.e. identifying the structures underlying the observed phenomena, theory plays a central role. As opposed to the view dominant in the explanatory social sciences, patterns and regularities in the empirical material are only a first step. In order to identify the underlying patterns theory is needed as a source of inspiration for finding the underlying structures, that can help to better understand the empirical phenomenon.

The approach underlying this study is thus neither purely inductive nor purely deductive, but based on a combination of the two, with some bias towards induction. As indicated by chapters one to three, theory plays a role in formulating the questions to the empirical material and provides a point of departure for the creation of understanding of these data. Based on Alvesson and Sköldbberg (1994) the approach can be characterized as abductive.

Design of the study

The point of departure for this study has been a broad area of interest, namely the role of methods in the work of management consultants. This area was in chapters two and three shown to be a relatively unstudied and multifaceted phenomenon.

Against this background, this study can be characterized as exploratory. The fact the study is exploratory and placed within the interpretive tradition of social science, creates a number of requirements for the overall methodological approach:

1. In order to make the most out of the successively gained understanding of the phenomenon as the study progresses, the approach should be *flexible*. Flexibility in this context requires both the possibility to constantly *adapt the focus and methods* used for data collection, as well as to provide the *possibility to reinterpret* collected data in the light of the increase in knowledge of the phenomenon in focus.
2. Given the broad and indeterminate character of the initial research focus, the methodological approach has to be able to handle the emergence of a number of diverse questions, requiring the application of a *diverse set of research methods*.
3. The creation of an understanding of the phenomenon requires that data is *presented in context*, and in a *rich way*, thus reflecting as much of the phenomenon's real complexity as possible. As indicated by the questions above, the identification of mechanisms underlying identified roles is a recurring aim. This requires a rich picture of the phenomenon.
4. According to Brulin (1987), a problem with the study of management consultants is that they are used to and good at convincingly presenting their

specific view of reality, i.e. providing the researcher with a picture of reality that fits the consultant's purposes. Van Maanen (1979:542) distinguishes between two kinds of data – operational data and presentational data. Operational data “documents the running stream of spontaneous conversations engaged in and observed by the ethnographer when in the field”. Presentational data “concern the appearances that informants strive to maintain in the eyes of the fieldworker, outsider and strangers....”. Against this background, consultants could be argued to be good at maintaining a large gap between operational data and presentational data, thus creating a need for the close study of operational data. This implies *studying consultants in action* rather than talking to them about action.

The above thus calls for a methodological approach that allows continuous, or at least step-by-step adaptation, that makes possible the use of several different methodological approaches in order to study phenomena of different character, that allows reinterpretation of data after collection, that provides rich data within context and that provides operational data in addition to presentational data.

In order to achieve flexibility and the possibility to use a varied set of methods, a step-by-step approach was chosen. A pilot study (reported in chapter four) was conducted in late 1994 and early 1995 in order to generate a first map of the phenomenon. Based on this map, three areas for further study were identified. Due to the diversity of questions generated in each of these areas, a separate study was designed to answer the questions within each area. These studies were carried out in sequence, where the conclusions of each study informed the design of the proceeding studies.

The first study, focusing on the method in the consultant - client interaction, was carried out in the summer and fall of 1995. The second study, focusing on the method in the consultant's problem solving, was carried out during the spring of 1996. The final study, concerning the method in the consulting company's knowledge system, was completed in spring 1997 (Figure 5.2). The methods applied, for each of these studies, will be briefly described below and in more detail in the introduction to the respective chapters presenting the studies (chapters six to nine).

In order to obtain data which were possible to reinterpret after their collection, the approach to data collection was held as broad and open as possible, being guided only by the general research interest of this thesis – the roles of methods in the work of management consultants. A certain selection of aspects to focus was of course unavoidable, but the overall ambition was to minimize this during data collection, and instead postpone it to the analysis phase, when a better understanding of the phenomenon had been gained. In order to take into

account all insights generated in this study, in the interpretation of each of the partial studies, these were also analyzed in two steps. A first analysis was made following the data collection. This first analysis was revised after the completion of the three empirical studies (Figure 5.2).

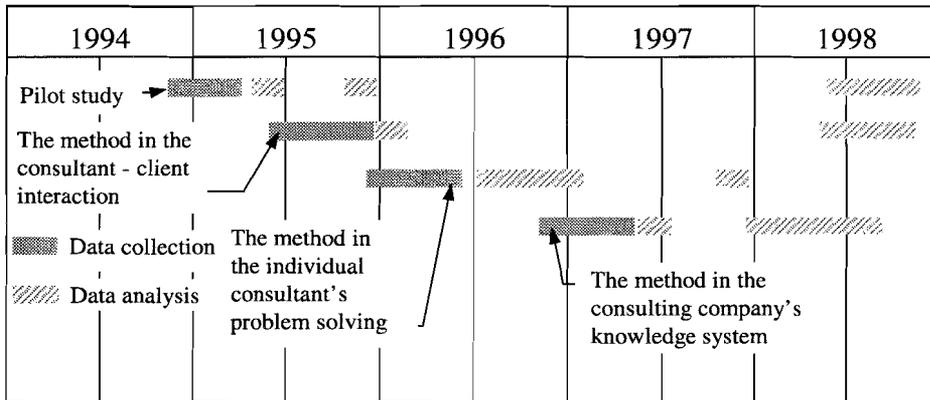


Figure 5.2. The sequential design of the study

Finally, in order to ensure the richness of data, and its embeddedness in context and operational character, data collection methods that provided as “raw” data as possible were chosen. These methods consisted of observations, simulations, and interviews closely related to cases. Simultaneously, presentational data were collected by interviews for most of the events for which operational data were available.

In summary, the overall methodological approach of this thesis is thus sequential, open and broad, focusing on as “raw” data as possible. In line with the study’s basis in the interpretive social sciences, its purpose is to identify structures underlying the phenomenon in focus in order to create an increased understanding of the phenomenon. In the following, I will go somewhat deeper into the designs of the three partial studies.

Studying the method - consultant - client interaction in the change process

The questions to be answered in the first study (reported in chapters six and seven) focused on understanding the interaction between the consultant, method and client in the change process. More specifically, the goal was to identify the roles of the method in the change process, the interaction of consultant, client and method in order to fulfill key activities in the change process and finally the problems and opportunities that arose in the consultant’s use of methods in the consulting process.

Little guidance was available from previous studies, especially in concern to the mechanisms underlying the roles of the method in the change process. This created a need for a flexible and “rich” methodology, which would make it possible to generate answers to the above questions from the empirical material. An approach supporting this requirement is the case study approach, which is relatively open, and therefore suitable for the generation of theory (Eisenhardt, 1989).

Given the choice of the case study approach a number of follow up choices emerged concerning the number of cases, the selection of cases, the techniques for data collection used in studying the cases and finally the way of analyzing the material. The choice of the number of cases was limited by time and access constraints. Closely following a change process in real time is very time consuming, which significantly limited the number of possible cases. Secondly, gaining access to cases was a constraining factor, as it involved the consent of two parties, namely the consultant and the client. Against this background, only one case study was conducted. But in this case, the change process was followed in as much detail as possible.

The selection of cases was also to a large extent steered by the availability. Still, a number of criteria were formulated for the choice of cases, which are fulfilled by the chosen case. These criteria follow the delimitations set out in chapter one, i.e. method driven BPR project carried out by a “one firm concept” management consulting company. A further criterion was that the project should not be too large as to be impossible to be observed by one researcher.

Given the focus of the study, i.e. the interaction between consultant, method and client in the change process, four different objects had to be covered in the study: the consultant, the method, the client and their interaction. Following one of the general principles for this study, the collection of the “rawest” possible data, observation of the client - method - consultant interaction was chosen as a method. All project group meetings, except for the initial phase of the project, were observed through participant observation by the researcher. This mainly provided a good picture of the interaction. In order to understand the consultant as well as the client’s point of view in more detail, the observations were complemented by recurring interviews with both the consultant and the project group members. In total, twelve project group meetings were observed and twelve interviews with the consultant and the project group members were carried out.

The analysis of the data was mainly carried out inductively with available theory on organizational change providing a structure for it. As a first step, the method - consultant - client interaction in carrying out key activities in the

change process is analyzed. Based on this analysis, three different roles of the method are identified together with prerequisites for their realization.

Studying the method in the individual consultant's problem solving

The second empirical study concerns the method's role in the individual consultant's problem solving. This general area has been operationalized into a study of the proposal writing process (see also appendix A). The questions posed here are whether different consultants differ in their activities during the proposal writing process, and whether these differences are reflected in the results of the process. The understanding of these differences and their potential causes is also focused.

Whereas the focus in the previous study was the understanding of one single case, the questions posed in this study imply a comparison of several cases. To control the variation between these cases, a strong control of the proposal writing process is called for, which is possible only in an experimental situation (Yin, 1989). Furthermore, the focus of the study is on understanding the sources of variation in the consultants' proposal writing processes as well as the mechanisms causing these variations. This requires an insight into the consultants' thought processes. One way of gaining this is through the production of verbal protocols, in which the consultant verbalizes his thoughts while he is thinking (concurrent verbal reports) or reconstructs his thinking afterwards (retrospective verbal reports) (Ericsson and Simon, 1984). The most reliable reports are the concurrent verbal reports, but it is hard to obtain these in a real life situation, which points at the use of simulations as a suitable method. This also fits well with an experimental design.

Against this background, an approach to the study was chosen, where consultants from two different consulting companies using three different BPR methods were confronted with the same task – the design of a proposal based on a standardized problem description and company presentation. The choice of participating companies was again based on the delimitations sketched out in chapter one as well as the companies' willingness to participate. In selecting consultants as "test persons", the aim was to ensure a spread in seniority. Thus, one of the consultants from each company was a junior consultant, one was experienced and the third had an intermediate experience.

A number of different types of data were generated throughout the simulations (see appendix A for a detailed description and discussion of the design of the simulations as well as the simulation case). Each simulation was begun by a pre interview collecting data on the consultant and his background, experience and used method. During the simulation itself, the consultant was asked to "think aloud" thus generating concurrent verbal protocols. The consultant's

information collection was also logged, which was possible, as the information was provided by a computer. The information concerning the case was distributed on a number of thematic “cards” (e.g. structure, budget, etc.). The time spent by the consultant looking at the different cards, as well as their sequence was recorded. Following the simulation, a post interview was conducted focusing on questions about the realism of the simulations, the consultants’ reflections about it, etc.

The data obtained in this study consisted of pre and post interviews, a concurrent verbal protocol of the simulation process, data about the times spent on different information, and a draft for a project proposal. The data were analyzed in a multi-step procedure, in which the rich data were reduced step by step. As a first step of the analysis, the consultants’ behavior was analyzed in terms of time spent on different information categories and reflections made in the process. This led to the identification of three dimensions, along which the consultants’ approaches differed.

As a second step, an effort was made to understand the observed differences. This effort was based on Schön’s (1983) framework pointing at four constants, claimed to explain differences in practitioners’ actions (see chapter three). The content of these constants for the studied consultants was investigated in the second step of the analysis. The method’s potential influence on and overlap with the constants was studied in a third step. This provided the basis for answering the question about the mechanisms underlying the method’s influence on the consultant’s action.

Studying the knowledge system in a consulting company

The focus of the third empirical study, finally, was the mapping and understanding of the consulting company as a knowledge system. This involved the identification of key elements in the knowledge system, their interrelations, and their temporal dynamics (reproduction and change). These questions were again of an exploratory nature, requiring a reasonably broad and open approach to data collection and analysis. Two sources of data were applied against this background. The main source of data was a case study, following a project from within the consulting organization. A secondary source of data were the pre and post interviews conducted in connection with the previous study. These data were mainly used to validate the insights gained through the case study.

Given the focus of the study, a case was chosen, where an intensive knowledge exchange was expected to take place. This case (the alpha project) was a large case involving three consultants on a more permanent basis – one project leader and two sub-project leaders. The project was also important for the consultancy, as the client was a large organization providing a vast potential for future

business. The study of this project focused on the knowledge sources applied in carrying out the project. In order to map these, recurring interviews were carried out with the project leader and one of the sub-project leaders. Their views were complemented by interviews with other consultants in the organization, involved in method and knowledge development. One internal planning meeting in the process was also observed. In total, seven interviews were carried out and one meeting was observed in this study.

The insights gained in the case study were validated and elaborated on, based on the basis of information gained during the interviews in connection with the simulations. One of the questions asked during the post interview was about the sources of knowledge in the proposal writing process. The answers to these questions generated insights into the knowledge systems in two additional organizations.

The analysis was again based on the empirical material and carried out step-by-step, addressing the formulated research questions in sequence. As a first step, the knowledge used in the alpha case was analyzed. The elements of the knowledge system were then as a second step validated against the knowledge system in the consultancy as a whole, as well as the two other organizations studied. As a third step of the analysis, the interrelations between the knowledge elements were identified. Finally, as a fourth step, the dynamics of the knowledge system, i.e. its reproduction and change were analyzed.

A note on analysis

Much has been said above about the empirical data and the overall purpose and direction of the analysis of this data. Considerably less has been said about the procedures of analysis in the different studies. The details of the approach to analysis will be discussed separately in the introduction to each of the studies. I will here only provide an overview of the analysis procedures applied, as well as comment on some issues relevant for the analysis processes in all the studies.

As outlined in the brief descriptions of the design of the three studies underlying this thesis, the empirical material has a prominent position in the generation of knowledge in this study. It is the empirical material rather than theoretical categories that provide the basis for knowledge generation. But, unlike a traditional inductive approach, this study takes the analysis a step further by discussing the observed empirical patterns in the light of theory in order to identify underlying structures that can help understand the empirical patterns. This is in line with the abductive approach chosen for this study. The analysis can thus be described as consisting of two phases. In the first phase, the focus is on searching for patterns in the empirical material. In the second phase, the patterns found are related to and discussed in terms of theory in order to

generate an understanding of the structures underlying the observed empirical patterns (c.f. Alvesson and Sköldbberg, 1994).

The first step in this approach is inspired by grounded theory, in the sense that a central activity is the generation of categories describing vital aspects of the phenomenon under study. These categories are generated based on data and gain their meaning through the data constituting them. The categories are also close to the empirical material, in the sense that they should be recognizable and understandable for persons involved in the practice from which the categories are generated (Glaser and Strauss, 1967). But, as opposed to Glaser and Strauss, I do not see these categories as a “true” representation of reality. Rather, they focus on certain aspects of this reality and are guided by the question posed as well as the theoretical point of departure for the researcher.

In order to give the reader some access to the exact contents of the created categories, as well as the procedure for analysis, I provide a large amount of citations throughout the empirical presentations below. These citations are to be viewed as typical exemplifications of a specific pattern in the empirical material. In most cases, the quoted citations are selected from among a larger number of possible citations contained in the created categories. The choice of a specific citation is guided by a desire to find citations that most clearly illustrate the point to be made, as well as provide a breadth in the persons quoted, so that the voices of as many actors as possible are heard in the empirical presentations.

In generating the categories representing the first step of the analysis, a computerized tool for qualitative data analysis – NUDIST – was applied. This supported the categorization of data as it made it possible to link an infinite number of chunks of text to an infinite number of hierarchically ordered categories created by the researcher. The program also greatly facilitated the retrieval of the text coded in a certain category, as well as making it possible to examine the coding of a certain piece of text. By supporting the mechanical aspects of the coding task, and making the content and coding of a category readily available to the researcher, it contributed to a more rigorous analysis process, ensuring the correspondence between conceptual categories generated from data and the underlying data (c.f. Fielding and Lee, 1991; Richards and Richards, 1991).

More concretely, the categorization process was carried out in two steps. As a first step, all data in terms of interview transcripts or field notes was gone through in NUDIST and categorized into categories derived from the data (see Appendix D for a list of categories generated in the three studies underlying this research). A category was in this context viewed as constituted by a number of text chunks with similar content. All information in the texts was coded in some category. If no suitable category for a piece of information was found a new category was created.

As a second step, the categories were looked at to ensure their coherence. This was important because the exact content of the category emerged throughout the categorization process. The chunks of text coded in a specific category were what defined the category. This second step of verifying the categorization was important in order to detect shifts in the definitions of categories during the coding process. In this second step, the total number of categories was also looked at in order to merge categories that were very similar to each other. In this activity it could also be found that one category actually contained text that represented a number of different categories. In these cases categories were split.

These created categories provided the point of departure for the empirical reports of the studies as well as the identified empirical patterns, which were then made subject to a more theoretical analysis. The contents in these categories were also the basis for selecting quotations, which have been richly used in the empirical presentations.

This two-step categorization procedure, using NUDIST as a tool, contributes to the rigor of the study, as it assures a sound empirical grounding of the concepts and relations to be reported. Alvesson and Sköldbberg (1994) criticize the grounded theory approach for the amount of time spent in categorization. I, on the other hand, view this as a strength ensuring the empirical foundation of conclusions drawn within this study.

Summary – the empirical basis of this study

The overall perspective on research, the methodological approach, and the three empirical studies providing the core of this investigation into the “roles of methods in the work of management consultants”, have now been described in an overview fashion. Some general comments were also made in regard to the analysis process. More detailed descriptions are provided in the introductions to each of the studies and in the appendices. Based on the exploratory nature of this research and its interpretive point of departure, a number of requirements for the methodological approach were identified. These requirements included the possibility for continuous or at least step-by-step adaptation and the possibility to use several different methodological approaches. The general methodological approach was also required to allow reinterpretation of data after collection, provide rich data within context, and provide operational data in addition to presentational data. Against this background, a sequential approach involving several sub-studies was chosen. The methodological approaches, the employed data collection methods and the underlying sample are summarized in Table 5.2.

	Pilot study (Chapter 4)	The method in the consulting process (Chapter 6 and 7)	The method in the consultant's problem solving (Chapter 8)	The method in the consulting company (Chapter 9)
Methodological approach	Broad overview study	Single case study	Simulation Experimental design	Multiple case studies
Data collection methods	Interviews	Interviews Observation	Verbal protocols Interviews Computer logging of data collection	Interviews Observations
Sample	12 Interviews from 5 companies	12 project group meetings observed 12 interviews with project group members and consultant	7 consultants from 2 companies	7 interviews and observations of 1 meeting in the case study Data gathered in the simulation study (see previous column)

Table 5.2. The empirical basis of this study

Chapter Six

Methods in the project work with the client – a case

Background and purpose

In the introductory empirical investigation of the roles of methods in the work of management consultants reported in chapter four, the project work with the client was identified as one of three domains where methods were seen to have a potential role. A preliminary set of roles was also identified and found to overlap rather well with roles of methods as identified by others and reported in chapter two. But it was also concluded in chapter five, that there is a lack of understanding of the detailed mechanisms underlying these roles, as well as the potential, problems and prerequisites for their realization. Against this background, the following three questions regarding the roles of methods in the consultant's project work with the client were formulated:

- 1. What are the roles of the method in the change process?*
- 2. How do method, client and consultant interact in order to fulfill key tasks in the change process?*
- 3. What problems and opportunities arise in the consulting process in relation to the consultant's use of methods?*

This chapter, as well as chapter seven, focus on answering these questions. This endeavor is based on an in-depth empirical study of a consultant driven change project that has been studied both through participant observation and through recurring interviews with both the consultant and the client representatives in the project group. The case study and a first analysis focusing on the method's role as a guide for the consultant are reported here in chapter six.

In chapter seven, the analysis is elaborated on. Based on a review of the literature on planned change, six key activities in the change process are identified. These activities provide a structure for a detailed exploration of the case, focusing on the interplay between the consultant, the client and the method in the change process in general, and in the fulfillment of the identified key activities more specifically. This analysis results in the identification of three roles of methods in the consultant's project work with the client as well as the relations of these roles to the roles of the client and the consultant.

The presentation of the case in this chapter is set out as follows: Firstly, I present a framework identifying the consultant, the client and the method as the key elements in the change process. In particular, the relations between these elements are identified as central. Secondly, the methodological approach to the study is presented. The study is based on one case that has been studied through unstructured observation and repeated interviews with both the consultant and the project group members.

After this initial background the case study is presented in detail. The presentation of the empirical material is structured according to the different project phases. For each phase, the activities suggested by the method and the project proposal are described first. Then the actual activities of the consultant and the client members, as well as the method's contributions to these activities are discussed.

A framework for empirical investigation

Much of the research on consultants' actions reported in chapter two focuses quite one-sidedly on the consultant, depicting the client as a helpless victim of consultant actions. This, Sturdy (1997) argues, is a somewhat misleading perspective underestimating the power of the client and his ability to resist the consultant's activities (see e.g. Watson, 1994). Sturdy therefore suggests viewing both actors as equally influential and focus on the interaction between them when trying to understand the consulting process.

Analogically, I argue that the roles of methods in the change process cannot be understood in isolation. The empirical exploration of the potential roles of methods (chapter four) as well as the theoretical reviews in chapters two and three establish a tight link between the method and its users. This suggests that an understanding of methods needs to take into account both the consultant – as the agent representing the method – and the client, having a choice to accept or reject the actions by the consultant in which the method is put into use (Watson, 1994).

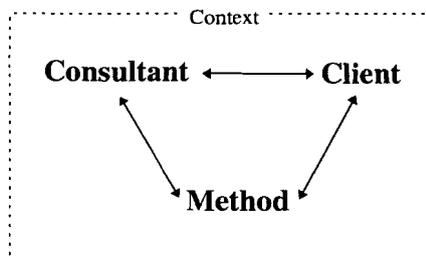


Figure 6.1. Consultant, client and method interact in the change process

Understanding the role of the method in a change process means to simultaneously understand the consultant, the client, the method and their interactions, as well as the context in which the interaction takes place (Figure 6.1). Examples of important aspects of these different elements are the client's attitude to change as well as towards methods in general, the consultant's view of his role in the process, the character of the methods available, etc.

The concepts of "consultant" and "method" have been defined at length above, but the concept of "client" has mainly been used unspecified, sometimes referring to the client company as such, sometimes to the top management of the company, sometimes to its personnel, etc. For the purpose of this study, the concept will be given a somewhat more specific meaning.

Kanter, Stein and Jick (1992) identify three groups of actors in the change process – change strategists, change implementers and change recipients. The main role of the *change strategists*, with their knowledge of and contacts with the external environment, is to identify the overall need for change and create an overall vision for the outcome. Change strategists do the "big-picture" work, and allocate resources to the *change implementers*, that "make things happen". Change implementers are often responsible for translating the vision into a realistic implementation plan and then carrying this through in order to achieve change among the *change recipients*. The change recipients are the numerical majority of those involved in the change process. They are the ones that have to adopt and adapt to the change, and who can stop change if reluctant to it.

Detailed methods for reengineering are mainly used in the collaboration with the change implementers, who are the ones that make up the project group and thus interact most actively with the consultant. Consequently, when talking about the client in the remainder of this chapter and chapter seven, I refer, if nothing else is said, to the change implementers as represented by the project group in the reengineering project. This choice of focus is somewhat unusual in research on management consulting, where the focus has often been the managerial level, i.e. the level of change strategists, but this choice is justified by the fact, that the most intense interaction between consultant, method and client takes place on the level of change implementers in the project group.

In line with the focus on the change implementers as represented by the project group, the main empirical focus of the study will be the place where project group members, consultants and method meet – the project group meeting. The importance of the above-mentioned three elements for the understanding of methods in the change process is also reflected in the presentation of the empirical material. Apart from a chronological structure, it follows a logic where the roles of each of the above three elements are described, and their interaction is discussed

Methodological approach

Delimitation

Change processes, especially radical ones are time consuming and complex processes (Kanter, Stein and Jick, 1992). Against this background, a delimitation of the process to be studied was needed for practical reasons. Delimitations in two dimensions were made – the phases to study and the actors to study.

In choosing which part of the process to study, it was natural to focus on the part in which the method played the most important role according to the consultant's own view. In the interviews with consultants about their use of methods reported in chapter four, the project phases preceding the implementation phase were generally described as the phases in which the method was most actively applied. In particular in the diagnosis phase, the method was described as important by the consultants. Against this background the case study to be reported below ends with the presentation of the consultants' final report, identifying a number of improvements for implementation.

The delimitation to the phases preceding implementation was also driven by more practical considerations, as the original consulting project only comprised the phases prior to implementation. Activities in relation to implementing the suggestions generated by the project were to be negotiated in a new contract. It was also indicated that the consultant would have a much less central role in implementation, leaving this mainly to the client organization.

The second delimitation concerned the actors included in the study. The focus on the client side was on the project group members, which was motivated by similar considerations as the choice of phases to study, i.e. the expected importance of methods for these actors. The change implementers were the ones, that interacted the most with the consultant and the method.

Data collection

The empirical material collected in the case relies on three main sources – observations of meetings in the project, written material handed out and produced during the project, and interviews with the consultant and the project group members. Twelve meetings related to the project were observed, and twelve interviews were carried out during the project (see appendix C).

Observation

The initial intention in relation to data collection was to observe the consultant in his work with the project group throughout the entire diagnosis and reengineering process. Unfortunately, for practical reasons, it was not possible to follow the initial phases (selling in and mobilization) of the project through observation. Therefore the descriptions of these phases are based on secondary information collected from the participants during interviews. The descriptions of the following phases (diagnosis, reengineering, and elaboration) are all based on direct observations. In these phases I participated in all the project group meetings.

My engagement in the project group was solely as observer, which gave me the possibility to in detail document these meetings lasting between two and twenty hours. The notes taken during the process focused on the consultant's actions and utterances. These were, as far as possible, transcribed literally. The comments of the project group members were written down in less detail, unless they were involved in a direct conversation with the consultant. All written material presented or produced within the process was copied and filed for the analysis.

The observations of the process provided me with a very detailed picture of the reengineering process and the consultant's actions within this. Specifically, it provided the possibility to go beyond the picture provided by the consultant of his actions, and compare this with what he actually did in practice.

Interviews

In order to complement my picture of the reengineering process with the perceptions of the consultant and the project group members, repeated interviews were carried out both with the consultant leading the project and with the project group members. Four interviews were conducted with the consultant, two interviews with each permanent project group member and one interview with each of the more temporary project group members (see appendix C). The interviews were conducted between the diagnosis phase and the visioning seminar and at the end of the elaboration phase.

The purpose of the interviews was to gain a deeper understanding of how the persons involved in the process perceived this, e.g. the division of labor between consultant and project group, the method, etc. The interviews were semi structured and lasted between one and two hours. The interviewees' willingness to participate in the interviews was great, and their participation candid. The interviews were documented through note taking. The notes from both interviews and observations were transcribed as soon after the meeting as possible, while the memory of the meeting was still fresh.

Analysis

The analysis was carried out following the completion of the data collection. The point of departure for the analysis was the above outlined framework underlining the importance of understanding the *interaction* of the consultant, the method and the client. As a first step of the analysis, the documentation from the project, about 125 single-spaced pages of interview and observation protocols, were entered into NUDIST¹². This material was then categorized in an iterative and inductive process, in which categories were created as the analysis went on (see Appendix D for a list of categories). As described in chapter five, the categorization process was carried out in two steps, focusing on the empirical material and the categories respectively.

Following the categorization of the material, the narrative describing the case presented in this chapter was written down, with a focus on presenting a concurrent understanding of the respective roles of the consultant, the client and the method in the reengineering process. As a basis for the descriptions of the different project phases, NUDIST reports were used. In order to validate the empirical description, it was presented to both the consultant and the project group members. No major changes were suggested by these, which I interpret as a validation of the case description.

The produced narrative provided the basis for the further analysis of the case, that is divided into two steps. Firstly, the role of methods as a guide for the consultant is investigated by comparing the links between the method, the situational adaptation of the method in the project definition and the actually observable activities in the project. This analysis concludes chapter six.

Secondly, reported in chapter seven, the analysis is elaborated on focusing more deeply on the interaction between method, consultant and client. This analysis breaks with the temporal logic underlying the case description and is instead structured according to theoretically derived key activities necessary in the change process. In this analysis, the interaction of consultant, method and client in realizing the key activities is discussed based on the case, and related to other theoretical and empirical findings. Based on this investigation, the roles of methods in the consultant's project work with the client are identified and their interaction with the client and consultant is discussed. In a final section

¹² NUDIST is a computer program for qualitative data analysis. It enables the categorization of text blocks. Its strength in this context is the possibility to present selected categories in a way that facilitates overview and further analysis.

the problems and opportunities related to the use of methods in reengineering, as perceived by the consultant and client respectively, are summarized.

Reengineering at Scandtel Ltd.¹³

In this section, I will provide a detailed description of a reengineering project at a mobile phone operator called “Scandtel”. In the below presentation of the case, my goal has been to convey an in-depth understanding of the case to the reader in order to leave some openings for the reader’s alternative interpretations of the data. In order to further facilitate this, the presentation of the empirical material is kept on a relatively detailed level, and separated from the analysis. In order to provide a “feeling” for the case, quotations are used extensively. As I did not use a tape recorder for data collection, quotations should be viewed to reflect the general meaning of what was said rather than the detailed wording.

Both the below presentation of data, as well as the analysis of it, will focus on the respective roles of the method, consultant and client and their interrelations. Following this logic, I begin by providing background data on the client (the business, the reasons for change, as well as the reasons for choosing the specific consultant), the consultant (both the company and the individuals involved in the process) and the method (its basic structure and perceived purpose). Following this background, I then turn to a temporal logic, describing each of the four main project phases. The choice of the temporal logic is motivated by the fact the roles of the elements in the process (consultant, method, and client) differ between different phases.

But before getting into the details of the case, I will below provide the reader with an overview of the overall logic of the reengineering process. This will hopefully help the reader in keeping the overview and a holistic perspective, during the following more detailed presentation of the case.

A summary of the Scandtel case

In February 1995, Keith¹⁴ became the manager of the Stockholm region of Scandtel, a mobile phone operator. One of his tasks was to see to the realization of the defined goals for the expansion of the radio network infrastructure, i.e. the putting up of new radio base stations around the city. This process became even more vital, as there were prospects for an even faster expansion of the

¹³ “Scandtel” is a fictitious name in order to guard the client company’s anonymity.

¹⁴ All names of persons used in the cases are fictitious.

radio network in the near future, related to the introduction of a new frequency range (GSM 1800).

In the middle of May, Keith called an old acquaintance – Bengt – a consultant at Ernst & Young Management Consultants (E&Y MC), whom he knew from a previous change project. The purpose was to discuss the reengineering of the process of putting up radio base stations as well as continually optimizing the radio network. As a first step in this direction, Keith invited Alan, a consultant from E&Y MC and a very engaging lecturer, to his first six-monthly management forum gathering the higher level managers in the Stockholm region. At the management forum Alan presented E&Y MC’s BPR- Norden method, which was greeted with enthusiasm by the participants.

After two brief meetings between Keith and Bengt, Bengt presented a project specification that was accepted right away. Thereafter, the work with the reengineering process started. Bengt began the project with a number of interviews with key persons in the organization. In parallel with these activities, the project group members were selected from the two departments involved in the process, and a “mobilization seminar” was held, with the members of the departments involved.

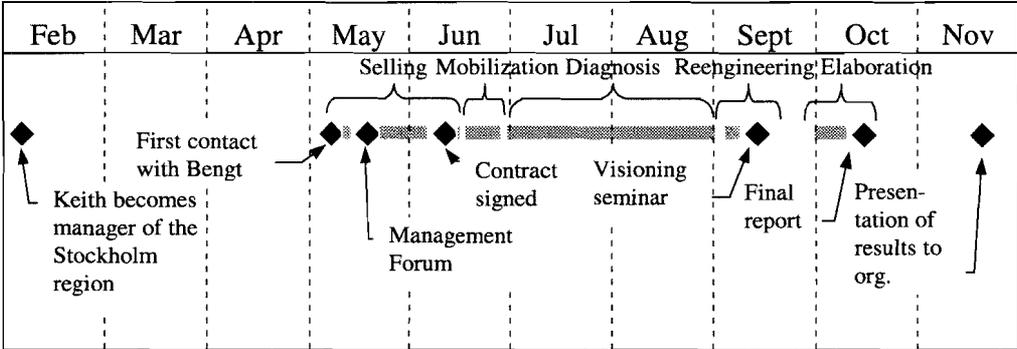


Figure 6.2. A summary of the case

After this seminar, the diagnosis phase was entered, which lasted throughout July to mid-August. In this phase, the processes to be redesigned were defined in more detail and measured and mapped. This activity initiated three project group meetings. In parallel with these activities, the consultants also carried out a number of interviews with clients of Scandtel, as well as initiated a benchmarking study with another company.

In the beginning of September, the reengineering phase was entered. The main activity in this phase was the two-day visioning seminar, gathering about twenty people from the organization for a creative brainstorming about the new processes. A project group meeting preceding this seminar was devoted to the

preparation of the seminar. Following the visioning seminar, the elaboration phase was entered, aiming at the specification of the visionary process design produced at the visioning seminar. This took place during three seminars in the beginning of October. In mid-October, a final report was delivered to the management of Scandtel. The design phase in the project was formally concluded with a presentation of the results to the two departments involved at the end of November (see Figure 6.2 for a graphical depiction of the developments).

The client and his problem

Following the overview of the case, I will now go into the details, beginning with a description of Scandtel, and the situation initiating the reengineering process. In 1995, Scandtel was one of three main providers of mobile phone services in a rapidly expanding market, especially in the larger area of Stockholm, which is the focus of this case. Being able to cope with the market expansion meant continuously expanding the network of radio base stations, particularly in the central areas of Stockholm. Lagging behind meant deteriorating quality of Scandtel's services in terms of not getting access to the network (not being able to call) or being cut off in the middle of calls. This in turn jeopardized the company's ability to serve its customers and thereby its long-term survival.

Keith was appointed the new manager of Scandtel's Stockholm region in February 1995. The expansion of the radio network was an important issue on the agenda. It had been identified as a key area in the quarterly report for the first quarter of 1995 in the Stockholm Region, and Keith had received an explicit order to ensure that the set goals for the expansion of the radio network in the Stockholm area were met. This required a large increase in the rate of expansion, as this had been lagging behind for some time, in spite of a workforce constantly working overtime.

Keith's main challenge as a new manager was thus to increase the productivity in the activities that were related to the expansion of the radio network. In practice this meant focusing on four main areas of activity – radio network planning, radio network projecting, implementation and production/verification. These activities ranged over three departments – network planning, network projecting and technology/service (see Figure 6.3).

The activities of the radio network planning department involved planning expansions and changes of the network of radio base stations that received and transmitted the signals from mobile phones. These activities involved decisions about whether and where to install new radio base stations, to increase the capacity of existing ones or to change the parameters of these in order to

increase the quality of the network by a better allocation of frequencies. These activities are crucial for the perceived quality of the provided telephone services. Initiators of these activities could be plans and prognoses, as well as demands or complaints from customers concerning the coverage and quality of the network.

In the activities of the network projecting department, the alterations planned in the network planning department were made more concrete. This involved finding a suitable site for the installation of the radio base station (on a roof, a facade etc.), the negotiations with landlords, the requisition of permits, as well as a number of other administrative activities required before the actual installation of the equipment.

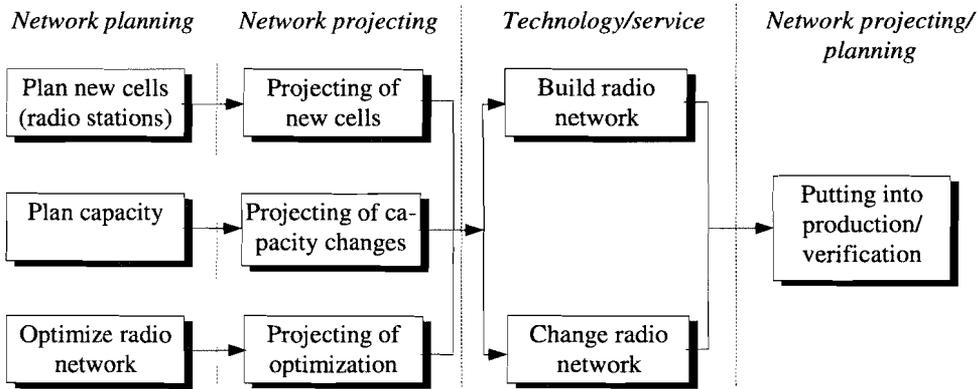


Figure 6.3. Sub-processes in the process of expanding the radio network

Based on the detailed specifications produced in the projecting process, work orders were then given to the technology and service department that was responsible for the physical implementation of the changes in the network. Having implemented the physical changes, the final step in the process was putting the new/changed base station into production and verifying that the changes had the desired effects.

The most time consuming and thereby most crucial activities in this process were those related to network planning and network projecting. Consequently, these were chosen as the focus of the reengineering process, thus excluding the activities of the technology/service department from direct study. In total, the two departments permanently employed about twenty persons, but in order to handle the increasing workload, several “consultants” had been hired, mainly for work in the projecting department.

The focus of the project to speed up the expansion process was stated in the project definition as follows:

The goal of the project is to design a new process for expanding the radio network able to handle a faster expansion of the network in order to meet the rapid growth of the market. The goal is to meet clients' requests faster than any other player and to be able to build xx¹⁵ radio base stations during 1996 with the same number of employees as today.

This project focus points towards a goal of drastic improvement of the productivity of the persons involved in the radio network building process. This was to be achieved through finding "a new way of working" – an objective for the project that was well communicated within the organization. All interviewed people in the organization describe the goal of the reengineering process in these terms.

The employees involved in the processes of building and changing the radio network looked forward to the process with high hopes. Due to, among other things, the high workload, their work situation had become increasingly stressful and frustrating, and there was a widespread dissatisfaction with the current way of working. One of the project group members from the network-planning department expressed her feelings as:

If this project does not deliver any results, there is no hope left. The only thing to do then is to seek a job somewhere else. (Anna)

In parallel with this frustration, creating a general enthusiasm towards the reengineering project, time and again expressions of an underlying skepticism towards it could be observed. In the past two years, a number of different projects with similar goals and approaches had been started within the departments, but none of them had led to any substantial changes. The question left in the air was "why should *this* project be successful?" This made the process crucial also from a human resource perspective. The employees of both departments had engineering degrees and at the time of the study, demand for the competencies possessed by these people, especially their experience, was high, not the least among Scandtel's competitors.

To summarize, the need for change in the organization was thus large, both in order to survive on the market as well in order to retain the organization's skilled employees. As this situation had been caused by expansion, commitment and willingness to change was high.

Contracting a consultant

Against this background Keith felt a need to act quickly. He described BPR, with its focus on rapid and radical results, as a suitable method. The remaining problem was by whom the work should be done. Keith had quite some

¹⁵ Figure omitted due to confidentiality reasons.

experience of change processes. According to his experience, the main problem was to create momentum in the project. Consequently, he looked for a consultant that could take the role of the engine in the change process, that would keep the process running. The mere presence of a consultant in the process was assumed to support this:

The consultant has a price tag, which contributes to an increased seriousness in the work. It is much easier to cancel a meeting with a colleague than with a consultant. (Keith)

Keith had positive experiences with E&Y MC, and especially Bengt, from an earlier project in another region of Scandtel. In that case the process had progressed very rapidly, which was a necessity in the current situation. So, in the middle of May, Keith gave a call to his old acquaintance – Bengt. This conversation, starting with a discussion of the emerging results of the previous project, soon came to focus on Keith's challenges in the Stockholm region. In this discussion Bengt took the opportunity to present E&Y MC's recently completed method – BPR-Norden. This discussion Bengt described as the actual sales event.

Soon after this conversation, Keith invited Alan – one of the portal figures of E&Y MC and a brilliant lecturer – to give a presentation at a management forum – a recurring event gathering the higher level managers in the organization. At this meeting, Alan presented “why to use BPR, and how such a project looks”. Martin, one of the project group members, further described the reception of Alan's message in the following way:

As the need was there, the method immediately fell into place for the people concerned. (Martin)

But the enthusiastic reception of the message was not only attributed to the content of the message, but also to Alan's lecturing skills. He was described as a charismatic presenter, who knows how to create enthusiasm among his audience. Thus, the method became strongly linked with the client's needs and with the charismatic consultant.

Following the telephone conversation with Bengt, a meeting was arranged at Scandtel in order to discuss a potential project in more detail. At that point in time Keith had already made up his mind about running the project together with E&Y MC. This meeting was therefore mainly devoted to the presentation of a typical project design according to E&Y MC's method, as well as to the collection of some base data about the organization and the problem needed for the production of a project proposal.

The project proposal, defining the project's purpose, approach, time plan and costs was presented to Keith in the middle of June. It was instantly accepted.

On the same day Bengt started his work by elaborating on his own picture of the organization through interviewing key persons in the organization.

The consultant and his method

Having described the client organization, as well as the process leading to the choice of Bengt and E&Y MC as the consultants, I will in the following provide some background to the consulting company, the method and the individual consultants.

Ernst & Young Management Consulting

Ernst and Young was founded in 1991 as a merger between two auditing companies – Ernst & Whinney and Arthur Young. Arthur Young, the one half of E&Y MC had started a subsidiary in Sweden in 1990. Its management consulting business was established around a model viewing the organization as a whole, consisting of the elements people/organization, technology (IT) and processes. This basic organizational model was also underlying the company's international method, Navigator, aimed at supporting the work of Ernst & Young's management consultants worldwide.

The Navigator method has its roots in the work with the development of IT systems. In the beginning of the 80s a decision was made in Ernst & Whinney to increase the knowledge of designing and developing IT systems within the organization. One output from this work was the systems development tool "Information Engineering", later developed into "Navigator". The experiences from the development and marketing of commercial systems development methods became guiding for the company's approach to methods. Rather than just looking upon these as a support to the internal consultants, they were also looked at as products to be sold to companies with a need for change.

Due to the specifics of the Swedish market for consulting services with regard to preferred ways of carrying out change processes and for specific solutions, there has been an ongoing local development in the method area. A major Swedish method development initiative was launched in 1995, when a collaboration with Björn-Erik Willoch, often referred to as the Nordic BPR Guru, was started aiming at the development of a Nordic commercial BPR method – BPR-Norden. This development was based on both the international Navigator method, as well as Willoch's method (see Willoch, 1994). A first trial version of the method was introduced in the fall of 1995 and the full-scale commercial release of it took place in January 1996. The Scandtel case was one of the first projects to use and test the method.

The method – BPR-Norden

The BPR-Norden method has a modular structure for simple updates, which is important, as a new version of the method is released every six to twelve months. The method for process innovation that was used in the Scandtel project consists of four main phases – Diagnosis, Redesign, Pilot and Implementation. The Diagnosis phase should normally be preceded by a Mobilization phase. Each of these phases contains a number of activities, sub-activities and sub-sub-activities¹⁶ (see Figure 6.4).

The Diagnosis phase	The Redesign phase
1. Map and quantify the process	1. Create future vision
Initiate and delimit the process innovation project	Develop background material
Establish business goals for the process	Plan visioning seminar
Describe and quantify the process	Develop visioning material
2. Evaluate the process	Execute visioning seminar
Evaluate the process against customer requirements	2. Elaborate future vision
Evaluate the process against best practice	Describe the new process
Analyze the enablers of the process	Describe the new requirements for Personnel/organization
Identify short-term improvement initiatives	Describe the new information support
3. Establish goals for the redesign process	Carry out a cost-benefit analysis of implementation
Establish redesign goals	3. Plan a pilot test of the vision

Figure 6.4. The activities in BPR-Norden’s diagnosis and redesign phase

Each of the sub-activities (e.g. “Develop background material”) is described in terms of key words, inputs (documents and information), outputs, activities, working techniques and examples of results. The method is thus relatively detailed in prescribing the approach to the reengineering process. The content in the different phases will not be elaborated on here. A short introduction to the content will be given below in connection with the detailed description of each of the project phases.

¹⁶ The sub-sub-activities are not presented below. For each sub-activity, there are 2 to 7 sub-sub-activities.

The consultants

Having given a presentation of the client – Scandtel – the consulting company (E&Y MC), and the method, BPR-Norden, all that remains to complete the case background is a presentation of the consultants involved in the case. From E&Y MC's side a number of different consultants were involved in the Scandtel project, but the bulk of responsibility and the client contacts were laid on one individual – Bengt – who was the project leader.

Bengt

Bengt graduated as an engineer from the Royal Institute of Technology. He also has some education in Business administration from executive education courses at the Stockholm School of Economics. He started working with E&Y MC in 1993, after leaving Ericsson. At Ericsson he had been working for ten years with issues related to the development of the AXE switching system, such as the management of large and complex technological systems, estimating the costs and benefits for projects, and licensing of technology.

Bengt had been working with issues relating to IT and business development since 1987. Via this interest he came across BPR, which he found to be an interesting method. In E&Y MC, Bengt has been an active proponent for the use of methods, by pushing for the use of E&Y MC's international method in Swedish consulting projects and by being one of the driving forces behind the development of the BPR-Norden method.

The experience-based views guiding Bengt's approach towards organizations and the change process fit well with the underlying assumptions of BPR. It seems that BPR has not led to a change in Bengt's basic perspective. Rather it was adopted as supporting his existing perspective, providing tools and a structure for a more efficient realization of it. Bengt describes his approach to methods as freer than that of many colleagues, which is partly attributed to his participation in the design of the method. Bengt views methods as "practical aids" in the change process.

Karin

Karin assisted Bengt mainly as a documenter of the process. She was also involved in the visioning seminar as a seminar leader. Karin participated in all project group meetings, documented them, and assisted Bengt in the preparations.

Karin had studied systems design and programming, and came to E&Y MC from an IT consulting company in 1994. In E&Y MC she started working mainly with the IT aspects of the consulting projects. The Scandtel project was her first reengineering project.

Others

During the visioning seminar, two further consultants were introduced in the project as seminar leaders and presenters – Alan and Torsten. Alan has already been mentioned as the presenter introducing the BPR-Norden approach to Scandtel during the management forum. He has a thorough experience of working with BPR, and is often the one who presents the BPR concept in connection with sales presentations and visioning seminars, being perceived as a very good presenter.

Torsten has a background in E&Y MC’s IT consulting business. He has carried out a number of IT design and development programs, in which he has led process mapping and data modeling seminars. He has also participated in a few visioning seminars before.

The design of the Scandtel project

I now turn to the approach in the Scandtel project in focus here. First, I will present the chosen approach in terms of activities to be carried out in the process according to the project proposal. Thereafter I will present the specific organization chosen for the Scandtel project. In this context, I will also briefly present each of the project group members.

Activities in the reengineering process

The specific design of the reengineering process in Scandtel is presented in the project definition for the project. E&Y MC produced this as a part of the project proposal in which the project phases and activities were briefly described (see Figure 6.5).

<p>The Mobilization phase</p> <ul style="list-style-type: none"> Project start Seminar/training Confirm the organization’s Strategy Document the process <p>The Diagnosis phase</p> <ul style="list-style-type: none"> Determine performance measures Analyze the current situation Interview customers Carry out benchmarking study 	<p>The Reengineering phase</p> <ul style="list-style-type: none"> Set goals for the change Execute reengineering seminar Elaborate on the vision for the network expansion process Map the barriers to change Carry out cost-benefit analysis <p>Implementation</p> <ul style="list-style-type: none"> Put together change agenda Implementation plans
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Figure 6.5. The activities in the Scandtel project according to the project definition

The descriptions of the method's project phases are adapted to the specific project. Words like "Scandtel" and "Radio network expansion process" are woven into the text in most of the descriptive passages. The link to the BPR-Norden method – or any other proprietary method of E&Y MC is not mentioned.

Bengt describes the above-listed activities as a selection from the BPR-Norden method. The selection is said to be based on a quick analysis of the organization's needs. These needs were identified early in the process – already after one phone call and one meeting. The questions underlying this analysis are: What is the situation of this organization? What are its problems and what experiences of similar change processes does it have? However, the answers to these questions do not automatically generate a project design. Bengt describes his experience as central for selecting the activities suitable in a specific reengineering project.

The selection of relevant elements of the method in order to fit the situation is according to Bengt one of the most important and time-consuming activities in the preparatory phases of the project. E&Y MC's international set of methods is a vital source of inspiration when designing the approach to a specific project.

As mentioned in relation to the selling of the project, the method is appreciated and heavily used by Bengt as communication aid "conveying the impression of competence and thus creating confidence" (Bengt). But, in the project definition of the Scandtel project, the presented approach is not explicitly linked to the method. Rather, the contextualized description of the different phases and activities conveys the impression, that the consultants want to emphasize the uniqueness and specific character of the presented reengineering approach, rather than its generality and well-testedness. In the final report, presenting the conclusions from the project, the approach used in the project is presented in the following way:

The method used in carrying out the project is a modification of Ernst & Young's international method for process innovation to the specific conditions of this project. The method divides the assignment into a number of steps with well-defined handovers between the steps. For each step, a number of activities are carried out. (Final report, p. 3)

Thus, the method is important as a background, a source on which context specific adaptations are made. Summarizing the above, it is shown that the project definition specifies a quite detailed approach to the reengineering process, based on a rapidly acquired understanding of the client organization (two meetings with the same person). The choice of activities for the approach is described as a success factor. Selecting activities from the method was described as based on an experience-based interpretation of the client's situation.

The project organization and the project group members

The project definition also contains a brief description of the project organization. From E&Y MC four consultants participate: Bengt as a project leader, Karin for process documentation and diagnosis, Torsten as responsible for quality assurance of the project and Alan as a seminar leader in the visioning project. From the client organization three persons are demanded in the project definition report. The roles of the consultant, as well as the client, are defined in the project definition report (see Figure 6.6). As is pointed out by Bengt, the consultant takes an unusually active role in the Scandtel project. Keeping the project running and on track is usually a role for the client, but the deviation in this case is explained by the strategic importance of the process to be redesigned.

The Consultant's role	The Client's role
<ul style="list-style-type: none">• Plan, lead and follow up the project• Report status to steering committee/client• Seminar leader and motivator• Develop templates and foundation for diagnosis• Actively participate in project work• Document and report results	<ul style="list-style-type: none">• Provide documentation and knowledge of the current process• Answer questions and provide ideas• Measure today's process based on provided templates• Communicate the progression of the project internally• Active participation in project meetings

Source: Project definition report, p. 6

Figure 6.6. The consultant's and client's roles in the reengineering process according to the project definition

In accordance with the specifications in the project definition, three members of the client organization were selected for the project. Two of these members were from the network planning department and the third from the projecting department. After the visioning seminar, some changes in the composition of the project group took place. One person was replaced and another added. In the following I will briefly describe the project group members. The focus will be on their motivations for participating in the reengineering process, as well as their understanding of the BPR-Norden method used in the project. The project group members' perception of the method was mainly obtained during the first interview with them, i.e. following the presentation of the method in the mobilization seminar and the first project group meeting.

Martin

Martin is the manager of the planning department. His motives to participate in the project are very well illustrated by the following quotation from the first interview with him.

I look forward to participating in the process. It will be both fun and educational... I especially look forward to the visioning seminar and the design of the new process. Seeing the results of the measuring of the process will also be interesting. (Martin)

Two motivating factors can thus be identified here – the possibility for personal learning about a change method and a change process and the possibility to participate in the design of the organization's and his personal future way of working.

Martin had the most elaborate picture among the project group members of the BPR-Norden method and its underlying logic. He described the different steps in the method in the following way:

1. Motivating action
2. Mapping and measuring – how do we work today and why?
3. Tear down the old processes and think in new ways
4. How to arrive at the new processes?
5. Do it

(Martin)

An important aspect of BPR, according to Martin, is the ongoing follow up of the reengineered processes, that initiates new BPR projects when a too large discrepancy between set goals and actual performance is detected.

Anna

Anna is also from the planning department. Initially she was reluctant to participate in the project, as she was skeptical to whether the efforts would lead anywhere – earlier efforts in the same direction had failed. But she had worked with similar issues earlier, together with Martin, which had worked well. At the same time she felt a stronger management commitment this time. She thus decided to give it a chance.

Also for Anna, the possibility offered by participation in the project group to influence the new working process is an important motivator. She also perceives it to be rewarding to receive a confirmation of her own view of the process through the mapping activities. Watching the change in the thinking of the other participants in the project, induced by their participation, is another factor, which fuelled her interest.

Anna's picture of the BPR-Norden method is quite diffuse. She "doesn't know, has no idea", as the "method was never presented in detail to her". The

description given reflects the activities that had been carried out at the time of the interview, which took place at the end of the diagnosis phase:

Get order into processes in a reasonably simple way and measure processes in order to see how efficiently we work. (Anna)

Magnus

Magnus is also a member of the planning department. He joined the project group after the visioning seminar, when Anna was replaced due to a longer vacation. Magnus' motivator during both the visioning seminar as well as his subsequent participation in the project group is to a large extent the possibility to take part in the design of the future organization and the ability to influence this in the direction of his own ideals. Against this background, the organization of the work connected with the network building process into teams was a vision he brought with him and pushed for during the visioning seminar.

Magnus describes the basic idea underlying BPR to produce a mental revolution, to make the members of the organization think in new ways. But this was not regarded as a specific characteristic of BPR. Rather, "any new stuff", that questioned the established way of thinking in the organization, would have worked.

Anders

Anders is a member of the project group from the very beginning, and initially the only representative from the projecting department. He is very enthusiastic towards the change project as "this is where the future lies, and I am very interested in participating in its formation". To get the chance to learn a new way of thinking, i.e. a process view, is another advantage he perceived with his participation.

An important motivator for Anders is the possibility to influence the new organizational structure. The project is seen as "our chance to realize our ideas". Several ideas for change, such as a team-based organization have, according to Anders, existed in the organization for a long time, but without getting any support from the management. That the basic ideas of BPR are in line with these existing ideas is thus a further motivator.

Anders described the basic idea of BPR as "taking the organization, breaking it up into molecules and building it up again in a better way". BPR was seen as a way of creating better prerequisites for work. Other aspects of the reengineering process attributed to the method focused on it being radical and fast:

It is obvious, that decisions are taken quickly in the project. But sometimes things have gone a little too fast so that you didn't have time to evaluate and think through ideas... But this is the way BPR works. (Anders)

Concerning the phases and activities during the BPR project, Anders repeatedly expressed some uncertainty about the continuation of the process:

Even if the consultants have presented the basics, I am not sure exactly how the project will continue. I take it step by step, which is necessary, as the project is based on a new way of thinking. My knowledge of the new process is sufficient. My uncertainty is not so much concerned with the process as with the results of this. (Anders)

The last sentence is characteristic for Anders' relation to the method. This relation is mainly focused on the results and their congruence with Anders' own views of how he would like to work. Consequently, he views the team organization as a better way of working and a common and important aspect of BPR.

Erik

Erik is a member of the projecting department and joined the project group after the visioning seminar. Erik perceives participation as an interesting task, as "it is about designing the new way of working". The major motivator is thus also for him, the possibility to participate in the design of the future organization and work processes.

Erik had read about the BPR concept in English magazines already before the Scandtel project, so he describes himself as being quite familiar with it. The basic idea underlying BPR is described as a new organization with shorter lead-times and decentralized responsibility.

The above shows a picture, where the motivators of the different project group members' participation in the process to a large extent overlap. There had been a large number of ideas about new ways of organizing and working in the organization before, but it was impossible to gain management support for these. The BPR project, as it was called in the project group, initiated by a new management, was thus seen as a possibility to present these ideas anew, and hopefully realize them. Consequently, the general attitude towards the project was enthusiasm mixed with some worries about the results – would these be in line with the ideas cherished by the individuals? The BPR-method was seen as a possible ally in this effort to realize the existing ideas:

The ideas have existed for a long time, but we have not had the powerful tools of BPR. (Anders)

Several of the project group members associated BPR- Norden with certain solutions, such as the team organization, a better way of working, continuous follow up, etc. These solutions are in accord with the project group members'

preferences in terms of results of the reengineering process. The project group members from the projecting department (Eric and Anders) are both interested in a new (team-based) organization. Thus, both of them described the team solution as a central aspect of BPR. Martin, on the other hand, being the manager of the planning team and the initiator of several previous change initiatives, was more interested in the continuous improvement of the processes after the reengineering process studied here. He thus emphasized a system for continuous follow up as a result of the BPR activity. This indicates that the method in the minds of the project group members is constructed based on their respective preferences.

Summary – The consultant, client and method in the preparatory project phases

The main activities involving the client, consultant and the method within the preparatory project phases regard the selling of the project and the overall design of it. In this case the client, taking contact with the consultant, initiates the selling of the project. From the client's (Keith's) perspective, the selling in this case was easy – he made up his mind after the first contact, based on his earlier experiences with the individual consultant – Bengt. The client's relation to the consultant is also characterized by the client having a very clear picture of what he wants done and of the role of the consultant – acting as an engine of the process and a symbol of importance.

Bengt, on the other hand, describes the selling phase as more demanding, requiring some effort in convincing the client of the value of his services. In convincing the client, the method was described as an important ally. It is repeatedly used in the communication with the client – both Keith and the larger selection of client representatives during the managers' forum. The method is by Bengt viewed as an important communication device conveying the impression of competence, and, as shown by Martin's description of the management forum, where “the method immediately fell into place”, it was somewhat successful. Still, it seems as if the method was rather played down in the project definition report, which instead emphasized the specificity of the approach and its fit to the situation of Scandtel.

A second important activity in the preparatory project phase is, according to Bengt, the adaptation of the general approach proposed by the method to the specific situation. This adaptation is regarded as both important, determining the success of the future project, as well as time consuming. The consultant's knowledge of the organization as well as his experience are important inputs to the design of the specific approach.

Finally, it could be observed, that the project group members see the method as a resource in supporting their hopes with respect to a more motivating and rewarding future work situation. In this context, each individual interpreted the method in a way that made it support their individual desires.

The Mobilization phase

Finally, the time has come to get into the details of the activities in the reengineering process. The activities for each of the four project phases will be presented in three ways. Firstly, according to the method (BPR-Norden), secondly, according to the project plan, and finally according to my observations in practice.

The first phase following the project's design and acceptance was the Mobilization phase aiming at the creation of commitment to the reengineering process within the organization and a deeper understanding of the organization among the consultants. As indicated in Figure 6.7, the mobilization phase is quite short in this project. It began with the agreement over the project definition report, and was concluded with the mobilization seminar presenting the project to large parts of the involved departments. During the mobilization phase, the consultants also carried out a number of interviews with key persons in the organization in order to deepen their own understanding of Scandtel.

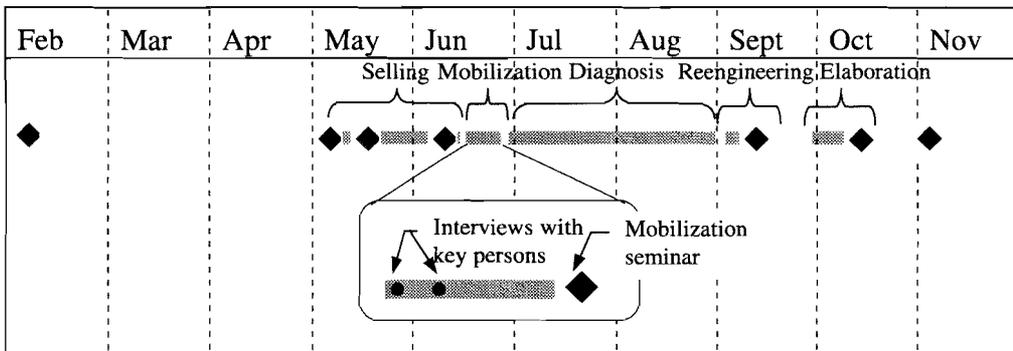


Figure 6.7. The mobilization phase in context

The mobilization phase in theory according to BPR-Norden

According to Bengt, the mobilization phase in the Scandtel project was very short and relatively unimportant. The method was therefore not an important predictor of what was going on in the project. I will therefore ignore the closer presentation of the mobilization phase according to the BPR-Norden method.

The mobilization phase in theory according to the project definition

The mobilization phase in the Scandtel project aimed, according to the project definition, at creating an interest for the project within the organization, as well as confirming the availability of the resources necessary for a successful reengineering process. As described by the list of activities below, the mobilization phase consisted of four separate activities:

1. *Project start* comprises the preparation of a detailed project definition, the booking of meetings, etc.
2. *Seminar/training* comprises a general introduction of the project to the employees affected by the reengineering process, as well as a more thorough presentation of the method to project group members.
3. *Confirm the organization's strategy*, which is described as involving the identification of core competencies, strengths and weaknesses and opportunities and threats to the organization at large as well as for the radio network expansion process more specifically. This is done on the basis of interviews with management.
4. *Document the process*. This activity aims at producing an overall description of the process in focus, detailed enough to serve as the point of departure for the collection of measurement data during the diagnosis phase.

The mobilization phase in practice

The acceptance of the project definition report by Keith started off the mobilization phase. The work with the activities of this phase was begun on the same day the project was accepted. Bengt immediately started the work with deepening his own understanding of the organization through interviews with representatives from the top management. A quite detailed interview guide supported these interviews. The interview guide was mainly described as a checklist used in order to assure that all important areas were covered. The interview guide was at that time not a part of the method, but had been developed by Bengt and was a resource in his personal toolbox.

During the mobilization phase, the knowledge of the project was also spread to a larger part of the affected departments through a half day mobilization seminar, the purpose of which was the creation of an understanding of and commitment to the change. The seminar gathered about thirty persons mainly from the two affected departments. The seminar began with a short presentation by Keith concerning the current position of the organization. Following this, Alan took the floor. Martin remembers the following issues being treated during his presentation:

- The message, that radical productivity improvement demands radical changes in the way of working.
- An overview of the history of organizing.
- Stories about the way of working in other companies.
- Presentation of the method. The different phases defined in the project definition and their associated activities were talked through. Special focus was put on the presentation of the initial phases. Many examples of companies having worked with the method were provided.
- Presentation of potential problems in the different phases.
- The focus of the presentation was to show – from a number of different perspectives – that radical change is necessary. (Martin)

Martin describes the seminar as a success, as “Alan is a good lecturer”. Everybody was claimed to have accepted his ideas, but “Willoch’s personality types¹⁷ became obvious already here – some couldn’t avoid the question ‘what will happen to me?’” In general, however, Martin recalls, the seminar left behind an enthusiastic group of people.

Anders also perceived the mobilization seminar as a success:

The mobilization seminar was fun. It showed how we had worked. The greatest problem in the company is inertia. Decisions take a lot of time. Alan’s message about flatter organizations was therefore perceived as positive.... Seeing the visions was also fun. Hopefully this will lead to more people seeing that the organization has to be restructured. (Anders)

Alan during his presentation sketched out a vision of the future situation that was very much in line with what the members of the organization had been striving for for several years. Characteristics of this future organization were flatter hierarchies and new working patterns. At the same time, today’s management principles and their limitations were presented in a way that created a feeling of recognition among participants as well as a number of “aha-experiences”.

The meeting was concluded with the design of a first process map depicting the network expansion process and its sub-processes. A couple of days later the project group began its mapping and measuring activities.

¹⁷ During this and earlier presentations, Alan presented a number of behavioral patterns individuals can follow during the change process. These are more closely described in Willoch’s book under the labels of different animals such as tiger, shark and donkey (see Willoch, 1994).

Summary: The consultant, client and method in the mobilization phase

In the mobilization phase, the method was repeatedly used in order to convey a picture of the project’s design. The different project phases with their associated activities were an important ingredient in the presentation of the project during the mobilization seminar. The consultant’s activities were also supported by more concrete tools, such as the interview guide used in the interviews with the managers.

The underlying rationality of the method, i.e. BPR, was conveyed to the organization during the mobilization seminar. At this seminar the creation of “aha-experiences” was a main goal. This was achieved through describing “typical” problems in today’s organizations, explaining their causes – often linked to the development of the market environment that has made the traditional organization obsolete – and finally pointing out alternative solutions eliminating the problems. (For examples of these lines of argument see Willoch (1994) or Hammer and Champy (1993)). The consultant, supported by the method, also provided other arguments and concepts that were rapidly picked up by the client’s personnel, such as the typology over personality types in the change process. These were rapidly internalized into the vocabulary of the client organization and mentioned to me in several of the interviews with the project group members.

The Diagnosis phase

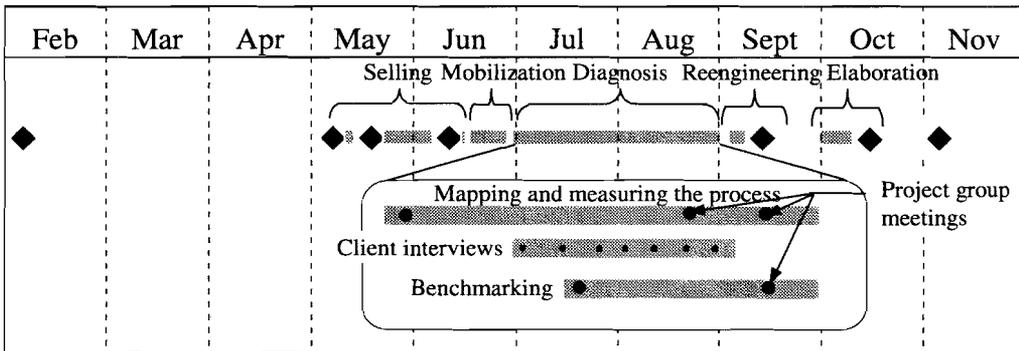


Figure 6.8. The diagnosis phase in context

Following the mobilization seminar was the diagnosis phase, in which the processes were mapped in more detail and measured. This was the most time consuming phase, both in terms of calendar time and active time. As indicated in Figure 6.8 above, the mobilization phase comprised of three project group meetings during an eight-week period. In parallel with the mapping and measuring of the processes, this phase also involved interviews with clients, as well as benchmarking activities. The latter activities were mainly carried out by

the consultants alone, and will therefore be neglected in the below description of the activities in the diagnosis phase.

The diagnosis phase in theory according to BPR-Norden

The purpose of the diagnosis phase is to document and analyze the current process. According to the BPR-Norden method, this phase is made up by three activities:

1. *Map and quantify the process.* In this first activity, the prerequisites for the reengineering process are set by determining the organization, the delimitation, as well as the quality parameters for the reengineering process. Thereafter the actual mapping begins, in which the overall processes identified during the mobilization phase are mapped in more detail, and their sub-processes are determined. In this phase the factors affecting the process' cost, quality and lead-time are also identified.

In order to support the measuring of the process, a matrix of parameters is created. In this matrix, measures for different aspects of the process are defined. The measures should cover two dimensions (therefore the term parameter matrix), namely the customer and the internal perspectives on the one hand, and money time and quality on the other hand. At least six measures are thus required in order to cover all aspects. Finally, the detailed mapping and measuring of the processes take place according to the identified measures.

2. *Evaluate the process.* This activity involves four sub-activities. In the first, the process is evaluated against the demands of the customer. These demands are determined through interviews with a representative sample of customers. Thereafter, the process is evaluated against best practice, often determined through benchmarking activities. In the third sub-activity, the enablers of the process are analyzed in terms of their support of the process. The enablers comprise personnel and organization, as well as the IT system. The fourth and last sub-activity aims at identifying "quick hits" (short-term improvements) based on the insights gained during the preceding analysis.
3. *Establish goals for the redesign process.* In this activity, the goals for the new processes are set. The goals are formulated based on the completed mapping and evaluation of the process. It is emphasized that the goals should be radical.

The diagnosis phase in theory according to the project definition

The purpose of the diagnosis phase is described as "to collect data about the current situation in order to fully understand the range of changes needed in order to reach the desired future state". The description of this phase in the

project definition report is briefer than in the BPR-Norden method. Nineteen activities in the method are described as four in the project definition. These are:

1. *Determine performance measures.* This activity involves the mapping of the process based on the existing performance measures, as well as the definition of new measures based on the results of the first mapping. The definition and selection of performance measures is an activity for the project group.
2. *Analyze the current situation.* This activity focuses on the mapping and measuring of the processes. The actual work in this phase is to be carried out by the personnel of Scandtel, while the consultants provide suitable methods and templates for measuring. The consultants also assist in the evaluation of the obtained measurement results.
3. *Interview customers.* The purpose of these interviews is to map the customers' demands on the process.
4. *Carry out benchmarking study.* Data about the performance of comparable processes in other organizations are collected. This data can be obtained in several ways, benchmarking being one of these.

The Diagnosis phase in practice

The diagnosis phase in practice consisted of three types of activities, which differed quite significantly in character. The first activity was the mapping and measuring of the processes. This activity initiated three project group meetings. The second activity were the interviews with the customers carried out by the consultants, and the third activity focused on benchmarking. In the following, I will only describe the activities related to the mapping and measuring of the process more closely.

Determine performance measures and analyze the current situation

This activity was initiated by a meeting in the project group, where BPR-Norden was described in more detail once again. Thereafter, the work with the detailed definition and mapping of the sub-processes began. The process charts depicting the identified sub-processes provided the basis for the measuring that followed next.

The parameters for the quantitative description of the network expansion process were designed by Bengt. Based on the parameter matrix presented in the method (see above) and the knowledge of the business and the process gained during the initial interviews, a number of "possible measures" were identified. These were supposed to serve as "a list of measures to pick from during the benchmarking activities and for goal formulation" (Bengt 2).

It was the responsibility of the project group to gather data for the defined measures. The following data collection by the project group was mainly concerned with the internal measures focusing on time. Three different times for the identified sub-processes were to be collected – lead times, active times and full time equivalents¹⁸. These data were collected mainly by tracing a number of historical cases through the process. The times needed for the different activities in each case were documented on a form, provided by the consultants.

A few weeks after the project group meeting, in which the sub-processes as well as the parameters for measurement had been identified in more detail, a project group meeting was held in order to follow up the project group's progress¹⁹. This meeting was motivated by Bengt's worries about the mapping becoming too superficial. In order to convey a feeling for the work in connection with the mapping and measuring activities, I will describe this first follow-up meeting in the project group in more detail (see Figure 6.9).

The consultants arrive punctually at Scandtel's Stockholm office. The reception has been informed of their arrival in advance, so their visitor's badges are ready for collection. After a short time waiting, Martin meets them in the reception and escorts them to a little conference room on the floor where the planning and projecting departments are located. After the consultants got their coffee, the other project group members (Anders and Anna) arrive, equipped with note pads, pen and a binder marked "BPR" in handwriting.

When all are present, Bengt opens the meeting. He begins with a short repetition of the different phases of the method (as defined in the project definition) based on a slide, which has been used in earlier presentations within Scandtel. The current activities are positioned by noting that the mobilization phase is now complete, and that they are now involved in the activity "performance measures". The activities "carry out benchmarking study" and "interview customers" are about to begin.

After the presentation, Martin asks Bengt about the purpose of today's meeting. Bengt describes this as checking on how the measuring of processes is proceeding.

Bengt asks the participants in the meeting, whether they found the measuring of processes they had been involved in for the past weeks difficult. Two problems were identified by the project group. Firstly, the persons with the available data were on vacation, which made it difficult to get a comprehensive picture. Secondly, it had often been difficult to find data that described what should be measured.

"How about the process model – does this still feel accurate now, when you have worked with the measuring?" (Bengt)

¹⁸ Full time equivalents measure the number of full time employees needed in order to carry out a specific sub-process .

¹⁹ This was the first meeting in which I participated as an observer. Earlier meetings have been reconstructed based on interviews.

The project group's answer to this question is a hesitant "mostly". Bengt follows up this hesitation by repeating the purpose of the process maps – to provide a basis for defining the data to measure and measuring the lead times.

After this general introduction, Bengt directs the discussion towards the results of the project group's work with the measuring of processes. The results of the measuring of Martin's processes are discussed first. This reveals that the compilation of times hasn't been easy. The data about lead times linked to different cases are extensive and difficult to compile. Often dates are missing, or discrepant from the "real" dates. Also the compilation of active times has caused some problems based on uncertainties concerning the definition of the measure. How should parallel activities be handled? This uncertainty is reduced by Bengt, who explains the measure and the handling of parallel activities.

The discussion of the measures continues process by process. The results of the measuring activities are commented on by Bengt in terms of much/little. The project group members' reactions to the going through of the first process' measures is that "this was interesting and fully measurable" (Martin). Still, some data were missing, as it had not been possible to get hold of all persons.

Martin then asks about the presentation of data – how should it be done? Bengt: "preferably in an Excel model". Anna: "How do you want it?" Bengt: "In tables per process, as well as a histogram of the distribution of the cases studied. This is important in order to get a feel for the mean and standard deviation. The important thing is to get hold of the waiting times, since we can do something about them."

Thereafter, Bengt directs the discussion towards Anna's processes. Anna perceived the compilation of times difficult. It was difficult to map the cases on the process map, as reality showed so many variants. In addition, activities were identified that preceded the process, but which were not included in the process map. On Bengt's initiative, the process map was changed in order to include these activities.

After having discussed Anna's processes, attention is turned to Anders' processes. Anders had had problems with the definitions of the different times, as well as the process thinking at large, which prompts Bengt to remind of the process thinking and its background. Bengt also asks for a further detailing of the lead times, in order to cover all parts of the process. This is described as important to fulfill the purpose of the mapping exercise – to identify which parts of the process create problems and to show the effects of planned future changes.

Also Anders had problems with measuring the active times. Bengt therefore gives some suggestions on how these can be measured. The ideal according to Bengt is to interview people in the process about each case in the sample. Then Bengt proceeds to the full-time equivalents. "How have you succeeded in measuring these?" For a description of the measure, Bengt refers to a paper, which has been distributed earlier.

After having discussed the times for the processes, Bengt proceeds to the remaining measures in the parameter matrix. Each measure is discussed in terms of whether the necessary data have already been collected and if not, whether data are readily available. In the cases where data had already been collected, these were commented on by Bengt. A delivery precision of about 50% Anna finds quite good. But Bengt's spontaneous reaction is that this is poor, which generates a discussion of delivery times – how to view and measure them.

Bengt concludes the meeting by suggesting that the consultants participate in the future mapping activities, involving interviews with the project group members' colleagues. This

suggestion is greeted with enthusiasm by the project group members. “It will make it easier to motivate the interviewees to devote time to this activity.” A time for such a meeting is scheduled for the end of next week.

Figure 6.9. Excerpts from the observations of a mapping and measuring meeting

The above-described project group meeting is followed by a second follow-up meeting, which was quite similar to the first, even if the consultants had a more passive role in this second meeting. This was to a large extent devoted to the project group members’ questions in relation to the depiction of the process and the usage of the defined measures in the specific situation, that had come up during the project group members’ work with collecting data from their colleagues. Bengt also used the meetings to put some pressure on the project group to complete the mapping and measuring activities in time for a planned Benchmarking meeting.

During this second follow-up meeting the consultants also elaborated on their own picture of the organization. Bengt wanted to see someone actively working with the process in focus, and get an account of what he was doing. In his questions, Bengt focused on understanding the tools used in the work process (pictures, tables, maps, etc.) as well as the IT systems. He was also interested in the time required for different activities as well as the perceived problems in these.

The client’s frustration in the diagnosis phase

The presentation of the meeting related to the mapping and measuring of the network expansion process (Figure 6.9) reveals a number of problems related to the work of the project group, with mapping and measuring the processes. The role of the consultant is in this context to a large extent about helping the project group to handle these problems.

A first problem concerns the *operationalization of measures*. Especially the more abstract measures, such as “active times” and “full-time equivalents” created some problems:

Knowing how to measure, how to operationalize the measures, which at the presentation at the whiteboard are so clear, is difficult... The measures sound easy on a theoretical level, but when you are to put them into real numbers, it becomes difficult. (Martin)

Really difficult is the measuring of active times. I have never done this before and was not used to the way of thinking. (Anna)

Against this background, an important role of the consultant was to assist the project group with the application of these measures by exemplifying their use

in the specific case, i.e. helping to calculate the measures based on the collected data.

A second area of concern was *finding the right information* needed for the calculation of the different measures. The reasons for this problem were several. The main data collection phase took place during the summer, when large parts of the personnel were on vacation. In some cases the required input data did not exist or required large efforts to produce them. In other cases, the available data were not a valid reflection of reality. The role of the consultant in these cases was to direct the data collection by specifying what information was “good enough”, i.e. to specify which information was of satisfactory quality, and in which cases it was worth the effort to collect more detailed or valid data.

The new way of *thinking in processes* prescribed by the method constituted a third problem area. This perspective on the organization repeatedly led to some confusion between functions and processes. The role of the consultant in these cases was to identify and point at these violations of the process perspective, and illustrate what a process perspective meant in the specific case.

A fourth set of problems emerged in relation to the *mapping of the processes*. It wasn't always easy to depict the complex reality in general process maps. The choice of the boundaries of the process and the level of detail in the mapping process were both perceived as difficult choices by the project group members:

The difficulty in the mapping phase was to find a suitable level of detail. The map should be detailed enough in order to be “valid”, but at the same time it mustn't be too detailed. (Martin)

In the different choices underlying the problems perceived by the project group members, the consultant played an important role by directing the process towards an appropriate level of detail. This meant initiating a more detailed mapping, where this was needed, and to stop the mapping activities in the areas, where the map was sufficiently detailed for the purpose at hand.

Bengt was a great support by directing the work to the right level and the right areas. It is important to have someone who sets the level of the mapping, and tells you if you are heading in the wrong direction. This requires some experience. (Anna)

The consultant's contributions in the diagnosis phase

Besides these activities, with the main purpose of solving the problems in the work of the project group, a number of other activities from the side of the consultant could be observed. Firstly, the consultant was strongly involved in *managing the work* of the project group. Bengt is the one who has control of the activities of the project group. He directed the overall structure of the process, the structure of the meetings and the requirements on the results of the

activities in the process, i.e. the level of detail in the process map, the way data are presented, etc.

The consultants have kept the overview and have had a picture of where we were heading. They have also contributed with knowledge of the right level for the mapping, and e.g. how many samples should be included in the measuring of the different processes. But their most important contribution has been their guiding of the process. They directed it and pointed out what was important. (Martin)

A related role for the consultant was the *driving of the process*, to see to the constant progression of the work. In the above-quoted meeting (Figure 6.9) there are several exemplifications of this in terms of Bengt emphasizing issues, such as the full time equivalents, in order to ensure that they are not forgotten. By emphasizing the Benchmarking meeting with a related organization as a deadline, he also creates a time pressure on the mapping process.

The consultants also have an important task in driving the process. Their presence makes us respect deadlines. (Martin)

Bengt has pushed quite hard, directed the mapping and ensured that we have proceeded. It was very good to have someone to keep things in order. (Anna)

By commenting on the collected data, such as delivery times and active times, Bengt also played an important role in *establishing shared levels of reference* concerning the “goodness” of the organization’s performance. Through these comments, the project group members’ perceptions of what is considered good and bad performance were partly changed. In some cases, the consultant also gave a more differentiated picture of the problem area. In the discussion of delivery times, for example, Bengt increased the project group’s understanding by defining different types of delivery times as well as describing different principles for supply management.

Some of the consultants’ activities, especially during the above-described mapping meeting, were also aimed at *elaborating on the consultant’s picture of the organization* and its problems. This was achieved through interviews with persons at their desks. The focus of these interviews was to a large extent identical with the focus of data collection defined in the BPR-Norden method, i.e. different types of times and IT support.

Furthermore, the consultants also continuously *gave meaning to the activities carried out in the project group* in terms of the reengineering process at large. This was achieved by summarizing the overall structure of the process in terms of the overall project phases and placing the current activities within this. The purpose of the mapping phase was repeatedly stated – even if in somewhat varying terms. But in spite of these repeated efforts to explain the basic structure of the process, the project group members were somewhat unsure

about what awaited them in the coming phases of the process. The information about this was perceived as poor.

Finally, the consultants also contributed to the *documentation* of the process, which was described as a great help by the project group members.

The method in the diagnosis phase

Having described the different activities during the diagnosis phase, as well as discussed the problems of the client and the role of the consultant in the mapping activities, I will now turn to the discussion of the method's role in this phase. The presentation of the different activities during this phase shows that the method provided a large number of concepts for the description of the business. A first example was the graphical language for depicting the processes. In this language, in and outflows are two important concepts. Further, the list of performance measures, especially those related to time, were derived from the method and played a vital role in the description of the processes.

The method also provided checklists, that could be observed to support the consultant in different phases of his work. Above, the parameter matrix was described as an aid for choosing performance measures, a template for listing the times for different cases was observed, and the interviews with clients, as well as with the key persons in the organization, were firmly based on a structured interview guide. The consistent use of these kinds of checklists indicates that they are perceived as supportive by the consultant in order "not to forget anything".

The above description also reveals the repeated use of slides depicting the phases of the project and the underlying activities in order to describe the project and create an understanding of the meaning of a certain activity in the process as a whole. Bengt views this role of supporting communication as the method's most important one. The role of the method in creating an understanding for the project as a whole, as well as the meaning of its sub-activities, was also perceived as positive by the project group members, who found the activities in the diagnosis phase both tedious and sometimes boring.

The method has an orienting role. It provides a goal for the processes and gives meaning to the individual activities. Without this goal, it would have been very difficult to find motivation for the activities in the mapping phase.
(Martin)

Finally, the method was also perceived as legitimizing the consultant. That he used a well-tested and widely accepted approach to the reengineering process supported the creation of confidence in the process. (Martin)

creative activity during which ideas concerning the future way of working are generated, and an activity of converging the different visions produced during the creative phase. A project group meeting precedes the actual visioning seminar in order to prepare this.

The Reengineering phase in theory according to BPR-Norden

The main purpose of the reengineering phase is the formulation of a vision for the new processes through a creative process. This involves three main activities – 1. Create future vision, 2. Elaborate future vision, and 3. Plan a pilot test of the vision. In this section, the first step – create future vision – will be described in detail. The remaining steps will be described in the following section describing the elaboration phase.

The activity “Create future vision” involves four sub-activities: develop background material, plan visioning seminar, develop visioning material and execute visioning seminar.

1. *Develop background material.* This activity aims at “choosing and putting together the results of the mapping activities to a presentation of the current situation. This presentation should be used in the introduction to the visioning seminar” (BPR-Norden, p. 3).
2. *Plan visioning seminar.* This activity is about “planning the execution of the visioning seminar and selecting the participants.” (BPR-Norden, p. 3).
3. *Develop visioning material.* In this activity, information is collected that can be used as a catalyst in creating the vision during the visioning seminar. Examples of such information are input about IT and organization as enablers. Other examples are triggers, that can make visible and question the basic assumptions underlying the current process as well as normative process models that can serve as an inspiration for the design of the future processes.
4. *Execute visioning seminar.* In this step, a vision for the future processes and the future work organization is created. The vision is described in terms of goals, characteristics and effects for the business. In connection with the formulation of the vision, barriers and enablers for the implementation of the vision are also identified.

The Reengineering phase in theory according to the project definition

The purpose of the reengineering phase is described as:

Create a future vision of Scandtel’s network expansion process, which is “the best” in order to:

- (i) Fulfill business goals according to the strategy

- (ii) Achieve satisfied customers according to customer demands,
- (iii) Be “world class” and competitive in relation to competitors
- (iv) Assimilate the competence potential within the organization (Project definition, p. 4)

In the project definition, five activities are identified for the reengineering phase: 1) set goals for the change, 2) execute reengineering seminar, 3) elaborate the vision for the network expansion process, 4) map the barriers to change and 5) carry out cost/benefit analysis. The first two activities will be described in detail below, the remaining are described in the next section.

1. *Set goals for the change.* It is emphasized that these should be radical.
2. *Execute the reengineering seminar.* During two days, the new process is designed. The first day aims at the generation of ideas. During the second day, the generated ideas are converged into a shared vision comprising process, technology and personnel.

The Reengineering phase in practice

The preparatory meeting

A project group meeting aiming at the preparation of the visioning seminar begins the reengineering phase. During this meeting, the introductory presentation of the current situation to be held at the visioning seminar is prepared. This presentation is to be made by both consultants and members of the project group. The project group was made responsible for presenting the results of their mapping activities of the process.

Against this background, the meeting is structured according to the parameter matrix, specifying the measures to be collected in order to describe the current situation. During the meeting, Bengt goes over all the measures and checks with the project group members, that the measures are available, and that the project group members understand the meaning of the measures. This can be illustrated by the discussion of the measure for the capital tied up that have been compiled by Martin (see Figure 6.11)

Martin presents his graph of the compiled data.
 Bengt: “How did you arrive at this?”
 Martin starts thinking. The numbers are from the accounting department, and some question marks concerning their meaning are revealed. Bengt tries to find out exactly what the numbers mean – how is the capital tied up measured?
 Bengt: “The capital tied up has increased during the last months (according to the graph) do we know why?”

Martin: "A lot of material was purchased before the summer, but during the summer there is little work done, resulting in few completion reports."

Bengt: "When are the completion reports filed?" As Martin is not sure, he goes and asks.

Bengt: "Which kinds of products do these numbers include? What is interesting for us is only what relates to the radio network."

Martin: "Both radio network and transmission are included."

Bengt: "What happens if you exclude transmission? Only the material handled in the focused process "build and change radio network" is of interest here." This is followed by a discussion about which equipment is included in the process. A consensus is reached that transmission to its largest part is not included (based on the process delimitation). But Martin believes that it might be difficult to divide the numbers in this way.

Bengt: "Can you estimate the proportion of the transmission material in the total numbers?" Martin believes he can.

Bengt: "The measure of capital tied up is interesting, as it shows an increase. What should be included in the measure are only the orders that are placed in the process described. The conclusion is that you produce a new graph, in which you eliminate what is not handled in the process."

Figure 6.11. Excerpts from the observation protocol of the preparation for the visioning seminar

In a similar way as in Figure 6.11, the other measures defined in the parameter matrix were walked through. Bengt structured the meeting and ensured that the project group members who should present the data had a good understanding of them. At the same time, Bengt also increased his understanding of some of the measures, which were specific for Scandtel, such as the degree of channel utilization:

Anna picks up her graph of the monthly channel utilization.

Bengt: "Can you explain this? How did you arrive at this graph?" Anna describes the graph and what it is based on.

Bengt: "How do you network planners interpret such a graph, what does it tell you? What is good? How do you use the information?" (Preparation visioning seminar).

While going through the numbers, both Bengt and the project group members tried to establish an understanding of which were "good" numbers and which were "bad". Bengt commented on the measures he introduced:

Bengt: "Do the numbers feel right?"

Martin: "Yes, but it is a little frustrating to see that the full time equivalent for the planning process is 1,75, while we have six employees working in the process. This is explained by them doing a lot of other things too."

Bengt: "The figure does not feel unreasonable"

...

Martin: "Is a delivery precision of 50% good or bad?"

Bengt: "It is dreadful." (Preparation visioning seminar)

When talking through the different times for the processes, the problem of understanding related to some of the measures, especially full time equivalents, again appears. These measures are thus explained once more. But the discussions of the measures are not only about their interpretation, but also about their presentation. Here Bengt is given the role of the expert. He gives instructions, and the project group tries to comply.

Having checked the different measures, Bengt turns to discussing the design of the seminar, and the practical details related to this. In a dialogue with the project group, it is decided who present what data when. It was agreed that the project group members would present the results of the process mapping and measuring. The consultants promised to make the slides to support the presentation of the project group members, "in order to make the presentations look homogeneous".

The visioning seminar

About a week after the preparatory meeting in the project group, the time had come for the visioning seminar – the central event in the reengineering process. About twenty people from Scandtel, mostly from the Stockholm region, as well as a representative from the benchmarking partner were invited to an intensive two-day seminar at a conference site outside Stockholm. Four consultants (Bengt, Karin, Alan and Torsten) provided input to and directed the seminar.

Bengt describes the basic logic of the visioning seminar in the following way:

The missionary logic is the basic idea. You let a leader present a vision. Then the problems of the own processes as well as the successes of the competitors are presented in order to motivate people before the formulation of their own vision. (Bengt)

Below I will describe the content of this two-day event in greater detail.

Introduction

The two-day visioning event began with a plenary session. The twenty or so participants – a selection of key persons on different levels in the organization – sit round a U-formed table in a large room. At one end of the table, three consultants sit. One is Bengt, the project manager.

At nine o'clock sharp he rises and enters the stage. Nervousness is reflected in his somewhat impatient movements and way of talking. This is an important presentation. It is the first time since the kick off of the project that it is presented to a larger audience. He welcomes the participants and briefly presents himself: "I am consultant at E&Y MC. My specialty is BPR. I have

worked a lot with this method in the telecom industry.” He also briefly presents the two colleagues sitting at the edge of the table. But the consulting team is not complete: “We are waiting for Alan, a portal figure and innovator concerning BPR”.

Bengt suggests beginning the seminar by having each participant around the table make a brief presentation. A round around the table is taken. “We clearly have a massive competence here today,” Bengt concludes. Thereafter he leaves the floor to Keith, the CEO of the company:

The background to why we are sitting here today is diverse, but the triggering factor has been the rapid growth rate of the market. But why should we start working with BPR? I have been working a lot with process improvement, and I have failed many times, but then I heard a presentation by Alan and everything fell into place. I saw the mistakes we had made – we focused on the current situation instead of being creative.

During these two days, we will find a way to work 80% more efficiently – isn’t that true Bengt?

Bengt: “Yes, every thing else will be a failure”. (Visioning seminar)

In his presentation, Keith focuses on three themes – emphasizing the importance of the reengineering process as a question of survival for Scandtel, establishing the radical goal for the reengineering process, i.e. 80% higher efficiency, and making plausible that the change process this time, as opposed to earlier efforts, will actually lead to change. Keith concludes his presentation with a brief presentation of the organizational changes awaiting Scandtel at large.

After this presentation, Bengt takes the floor again: “I have something to tell you. I want to report what we have done in the project so far... We have worked in four phases, which is a quite typical approach in reengineering” he claims, putting on for the project group members a well known slide “Method for implementation” depicting four project phases ordered in the form of steps upwards from the low left to the upper right. The more detailed exploration of these phases, and the related activities occupies the following minutes. Which activities have been carried out, and which remain to be completed is especially focused. Thereafter, a sequence of transparencies describing the overall situation of the company follows. These are based on the information gathered during the consultants’ interviews with customers and key persons within Scandtel. The transparencies use well-known business concepts in structuring the data. The titles of the slides read “Strategic positioning” (the model presented under this title has strong similarities with the BCG matrix), “SWOT analysis”, “Core competencies”, and “critical success factors”. These areas are emphasized in the BPR-Norden method as important aspects of the strategy presentation during the visioning seminar. Even in this presentation by Bengt,

the importance of the reengineering process and the high potential for success is repeatedly emphasized:

Alan (who has now arrived, commenting on Bengt's presentation): "Scandtel is different in the sense the infrastructure directly affects the customer. If you succeed in becoming world class at the activity of building and changing your radio network, you also become world class at building the overall infrastructure. This provides a further challenge for this seminar." (Visioning seminar)

Following the consultants' presentation, the project group members present the results of their mapping and measuring activities structured according to the parameter matrix. After a short presentation of the matrix, Martin presents an overall project map giving an overview of the studied process. Thereafter he turns to the presentation of the detailed figures. The consultants repeatedly brake in clarifying the information as well as reflecting on it, for example, they ask for descriptions of how the measures are defined, explanations for extraordinary figures, etc.

The following presentation by Bengt concerning the results of the benchmarking study conveys that the benchmarking partner carries out most of the activities in the process much faster. This presentation triggers a discussion about the comparability of Scandtel's process with that of the benchmarking partner. The presentation is concluded with a slide titled "preliminary goal formulation".

Bengt: "We want to shorten lead times by 80% and reduce the capital tied up by 50% as well as meet the other goals, that we will work out together." (Visioning seminar)

After this description of the current situation, that took most of the morning, Alan introduces the creative phase of the seminar. The only limitation to remember from the morning, according to Alan, is the overall delimitation of the process "expand radio network". In order to further underline the possibilities for change, a number of Swedish, as well as US success stories are presented.

Alan: "The message I want to communicate is that there exists an astronomic potential for improvement." (Visioning seminar)

Idea generation

Following the introduction and presentation of the current situation, the creative phase of the reengineering process was entered. In order to stimulate the generation of ideas and establish principles for "good process design", Alan presented a number of rules and principles. Their application was exemplified through short stories from practice. Three such principles were presented.

These were a selection from a larger number of principles presented in the method:

- 80/20 or the generalist/specialist rule, according to which most processes are designed in order to cope with the 20% most complex cases. Increased efficiency can be obtained by handling the normal cases in a different way than the special, more complex cases.
- The principle of parallelism suggests examining sequential processes in order to identify activities that could be handled in parallel.
- The customer - supplier principle questions the division of work between a company and its suppliers and customers. The question to be posed is whether there are any activities that are carried out in-house today, that could be transferred to the suppliers or customers instead.

With these principles in memory, the participants were divided into three groups in order to each work on a vision for the new process:

Alan: "When working with the vision, there are no limitations, everything is ideal and optimal. In particular, you have access to perfect information."
(Visioning seminar)

Each group was lead by a consultant. Bengt, as the fourth consultant, would circulate between the groups.

As a support to the brainstorming process, each of the group leaders was given a list of "triggers" in the form of questions relating to basic aspects of organizational design, e.g. "How can today's sequential processes be changed to more parallel processes?" or "What is produced in today's processes, that no one wants?". These triggers were based on the generalized process models presented in the method (see also Willoch, 1994 for a more general presentation of these). Among the triggers are recognized the "principles for good process design" presented by Alan in the introduction to the creative phase. These triggers were used by the seminar leaders to structure the discussion.

During the brainstorming, the group leaders mainly acted as facilitators. They asked questions and inspired the participants by providing provocative solutions. In some cases, they also contributed expertise in functional areas in order to solve identified problems (e.g. how can the tendencies towards sub-optimization in project teams be counteracted?). However, the approaches of the different seminar leaders differed considerably.

Alan was quite directive. His structure followed the distributed triggers in detail. The solutions and expert knowledge he provided focused on changed routines and changed organizational solutions, e.g.:

Alan: "The two big questions are how the resources should be planned, and how the job should be done. It is important that the team/area is managed by objectives rather than steered in detail, in order to give people a larger freedom to think."

Alan: "It seems to be a big advantage that the teams know their district in detail. This makes it possible to give them a more active role. Let the teams think by themselves, but use the right measures to evaluate them." (Visioning seminar)

Early on in the discussion, he presented the team organization as a possible solution to some of the problems in the current situation presented by one of the group members. The team organization subsequently became a focus during the rest of the brainstorming session.

Torsten was less directive. He let the discussion emerge as directed by the participants:

Martin: "Should we proceed to other triggers, e.g. which activities can be handed over to the client? ... Can we get on to the suppliers? Which activities can they perform?" (Visioning seminar)

Still, the trigger questions guided the participants' initiatives and could be observed in the follow-up questions posed by the consultant. The trigger questions were also used in order to structure the documentation. In writing down key issues in the discussion on flip charts on the walls of the room, *Torsten* structured the issues according to which of the trigger areas they affected. The suggestions of solutions presented by *Torsten* were often on a more detailed level than *Alan*'s, and more focused on IT solutions.

Karin worked in a similar way, following the process as it emerged rather than strictly directing it. As with *Torsten*, the structure provided by the instructions to the seminar leaders was mainly used in order to structure the information rather than the discussion. Sometimes inspiring and provoking questions were posed.

Bengt was structured and directive in his way of leading the group. The structure to a large extent followed the instructions handed out. The process was directed by posing concrete questions to the participants. The motion from one issue to the next was made fairly explicit:

Bengt: "I think we are ready, let us proceed to the next issue",

Bengt: "I think we have covered the important effects, how about barriers?" (Visioning seminar)

Following the brainstorming phase, which took the whole afternoon, and for some groups also parts of the evening, the groups presented their visions. These were quite similar, focusing on the expansion of the tasks carried out by each individual, the destruction of organizational barriers and improved IT support.

During the presentations, Bengt asked clarifying questions such as “How long will it take to realize your solution?” or “What do you mean here?”

The working day was ended by the groups ranking their respective suggestions for improvement according to their importance.

Converging the vision

The purpose of the second day of the visioning seminar was to create a vision of the future processes that was shared by all the participants. This phase of the seminar was begun by a presentation of a number of questions that should be covered by the vision. The work of answering these questions was again carried out in groups.

Also in this phase, the main task of the group leaders was to ensure the smooth working of the process, as well as seeing to that it delivered what it should, i.e. answers to the presented questions. But again the strategies in directing the discussions differed between the group leaders.

Following this group activity of elaborating the vision, the produced visions were presented to the other participants. These presentations were structured according to the presented questions. The consultants contributed by asking clarifying questions.

The results of the three groups' work showed

... a lot of similarities, but also interesting differences. It is important that we have a common goal with us, when we leave today. (Bengt, visioning seminar)

The creation of this shared vision of the goal to be attained by the reengineering process took place under the direction of Bengt. He went through the goals presented by the different groups, and put up those that were shared by all on a separate flip chart. Some of the goals required further explanations, but generally there were no disputes concerning them.

The meeting was ended by a preview of the activities to follow. The slide depicting the phases and activities in the method was again used as the basis for the description of the entire reengineering process. The activities following the visioning seminar were described in more detail than the others:

Bengt: “The project group will describe and detail the organization in terms of processes, IT and people. We will also prepare for the implementation by a questionnaire investigating how widely accepted the change is. We will also have a look at costs and benefits of the change as a basis for decision making. A change agenda will be produced, where a number of projects are identified.” (Visioning seminar)

Summary: The consultant, client and method in the reengineering phase

In the reengineering phase, the BPR-Norden method could be observed to be an input into a number of activities. In both the visioning seminar, as well as during the preparatory meeting, the method had a structuring role by providing checklists for e.g. measures to be presented (parameter matrix) or agendas for meetings. As mentioned, the preparatory meeting was to a large extent structured according to the parameter matrix. During the rehearsal of the presentations of the different measures the problems observed earlier, concerning the understanding of measures such as active times, reappeared. Consequently, the earlier observed contributions of the consultant, such as explaining the measures or setting levels of reference, were also recognized during this meeting.

The above descriptions also showed that different consultants used the structure provided by the method in different ways. While some of the consultants (Bengt and Alan) used the agenda provided by the method in order to structure the discussions, others (Torsten and Karin) used them to structure the information obtained from a freer and more unstructured discussion. In the latter cases, the seminar leaders steered the discussion less.

Still, in both cases, the consultants directed the discussion by initiating the elaboration of certain areas, while cutting off discussions of others. Even through their suggestions for solutions, and their providing of expert knowledge, they directed the discussions. In this context, the background of the consultants seemed to play a role. Alan, with his experience of management consulting, mainly made comments on the organization and the business, whereas Torsten, with his background in IT consulting, to a larger extent proposed IT solutions.

Finally, coming back to the role of the method, this was again observed as an important aid when presenting the reengineering process and the role of certain activities. Both in the introduction to the seminar, as well as at the end of it, the picture over the phases of the method and the associated activities was used in order to show what had been done and what remained to be done.

The Elaboration phase

The central output from the visioning seminar was a vision for the future way of working in the process of expanding the radio network. This vision was the point of departure for the next phase in the process, aiming at elaborating this vision to a level of detail that made it possible to implement. The elaboration phase again mainly concerned the project group and involved three meetings. This phase was terminated by the presentation of the final report of the project to the management. Hereafter the implementation work began, but as the

consultants were assigned a minor role in this, this has not been studied in detail.

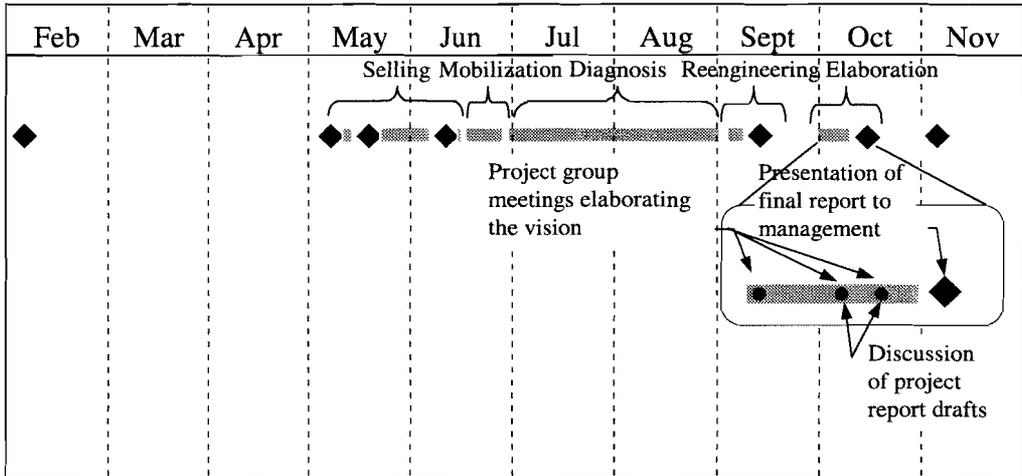


Figure 6.12. The elaboration phase in context

The elaboration phase in theory according to BPR Norden

“Elaborate future vision” is the second activity in the reengineering phase. This concerns the detailed elaboration of the vision sketched out at the visioning seminar. The sub-activities in this activity are concerned with describing the new process and its requirements on personnel, organization and information flow. The consequences of the redesign process on the organization, personnel and information flow are to be described at a detailed level comprising activities, competencies, etc. A cost-benefit analysis of implementation is also proposed as a part of the elaboration phase.

The elaboration phase in theory according to the project definition

The elaboration phase is a part of the reengineering phase. The activity “elaborate on the vision for the network expansion process” is the third step of the reengineering phase. In this step, the vision is elaborated and documented, and a detailed picture of sub-processes, activities, IT support and the future organization, is designed following the guidelines of the formulated vision. This step is followed by the fourth – “map the barriers to change”. This step mainly consisted of the distribution of a questionnaire, and is therefore neglected here. As a fifth step finally, a cost/benefit analysis over the suggested changes is carried out.

The elaboration phase in practice

The work in this phase initiated three meetings in the project group. During these meetings, the sketchy vision produced during the visioning seminar was elaborated into more concrete process and organization designs. Bengt describes this phase in the following way:

Bengt: “Let us start by summarizing the situation of the project and what we will do. What remains to be done is to create a more detailed description of the vision, based on business events. Here we describe how we will work. Our suggestions of business events to discuss here are “technical plan”, “budget”, “customer complaints” and “customer contracts” as triggers for the network expansion process. We will also produce a number of working steps, an improvement agenda and its cost. This demands an elaboration of the vision, which we want to achieve by walking through the business events.”
(Elaboration seminar)

Bengt: “The elaboration is an iterative process in which the vision produced in the visioning seminar is refined through testing and discussing it with the organization.” (Bengt)

As indicated by this description, the first meeting was devoted to a closer description of the different business events that had been identified by the consultants. As a structure for this activity, a checklist was distributed among the participants that identified eleven headings in terms of which business events should be described.

Bengt was as usual leading the meeting. In this activity, he followed the distributed checklist strictly. Asking questions was Bengt’s main vehicle for guiding the process into the desired direction. The answers to these questions, given by the project group members, were then often questioned in order to gain additional information. In this phase of the project, the consultant’s main aim was the generation of information, and the role of the project group members was consequently to provide this information to the best of their knowledge. This is illustrated in the excerpt from the first elaboration meeting below (Figure 6.13), which focused on walking through a number of business events. Noteworthy is, that the communication in this phase is smooth, and that the project group members now use many of the terms initially only used by the consultant, such as the “team” concept.

Description of the business event

Bengt: “Yearly compilation of needs for expansion. Is yearly a key-word?” The project group reaches a consensus around the formulation “yearly plan for the expansion of the network”.

Bengt: “Does this plan include money?” The answer is yes, which renders the following addition to the description: “including technology, investments, material, traffic forecasts and strategies for coverage.”

Frequency:

Bengt: "How often is this produced?" Martin: "Once per year." Bengt: "Should it be produced more often?" Martin: "Yes, absolutely, at least it should be revised." Bengt: "This is an important discussion. How often should it be revised?" Martin/Magnus: "We must not forget, that the general plan is important." Bengt: "Is this really required by the teams? Can't they take care of these questions internally?" After an extensive discussion, in which the project group members in detail explain the use of the technology plan, consensus is reached that the frequency should be "yearly, with quarterly revisions".

Affected processes:

Bengt: "Which processes are affected?" Bengt puts on the slide of the agreed upon vision. Martin: "Help desk and technology support, what is included in these processes?" Bengt: "It depends on how we view them."

...

Bengt: "Is there a need for a regional level?" Martin: "This is a central question. It depends on how much we want to delegate to the teams. The great problem for me is to see the interfaces between the teams and radio network development. It is hard to see what requires generalists and what requires specialists."

Bengt: "We also have to include technology development. This is also a part of the technology plan."

Martin: "This is done centrally today, and will probably remain this way."...

The discussion then turns to the coordination problem and the need for a regional level.

Bengt: "It does not seem to be a good idea to have a level between the teams and top management."

Magnus: "How should the teams be managed?" Bengt: "According to the vision, there is a team coach. He should not be a bottle-neck, who sets priorities, but everybody should have access to a planning tool, from which they can choose jobs." ...

Figure 6.13. Excerpt from the observation protocol from elaboration seminar 1

In the seminar, the checklist for describing business events was followed rigidly. The headings were written down on the whiteboard and information was filled in bit by bit, as the meeting went on. Still, it was often hard to avoid related discussions that had to do with the more detailed design of the future team organization, for example which functions should be included in the teams, how large should the team be? How should interaction between them take place? Etc.

The project group members' worries concerning these issues also became obvious during the second elaboration meeting:

Bengt opens the meeting with "how's life?"

Martin: "It is only getting more and more confused. The problem is that the teams would become very large, if they were to do, what we plan they were to do."

The second and third elaboration meeting mainly consisted of a discussion of documents produced by the consultants. During the second meeting, descriptions of further business events, as well as the future organization and planned actions, were presented and discussed. During the third meeting, parts of the final report – the change agenda, improvement activities, their effects and a cost - benefit analysis, were presented for discussion.

All these descriptions were structured according to recurring headings. The structure of the meeting discussing the texts followed the structure of the text, and both project group members and consultants asked clarifying questions. The presented descriptions were in no way complete, but were worked through and improved continuously during the meeting. The project group's knowledge of the business was an important input in this process. The activities of the consultant to a large extent aimed at further increasing his understanding of the organization.

The clarifying questions of the project group members further contributed to an improvement of the material produced by the consultants. These questions showed up a number of errors and flaws in the material that were corrected on the spot. Also Bengt proposed improvements, which he came to think of during the discussion.

Interesting to observe was also that the project group members were very active in providing arguments for the consultant's suggestions. It could repeatedly be observed that a project group member posed a question to a consultant about "how they had thought", which then was answered by another of the project group members, or even the same person, that had posed the question²⁰:

Martin: "Why have you chosen the process "acquire sites" for a pilot project?"

Bengt: "This is only a suggestion. Do you have others?"

In the following discussion in the project group, no real alternatives are generated, but arguments for the process chosen by the consultant are generated. After the discussion, Bengt confirms that these arguments were what they were thinking of when choosing the process "acquire sites". The process proposed by the consultant is now accepted by the project group members. (Elaboration)

Apart from collecting information from and checking facts with the project group members, a clear purpose of the elaboration phase was to gain the project group members' support for the suggestions, to make them feel "that they own the suggestions" (Bengt). But the participation in the formulation of the

²⁰ This is in accordance with Bennis' (in Bloomfield and Best, 1992) observation, that clients strive to emulate their consultants' values and identify themselves with these.

suggestions was not unlimited. The consultant had a clear position of authority, that he did not hesitate to use when necessary to get support for his ideas, which is illustrated in the following case:

[The background to the discussion is an assumption in the cost-benefit model stating that the pilot during the first quarter will lead to the installation of X more radio base stations than would have been the case otherwise.]

Anders: "I don't believe, you can install more radio base stations than we do now, if we take personnel from existing processes to pilot projects."

Bengt: "What we are doing here is an assessment of what we think is possible. Then the managers have to determine what they want to do and what not."

Anders: "It is hard to estimate if you don't know which people will be included in the pilots."

Bengt: "You can't estimate this, but we consultants can, as we are not tied to the same responsibilities in the organization as you are. We just want some more input on this. Do you want to discuss the figures, or does it feel bad to commit to them?"

Martin: "Of course we should discuss the figures..."

Summary: The consultant, client and method in the elaboration phase

As the description and the exemplifications of the elaboration phase above show, the main purpose of this phase was the design, in collaboration with the project group members, of a future work process that was both realistic and accepted by the organization. For the consultants, this meant producing drafts of process descriptions that were then discussed at the project group meetings and elaborated in a joint process. The consultants mainly focused on obtaining information about the organization, and the project group members' attitudes towards the consultants' suggestions.

Also in this phase, Bengt directed the meetings with a firm hand. The structure for this directing was this time provided by the checklists for the description of the various aspects of the future process. Pushing and directing the process was seen by the project group members as the consultants' most important contribution in this phase.

Bengt knows from experience how to direct the process in order to achieve something. Without somebody driving the process hard, it is easy to become stuck in checking details, which takes time. (Magnus)

The consultants played a significant role in the elaboration phase. They pushed us along and documented the results. Without the consultant, the process would have taken ten times as long. Now we have proceeded very rapidly. This had the advantage of making things happen, but the disadvantage was, that people didn't really understand what they were deciding. Still it is quite impressive, what we achieved in two weeks.

The role of the consultant has been to take care of the process, while the project group has contributed with information. The detailed vision is the product of the project group. The vision is based on our background material. (Anders)

The problems in the elaboration phase were mainly related to the activities of elaboration, i.e. the problems arising when a vision is to be elaborated into concrete processes in a context of limited knowledge of the current situation and uncertainty about the future.

The consultants were mostly willing to learn from the project group members in these issues, and engaged in the discussions but sometimes, they used their power position to end discussions as well as make assumptions the project group did not want to commit to. This helped avoid potentially endless discussions, at the same time as the project group members' feeling of participation was reduced.

The roles of the method in the elaboration phase were several. A first observation was that the work with the elaboration of the vision to a large extent followed the instructions of the method, which suggests that the vision should be elaborated in terms of processes, personnel/organization and IT support. A deviation from the method though is that the elaboration stops on a higher level of abstraction than proposed by the method. Neither descriptions of activities, nor data models, are produced. Bengt explains this discrepancy in the following way:

The method is a maximum approach, from which you have to choose. The problem with a detailed elaboration of the vision is that it takes a lot of time. Furthermore, the vision is concerned with an uncertain future. A too detailed elaboration also has the effect, that people who lack an overview, but who still want to have a say in the process, get larger possibilities to criticize details. (Bengt)

The checklists for the description of the different aspects of the vision are another support for the consultant in this phase. These gave a clear structure to the activities, which facilitated the guidance of the process and its documentation. The overview of the whole provided by the structure also helped the project group members to keep track of what they were doing.

The checklists observed during the elaboration phase were not a part of the BPR-Norden method, but were Bengt's product. They are described as the result of his thinking in relation to the specific Scandtel project and based on experience and earlier use of methods. But, as the checklists worked well in this case, Bengt was thinking about making them available to the entire organization by incorporating them into the method.

Finally, the operationalization of the language of description provided by the method, especially the process graphs, was shown to be an issue also in this

phase. But the problems were less, and it could be observed that thinking in processes had become a more natural part of the project group members' thinking. This was illustrated by them starting to use process oriented terms introduced by the consultant:

Martin: "The network optimizing process should have an *outflow* to the *coordination process* which should be located outside the *team*". Bengt: "I can accept that, you have a point here." [makes changes] (Elaboration)

The End

After the discussion of parts of the final report in the project group, the consultants distributed a preliminary version for review to the project group members. These were given a couple of days to come in with comments, before the final version was printed and presented to management. During these days some minor comments were received, but generally the project group members were satisfied with the process and its results.

Following the presentation, also the management team was described as happy with the project:

They nodded and had no objections. They are qualified people, who don't pick on details. (Bengt)

During the presentation of the final report, the continuation of the project was discussed. However, no concrete agreement about the next steps was reached at that time. The project definition report, on the other hand, specified a pilot project during the fall of 1995 and further pilot projects during the spring of 1996. After discussions with managers and the groups affected by the reengineering process, it was agreed to eliminate the first pilot due to a too high workload in the affected departments. Furthermore, it was agreed to carry out the other pilot projects during the spring of 1996. These pilots were to have an external project leader from E&Y MC – Bengt.

About six weeks after the presentation of the final report to management, a meeting was held for the rest of the persons affected by the change. During this meeting the project and its results was presented, followed by a presentation of the future way of working, and the necessary changes in the organization.

The method – a guide to the consultant?

Underlying the logic of methods is an assumption of their direct use in practice as a guide for actions. Ideally, methods should "be followed rigorously and in totality" (Fitzgerald 1997:201; c.f. chapter two). Even if this view has been questioned in a large number of studies, it is still to a large extent reproduced in much of the more practically-oriented literature. The congruence of this view

with the observations made in the Scandtel case will provide a first step in the analysis of the roles of methods in the consultant's project work with the client.

Against the background of the observations in the Scandtel case, the investigation of the method's role as a guide for action has to be carried out on two levels. The first concerns the guiding effects of the method on the overall sequence of activities to be carried out in the project, the second concerns the guiding effects on individual activities within the project.

The method as guide for project design

Above, three parallel descriptions of the Scandtel case were given. The first description concerned the activities prescribed by the method used by the consultant in the project, BPR-Norden. The second level concerned the activities prescribed by the project definition for the specific project. The project definition was described as a situation-specific adaptation of the BPR-Norden method. The third level, finally, concerned the actually observed activities.

The comparison between the general method, and its situation-specific adaptation in the project definition, revealed a reasonable overlap (compare Figure 6.4 and Figure 6.5). The general phasing of the approaches (mobilization, diagnosis redesign/reengineering, implementation) is identical apart from the differing labels redesign and reengineering. On the next level of detail, describing the activities involved in each phase, the differences in the labeling of different activities increase, although a look behind the labels reveals that the contents of the phases are rather similar.

This lack of coherence between the wording of the different activities in the method, as compared with the project definition, to some extent questions the consultant's description of the project definition as a selection of activities from the BPR-Norden method. This description suggests a picking of activities from the menu of activities provided by the method. In such a case, it would have been reasonable to expect that the activities proposed in the project definition would have direct correspondents in the underlying method, which is not the case. I will not elaborate on this observation here, but rather take this as a point of departure in chapter eight, focusing specifically on the relation between method and consultant.

Turning to the overlap between the project definition and the observed activities, this is again good. In all the phases, the activities carried out in the project fit well with the activities specified in the project definition. However, it must be remembered that the project definition defined activities on a relatively high level of abstraction, thus making it relatively easy to obtain coherence between this and the actions observed in practice. This coherence was further

supported by the repeated use of the phases and activities identified in the project definition in creating an understanding for the project as a whole, as well as the position of specific activities within this. On this high level of abstraction (four phases and fifteen activities) the project definition functioned as a guide for the project.

The method as guide for individual activities

The method was not only referred to as a guide for action in relation to the overall design of the project, but also in specific activities, where parts of the BPR-Norden method were applied in order to structure the process. Such uses of the method were observed in all phases. In the mobilization phase, interview guides were used as a support in the interviews with Scandtel's management. In the diagnosis phase, the parameter matrix defining the set of measures to use in the mapping of the process was used and referred to by the consultant. In the reengineering phase, and especially the visioning seminar, the BPR-Norden method contributed with a detailed agenda that was mostly followed as well as with triggers. Finally, in the elaboration phase, the BPR-Norden method contributed with a specification of the terms in which the organization should be detailed (e.g. IT and processes).

In all the phases of the project, a use of the method as a checklist could thus be observed. However, this use was not rigid, but rather in all cases involved some adaptation. The parameter matrix had to be complemented with organization-specific measures; the triggers used during the visioning seminar were a selection of a larger number, etc.

This thus indicates that the method, in spite of the fact that it is not used rigidly, has some relatively tight links to action in the sense that it is used as an inspiration and structuring device for the process at large, as well as its detailed sub-activities. But this structuring of the consultant's actions was by no means the only observed role of methods. The focus of the next chapter is the investigation of these other roles, as well as an elaboration of the role of the method of providing structure in the light of its interaction with the consultant and the client.

Against the background of the above-described tight link between the BPR-Norden method and the approach proposed in the project definition, I will in the following analysis, if nothing else is said, treat both the contents of the BPR- method, and the project definition, as instances of the method. This is also motivated by the fact that the client regarded the contents of the project definition as an instance of the method.

Chapter Seven

The method - consultant - client interaction in the reengineering process

Background and purpose

Above, the reengineering process in Scandtel has been described in detail. Some efforts were also made to continuously identify the respective roles of the client, method and consultant and their interaction in the different phases of the reengineering process. A first step towards a discussion of the roles of methods was taken in the final section of the previous chapter, in which the method's role as a guide for the consultant's actions was discussed. Below the analysis of the respective roles of method, consultant and client will be further elaborated on.

This elaborated analysis represents a break with the temporal logic underlying the case description in chapter six, in order to enable seeing issues that may have been obscured by the temporal logic. Instead of continuing the analysis on a level of project phases, I have chosen a logic based on "key activities" in the change process. The activities, which are derived from a review of the literature on planned change, are presented as an introduction to this chapter.

Having identified six key activities in the change process, I return to the Scandtel case in order to investigate the method - consultant - client interaction in fulfilling these activities. This analysis reveals that the method is an important, but by no means free-standing element in the change process. The realization of the potential roles of the method requires the actions of an experienced consultant and the support of clients willing to accept these actions.

Based on the discussion of the interaction of method, consultant and client in fulfilling the key activities, three roles for methods in the consultant's project work with the client are identified. These are the method's ability to provide a language for reality construction, its ability to provide a structure for action and its ability to provide a discursive framework for communication. The identification of these three roles is followed by a discussion of the links between these roles and the roles of the consultant. The chapter is concluded

with a summary of the problems and opportunities arising from the use of methods in the change process identified throughout the analysis.

Six key activities in the change process

Carrying out change processes is a complex activity requiring the successful completion of a number of different tasks. In order to identify a set of basic activities in the planned change process, a review of the literature was carried out. A number of articles and books on planned change were reviewed with a focus on the activities identified as necessary in the change process. Attention was also directed towards the success factors stated in the literature, as these provided an indication of the activities important in the change process.

The different activities found in the literature were listed and then sorted according to similarity. This process revealed a high level of consensus on a core of six basic activities, which were recurring in most of the literature. These activities will be briefly described below, and provide the basic structure for the further analysis of the Scandtel case.

The key activities in the change process generated by the literature review are generic in the sense that they are required in planned change processes of all sorts and independently of the approach to change chosen. This generality of the key activities concerns their results (e.g. having created a feeling of understanding of the organization to be changed), but not the way in which they are carried out or by whom. Here different approaches to change have very different solutions. For instance, all planned change must be based on some kind of understanding of the organization to be changed, but how this understanding is created, when, by whom, with which focus and what importance is attributed to this, varies greatly among different approaches. In an expert-driven or “programmatically” approach the activity may be carried out by a consultant interviewing the employees, whereas in a more participatory or learning-oriented approach it may be carried out by the organization’s members themselves, possibly supported by the consultant (Rhendahl et al., 1996; Norrgren, Hart and Schaller, 1996). These kinds of differences in the fulfillment of generic activities in the change process among consultants with different approaches, is also illustrated in the next chapter, which focuses on the method’s roles in the individual consultant’s problem solving.

The basic activities in the change process should not be regarded as a sequence of steps for the change process. Rather, when and how these activities are carried out is a question of which approach to change guides the process. Typically, different activities will also go on in parallel, and be partly interrelated, i.e. a specific action in the change process may contribute to the fulfillment of several of the key activities. When, for example, interviewing

client personnel about their organization, the consultant may simultaneously be involved in the activities of “understanding the organization”, “ensuring political support” (checking interviewees’ attitude to the change), “create or make visible dissatisfaction...” (asking questions, that make problems obvious), as well as “enable participation” (opening up for the client personnel to influence the process). The division of the change process into a number of key activities is thus a purely analytical task, carried out in order to facilitate the further analysis of the Scandtel case.

1. Understand the organization to be changed

A first important step in a change process is generally to acquire a thorough understanding of both the internal and the external aspects of the organization to be changed (see e.g. Bruzelius and Skärvad, 1992; Kanter, Stein and Jick, 1992). According to Nadler and Tushman (1993), a central success factor in the change process is that the need for change, as well as the suggesting of solutions, is firmly based on a thorough understanding of the organization’s relation to its environment, its strategic position and its internal dynamics. Mohrman, et al. (1989) further point at the need of understanding the “soft” aspects of the organization, especially values, expectations and the organizational culture.

An understanding of the change’s “psychostructure”, i.e. its consequences for different stakeholders both within and outside the organization, is also important in order to judge the feasibility of the change processes and the proposed solutions. Against this background, an understanding of the political system and its dynamics is also stressed (Nadler, 1993; Nadler and Tushman, 1993).

2. Design solutions

A central task for the consultant is to design, or support the client in the design of, a solution to the identified problem. This solution should ideally be based on a clear picture of the goals of the change process, i.e. a clear vision of the desired situation (Bruzelius and Skärvad, 1992; Hiam, 1992; Kanter, Stein and Jick, 1992; Beer, Eisenstat and Spector, 1993; Jick, 1993; Nadler and Tushman, 1993). The sharedness and degree of diffusion of this vision within the organization is central for success (Beer, Eisenstat and Spector, 1993). Furthermore, the vision’s clarity is important for its ability to absorb the widespread and most often destructive uncertainty in the change process (Nadler and Tushman, 1993).

The change agent’s role in this activity is firstly to support the formulation and communication of the broad boundaries of the solution (the vision) and

secondly to support the formulation of a detailed solution. In working with the solution, the change agent should build on her in-depth understanding of the organization as well as her expert knowledge within functional areas such as marketing, production, business administration, etc. (Greiner and Metzger, 1983; Bruzelius and Skärvad, 1992).

An important task for the change agent is thus to provide expertise within different areas in order to inspire new solutions and to ensure that the found solutions build on state-of-the-art knowledge (Greiner, 1967; Docherty, 1976; Greiner and Metzger, 1983; Mohrman, et al., 1989; Hiam, 1992; Beer, Eisenstat and Spector, 1993; Resnick, 1993).

3. *Ensure the political system's support for the change process*

In-depth knowledge of the organization's way of working is also a prerequisite for the establishment of a broad political support for the emerging change. The importance of the support from a broad power base is emphasized by both Kanter, Stein and Jick (1992) and Nadler (1993). Especially the support, commitment and participation of the top management is described as crucial for success. This aspect has been recurrently identified as a key success factor (e.g. Greiner, 1967; Mohrman, et al., 1989; Nadler, 1993).

4. *Create or make visible dissatisfaction and problems in the organization*

The success factor for organizational change most often mentioned in the reviewed literature was a strong perceived need for change, preferably emanating both from within the organization and from its environment. There has to be awareness in the organization about both the necessity and the urgency for change (Greiner, 1967; Kanter, Stein and Jick, 1992; Beer, Eisenstat and Spector, 1993; Nadler, 1993; Nadler and Tushman, 1993; Resnick, 1993; Spector, 1993).

In many change situations, especially when concerning proactive change, an awareness of a need for change has to be actively created, for example by amplifying existing dissatisfaction and problems in the organization (Nadler, 1993). Spector (1993) views this creation of dissatisfaction and frustration as one of the main activities of the change agent. A healthy competition in the industry can also contribute to the creation of an awareness of the necessity for change (Hiam, 1992). Nadler and Thushman (1993) recommend focusing the change process on such problems perceived as pressing by the organization's members and that are closely related to the core of the organization's business.

5. *Lead the change process*

Leadership plays a crucial role in the change process (Kanter, Stein and Jick, 1992), especially in order to motivate and create commitment. Nadler and Tushman (1993) summarize the main functions of leadership in the change process with the words “envisioning”, “energizing” and “enabling”. Consequently, the leadership aspects of the change process overlap with the activities of creating dissatisfaction.

The leadership in the change process also has an important role when it comes to enacting and exemplifying the new desired behavior in the organization. It is the leader’s task to exemplify desired behaviors through their own actions as well as influence others’ behaviors through rewards and punishments (Nadler, 1993).

Furthermore, the leader as a person is important, as he embodies the entire change process:

[He] serves as a focal point for the change, whose presence has some special ‘feel’ of ‘magic’. (Nadler and Tushman, 1993:235).

Resnick (1993) and Greiner (1967) further emphasized the importance of a motivated and committed leader in the change process. The actual leadership in the change process is seldom the responsibility of the consultant. Instead this task has to be carried out by a respected actor in the client organization. Still, consultants play a role in identifying suitable leaders and supporting existing leaders in the work of leading the change process.

Leading the change process is not only about this visionary leadership, but also about the day-to-day guidance of the process. Besides formulating and communicating the vision, the change agent has to build up an infrastructure that supports the process. Such an infrastructure can comprise of an organization for the change process, implementation plans (Hiam, 1992; Kanter, Stein and Jick, 1992), as well as a structure for following up the different activities of the change process in order to remain on top of the developments (Nadler, 1993). The change agent is also expected to have in-depth expertise of the change process and its dynamics. Concerning the latter, the change agent may contribute with knowledge of the management of the process or provide specific problem solving tools.

6. *Enable participation and create trust*

The participation of the client in the change process is recurrently emphasized as a central success factor in large parts of the reviewed literature. (Greiner, 1967; Mohrman, et al., 1989; Hiam, 1992; Beer, Eisenstat and Spector, 1993; Resnick, 1993). Against this background, an important task for the change

agent is to create possibilities for participation and support initiatives for participation. An important part of this is communication that both involves (Kanter, Stein and Jick, 1992) and motivates (Nadler, 1993). Commitment to participation also requires, that the change agent encourages and supports organizational members that feel uncertainty about their role and ability to participate in the process. This means creating an environment of trust between the different parties in the change process (Resnick, 1993).

Enabling participation and creating trust is also an important prerequisite for the client's learning in the change process. Transferring knowledge to, as well as within, the organization is an activity of the change agent that has received an increasing attention in recent times, as the attainment of set goals to an increasing extent requires new knowledge. (Beer, Eisenstat and Spector, 1993). Against this background the teacher-role of the change agent has gained in importance. Mohrman, et al. (1989) also emphasize the importance of creating structures that support learning in the change process.

The consultant – method – client interaction in fulfilling key activities

The six generic key activities in the change process will in the following guide the further investigation into the Scandtel case. In line with the basic framework for the investigation, the focus will be on understanding the respective roles of the consultant, method and client and their interaction in fulfilling these activities. In these discussions, the findings in the Scandtel case will also be related to other empirical and theoretical studies.

Understanding the organization to be changed

A key task in the change process is the creation of a thorough understanding of the organization to be changed. As argued in chapters two and three, I do not believe in the existence of one objective understanding. Rather this is seen as subjective and dependent of the concepts and logic available to the change agent. In chapter two, a potential role for methods of providing such concepts and logic was hinted at.

The activities aimed at creating an in-depth understanding of the network expansion process in Scandtel were devoted the most time in the studied process. These activities went on during the entire reengineering process with a focus on the diagnosis phase. Consequently, I will in the following analysis of the consultant - method - client interaction in this activity focus on the diagnosis phase. The consultant's individual activities of understanding the organization, and the method's role in these activities, will be touched upon only briefly, as this is the theme for the next chapter.

The activities carried out by the project group members during the diagnosis phase, were to a large extent directed by the consultant as well as the method. These activities to a large extent focused on creating and elaborating on the consultant's as well as the project group members' understanding of the network expansion process. The method's contribution to the process was the language for the depiction of the organization. This included both a graphical language for the depiction of the organization in terms of processes, i.e. process maps, and a set of measures, supporting the process view by focusing attention on times in the organizational processes. As several of these measures were alien to the organization, their application created an active role for the consultant in the process.

Firstly, the consultant had an important role in choosing suitable measures based on the instructions in the method (parameter matrix). This involved choosing measures both from the method as well as from the set of measures existing in the organization. Secondly, the consultant played a key role in applying the concepts (measures, graphical symbols, etc.) provided to the Scandtel case. As described above, the project group members had some problems in applying the concepts provided by the method. These problems were to a large extent resolved by the consultant's authoritative guidance of the process. Through this guidance, the consultant was observed to support the operationalization of measures, the finding of the right information, the thinking in processes, the mapping of processes, and the interpretation of measures, which established what was good or bad.

Through these activities, the consultant, with the support of the method, introduced a partly new perspective on the organization to the project group members. This perspective was supported and enforced by a whole language, the meaning and use of which was elaborated on throughout the process by the consultant. Several examples of the change of the project group members' understandings as a result of the language provided by the consultant and the consultant's interpretation of this could be observed in the Scandtel case. One obvious example of this was the redefinition of a 50% delivery precision from quite satisfactory to "dreadful" during the preparatory meeting to the visioning seminar. Another example is provided by the rapid picking up of the vocabulary on personality types presented during the mobilization seminar, which made the seminar participants reframe their colleagues as "sharks", "donkeys," etc. Furthermore, some members of the project group claimed that the process perspective led to new insights:

Anna: "Thinking in terms of inflows and outflows has also been interesting. It has given us a new way of mapping and understanding the business." (Anna)

But generally, the project group members claimed that their view of the studied process did not change in any significant way during the mapping and measuring activities, which they explained by the fact that the process perspective was not entirely new to the organization, and that prior efforts had been made to map the focused processes. The activities of the diagnosis phase were therefore occasionally perceived as both meaningless and boring by the project group members. In spite of this occasional feeling of frustration, the measures and their relevance were never questioned by the project group members. Instead they were described to me as relevant and important descriptors of the process.

The activity of “understanding the organization to be changed” was thus described as a joint activity between the consultant, method and client. The method provided a language and thereby a perspective on the organization which made it possible to view this in a new way. But the realization of this role of the method created some frustrations for the project group members. The consultant was found to have a key position in resolving this frustration, and supporting the establishment of the new perspective. However, this required the acceptance of the consultant’s authority by the project group members.

This role of methods was indicated in chapter two based on among others Czarniawska-Joerges (1988b), who viewed the provision of language, i.e. concepts endowed with meaning, as one of the main tasks of consultants. The Scandtel case provides a concrete example of how concepts change understanding, and highlights the problems emerging from the application of the concepts. These problems gave the consultant a key position.

Summarizing the above-described interaction between consultant, method and client, the following table emerges:

Method - consultant interaction	Method - client interaction	Client - consultant interaction
Method provides language	Method provides language	Consultant assists client in application of method
Consultant selects suitable concepts	Client struggles with application of language	Client follows consultant’s guidance

Table 7.1. The consultant - method - client interaction in “understanding the organization to be changed”

Create or make visible dissatisfaction

In the literature review on key activities in the change process, the existence of a perceived, urgent need for change was recurrently presented as the most important success factor in the change process. In the Scandtel case, such dissatisfaction clearly existed among the project group members at the outset of the project. Still, a number of activities with the goal of framing the need for change and emphasizing the urgency of the change could be observed. These activities could mainly be observed in connection with the larger seminars, i.e. the management forum, the mobilization seminar and the introduction to the visioning seminar.

In the first two seminars, the consultant's presentations were of a general nature. According to Martin they focused on showing "from a number of different perspectives, that radical change is necessary". This was achieved by reproducing the underlying rationale of BPR, according to which today's functional organizations are described as artifacts of a long-gone environment. In order to fit today's environment, organizations instead have to focus on processes, decentralize, empower employees, etc. (See e.g. Hammer and Champy, 1993). In line with the management philosophy of BPR as described in chapter one, the presentations thus both focused on characterizing the current problematic situation and sketching out the contours of a vision of the desirable future organization.

These presentations were very successful in fueling the motivation for change. Following the presentation during the management forum, the BPR-method "directly fell into place" as a solution to the organization's problems (Martin). Similarly, Anders reports enthusiastically from the mobilization seminar:

The mobilization seminar was fun. It showed how we had worked. The greatest problem in the company is inertia. Decisions take a long time. Alan's message about flatter organizations was therefore perceived as positive.... Seeing the visions was also fun. Hopefully this will lead to more people seeing that the organization has to be restructured. (Anders)

The last sentence in this quotation reflects this presentation's potential of creating dissatisfaction within the organization. Anders found the consultant's rationale for change relevant and convincing and hoped that it would convince even those who had earlier been skeptical to the changes long sought for in the organization. The consultants with their BPR method were thus by the project group members viewed as a support in realizing these ideas. However, these ideas meant different things to different individuals.

This again highlights the above-observed role of the method of providing a holistic framework of causes and effects. This not only helps the participants in the project group to create an understanding of their organization, but also

provides them with a discursive framework for articulating and legitimating their own thoughts and ideas (c.f. Watson, 1994).

But the content of the conveyed messages is not the only important aspect in the activity of creating dissatisfaction. In both seminars, Alan, the charismatic, engaging presenter presented the argument for change. In both cases, he could not reasonably have had any deeper understanding of the organization, but still the reactions to the seminar highlighted that the message was well perceived and regarded as highly relevant to the organization. Which are the roles of the consultant, method and client in achieving this?

The crucial actor in these performances was the consultant – Alan – who was described as a very good presenter. This highlights the importance of the consultant's personal skills in carrying out the activity of making obvious the need for change in a specific situation:

...in order to produce transformation and illumination, these performances depend primarily on the impact and persuasiveness of the performer. (Clark and Salaman, 1996a:102)²¹

But in his performances, Alan is assisted by the method – BPR – that provides a script for his performance. BPR in its managerial philosophy (c.f. chapter one) includes a whole discursive framework spelling out why change is necessary. As this framework is grounded in a change of the general business environment, it is potentially applicable to all organizations, and thus universal, a characteristic that is recurring in most popular management concepts (Huczynski, 1993; Sahlin-Andersson, 1996). The main contribution of the method is to provide an entire system of thought, which is one of the positive aspects of methods, identified by the managers in Watson's (1994) study. Here, the package character of the method was said to facilitate the introduction of a new way of thinking.

Against this background, the question is again – why does the client accept the consultant's version of reality, defining this as a problem? This is something I will come back to when discussing the activity of enabling and motivating the client's participation.

The presentations by Alan of the BPR concept were not the only way of creating dissatisfaction and thereby establishing the need for change in the organization. During the visioning seminar a more specific picture of the problematic situation of the organization was sketched out, based on the mapping and measuring activities during the diagnostic phase. This

²¹ See Huczynski, 1996; Clark and Salaman, 1996a,b for further explorations on the nature of management gurus' work.

presentation clearly established the problem as one of throughput times caused by an inefficient way of working. The interaction of method-consultant-client in relation to this role is closely linked to the reasoning about the activity of understanding the organization. In this context, the consultant's role of establishing reference levels for the provided measures, identifying what was good and bad performance can also be mentioned, as this was shown to create problems, not previously perceived as problems (see the example of delivery precision). Management consultants thus not only contribute to easing the problems and complexities within organizations, but also introduce new ones (c.f. Sturdy, 1997).

Finally, another program point during the visioning seminar should be mentioned, namely Alan's presentation of "rules and principles for good process design". Implicitly in this presentation lay an assumption, that the better these principles were implemented, the better the process was. This impression was further enforced by the examples of organizations that had obtained radical improvement following the implementation of these principles. These principles were again provided by the method, and provide yet another example of the method's ability to provide a system of meanings identifying problems and solutions in a coherent and convincing way.

Method - consultant interaction	Method - client interaction	Client - consultant interaction
Method provides coherent and convincing account of problem situation	Message is reformulated in order to fit personal needs	Consultant presents account in a convincing way
Consultant adapts account to situation		Client accepts consultant's account
Method provides concepts	Method provides concepts	Consultant gives meaning to concepts (establishes good and bad)
Consultant chooses concepts	Client applies concepts	

Table 7.2. The consultant - method - client interaction in "creating or making visible dissatisfaction"

Lead the change process

In the beginning of this chapter, the leadership role was to a large extent described as a symbolic activity, creating meaning and enforcing desired behavior. These aspects of the change process are usually to be carried out by a member of the organization. The consultant's and the method's role in this

activity has been touched upon in relation to the activities of understanding the organization (creating meaning of what is today) and creating dissatisfaction.

In this section, I will therefore focus on a more down-to-earth aspect of leading the change process, namely the detailed direction of the activities carried out during the observed process, i.e. the leading of meetings, the direction of the project group members' activities, etc. These activities were, by the project group members, viewed as one of the main contributions of the consultants. The firm and authoritative guidance of the consultant was viewed as positive, as it assured that the right things were done in the right way, that unproductive discussions were cut, that the process progressed, that deadlines were kept, etc. This reflects a large confidence among the project group members towards the consultant's expertise in guiding reengineering processes. But how does the method and the client support the consultant's activities related to leading the reengineering process?

Beginning with the method, it was in several instances observed to provide the basic structure for the activities, which Bengt then saw to was followed and completed. Examples of this use of the method were the overall design of the project, the design of the visioning seminar, that followed the method in detail, the formulation of the vision in terms of processes, personnel/organization and IT support and finally the structure for elaborating the vision.

This role of the method to provide a checklist and structure for the activities to be carried out in different parts of the reengineering process, was also highly valued by Bengt, who saw a main use for methods as checklists, in order to ensure that nothing important was forgotten. The method as a checklist can thus be argued to reduce the consultant's uncertainty related to action, which according to Brunsson (1989) supports committed and confident action. Such a role for methods in relation to the consultant was also assumed by Anna, one of the project group members. She saw the method as an explanation for why "Bengt had been so determined during the process". But, as indicated, the method did not give all the answers to what to do in practice. In order to be productive, it had to be adapted to the specific situation, which required the consultant's experience.

Turning to the client, his main role in supporting the consultant's leadership activities is to accept the consultant's authority. Overall, as shown repeatedly in the case, the consultant's firm guidance is not only accepted, but also viewed as a strong and positive contribution. Based on his experience, the consultant knows how such a process should be run and should therefore be given the privilege of interpretation within it, the project group members argue. Only on very rare occasions (e.g. the visioning seminar) did the project group members voice doubts about the consultant's firm guidance, as they feared this would

reduce their possibilities to influence the process. But this skepticism was quickly taken back. Anna, in regard to the creative phase of the visioning seminar, found that her skepticism “was shown to be ungrounded”. Martin rationalized his skepticism in the case of the elaboration of the vision, that was perceived to go very fast, hindering the project group members from really understanding what decisions they made (Martin). According to Martin, the project group members deemed the high speed both necessary and good. The roles of method, client and consultant in relation to leading the change process are summarized in Table 7.3.

Method - consultant interaction	Method - client interaction	Client - consultant interaction
Provides a checklist/structure “in order not to forget anything”	Method provides a structure	Authoritative guidance of activities by consultant
Consultant adapts the structure to the situation	Client applies the structure, but has problems with “operationalization”	Consultant supports operationalization of the method
The method as checklist provides security and thus enables confident action		Client accepts consultant’s authority
		Consultant acts confidently, which supports client’s acceptance of consultant

Table 7.3. The consultant - method - client interaction in “Leading the change process”

Design solutions

The design of the solution in the Scandtel case took place mainly in the reengineering and the following elaboration phases. This was one of the more resource-intensive activities, involving about as much consultant - client interaction as the foregoing mapping phase.

The main purpose of this activity is the application of both the acquired deep understanding of the organization and functional expertise in order to solve the problem or rather, in line with the emphasized importance of participation, support the client in solving the problem. This more detailed formulation of a solution is also based on the broader vision sketched out for the reengineering project in its early phases.

Two aspects of the client - consultant - method interaction supporting the activity of designing the solution have already been discussed above, in connection with the activities of understanding the organization and creating

dissatisfaction. The activities related to understanding the organization largely influenced the design solution activity, as the formulation of the problem set the frame for solving it. Similarly, it was shown in relation to the activity of creating dissatisfaction, that the consultants from the beginning of the project were involved in presenting an overall direction of the solution by sketching out the contours of the modern, process-oriented organization. I will therefore not go into these aspects further here, rather, I will focus on the method - consultant - client interaction in the activities directly related to the detailed design of the solution to Scandtel's problem.

According to the literature on change, the participation of those affected by the change is an important prerequisite for their wholehearted engagement in the process and the avoidance of their resistance to change. Especially the possibility to take part in the formation of the solution was, by the project group members, viewed as a central motivator for their participation (see case description above). But, as discussed in the previous section, the consultant's firm guidance of the process set some boundaries for the project group members' initiatives. In the following, I will go somewhat deeper into the process of forming the solution, with a focus on understanding the respective roles of the consultant, the client and the method in this process.

I will start this investigation with the consultant's role. Picking up from the previous section, the consultant was seen to guide the process with a firm hand, which was also seen as his major contribution. But this guidance also had its drawbacks in terms of an occasional feeling among project group members, that the process of formulating solutions may not be as open and undetermined as it was presented by the consultant. The project group members repeatedly voiced doubts about the real openness of the process:

Anders

Some felt almost resigned before the visioning seminar, since they felt that the solution was already determined. I too had such a feeling at times. ... I am unsure about how much of the solution was actually produced at the seminar, and how much had been specified in advance. ... The results of the visioning seminar are a compilation of a number of models. I don't know if a standard model was used and marginally adapted to our business.

Bengt directs the discussion in one direction, leading it on to a specific track, until the project group can't distinguish any longer between their thoughts and the consultant's. At the end it has often become as Bengt wanted. Sometimes, it feels as if he had a model for the direction in which he leads the discussion. (Anders)

Martin

The influence on the vision produced at the visioning seminar was distributed about 50-50 between consultant and project group. I don't think it was as bad

as the consultant having a complete solution from the beginning. Although, Bengt is a strong person, who can guide you on to tracks without you noticing it. Nothing in the final report goes against what has been said in our common process. (Martin)

Magnus

The team idea has been a clear vision among the consultants from the very beginning. This was illustrated by Alan during the visioning seminar, where he guided the focus of the discussion in a certain direction. ... I had a feeling that the regional manager wanted us to work in teams. At a managers' forum, we were given the task of describing how we should become the best. The answer was given in the task – teams. On one occasion, the regional manager also said that the problem was not the organization, but rather the way of thinking in it. In this context, the team organization was described as a way to change peoples' established thought patterns. (Magnus)

Anna

In the beginning of the visioning seminar, Alan directed the processes so firmly, that I was worried he had a predetermined solution he wanted to arrive at. However, these worries were shown to be ungrounded. (Anna)

This indicates that the firm guidance of the process by the consultants was not always perceived as positive. Rather, judging from the quotations, it was, at least in some instances, viewed as a more or less subtle way of guiding the project group members in a certain direction towards a predetermined solution. Interesting in the above are the descriptions of the subtle way of guiding by the consultants, making it hard for the project group members to actually keep apart their thoughts and the consultant's thoughts (Anders), thus guiding without making this obvious to the project group (Martin).

This further highlights the question as to who actually determined the solution to Scandtel's problems. Different project group members voice different theories about the underlying determinants of the solution. These cover the model/method (Anders, Anna), management (Anders) and the consultant (Magnus, Martin). In the following, I will examine the question of the method's, the consultant's and the client's influence on the solution in more detail. I will not be able do arrive at any conclusive answer about "who created the final solution", but the following discussion will hopefully give some insights and hints.

The consultant is by the project group members seen as a major source of influence on the results of the mapping and redesign process. Bengt, who regarded the steering of the events during the visioning seminar as one of the main tasks for the consultants, confirms this:

An important task for the seminar leaders is to direct the groups' work so that the different solutions produced by the groups do not contradict each other.

One way to achieve this is to have one consultant circulating between the groups during the seminar and pose steering questions.

...

One of the most important tasks for the consultant, but also one of the most difficult, is to direct the group to a shared result. (Bengt)

This indicates an ambition to steer the results of the three working groups into a common direction, and a conviction that this steering is actually possible.

The consultants' influence was to a large extent based on the detailed guidance of the process through the provision of agendas, the asking of questions and the provision of information. The first two aspects (providing agendas and asking questions) have already been treated in some detail. They identify the importance of the method in providing an overall structure, as well as of the individual consultant in applying this to the specific situation. The method in this context had a directing role when it came to the overall structure of events, i.e. to determine which questions to ask. But when it came to the details of the specific client situation, such as the content of the vision under design, the input from the consultant became determining. This input depended on the consultant's experiences and background²².

An important input to the process was information provided by the consultant. This constitutes the third way, in which the consultants were observed to guide the process. The consultants repeatedly provided information about a "suitable solution" in a situation similar to the client's as well as conveyed values, principles and examples to the project group.

During the *diagnostic phase*, the information disseminated by the consultant was mainly related to the diagnostic process and the interpretation of the mapping results. The comments related to the process mainly aimed at providing the principles underlying the operationalization of measures and the mapping of processes:

Martin: "How should we compile the data?" Bengt: "The important thing is to arrive at the waiting times. These we can do something about." (Elaboration meeting)

Bengt: (concludes a discussion about which activities should be included in the process map) "What is interesting is what creates value for the customer. Follow-up is no such activity." (Elaboration meeting)

The comments related to the mapping results concerned their interpretation in terms of good/bad, high/low, etc. Through these comments, the project group

²² If the consultant has worked with the method earlier, and "internalized" this, it becomes hard to distinguish between the influence of the method and of the consultant's experience. This issue will be discussed in more detail in the following chapter.

members were provided with aspiration levels for the future processes, and the solution to be designed.

During the *visioning seminar*, the consultants' dissemination of information became more concrete in relation to the proposed solution. Triggered by potential problems identified by the participants in the brain storming groups, suggestions for solutions were provided:

Torsten: "Is it possible to move jobs from projecting to technology service?"

Participant: "It would be difficult to get the people from T to document sufficiently." Torsten: "Well, then you could design the reward system so that it supports this behavior." (Visioning seminar)

Alan: "It seems to be a big advantage that the teams know their district in detail. This makes it possible to give them a more active role. Let the teams think by themselves, but use the right measures to evaluate them." (Visioning seminar).

The organizing principle found in the final solution – geographical teams with holistic responsibility – was also explicitly mentioned for the first time during the visioning seminar. Alan presented it in one of the brainstorming groups as a possible solution to the identified problems of coordination between the planning and projecting groups.

Another example of information conveyed by the consultants, that could be expected to influence the work of the project group, was the presentation of "rules and principles for good process design" during the visioning seminar.

Finally, during the *elaboration phase*, the consultants' information dissemination, related to the concrete solution to Scandtel's problem increased further:

Bengt: "The idea is that the teams get requirements and money. With these inputs, they can then do the best they can in their area." (Elaboration seminar)

Bengt: "... which role should the team have? Our point of departure should be that the team has the entire responsibility for the profitability of a certain area. Consequently, the profit per area should be calculated." (Elaboration seminar)

Bengt: "I think, we should have geographic teams, which have total responsibility for that area and do what they can on that level." (Elaboration seminar)

When discussing motivations for the positive effects of the proposed changes in the project report, a number of "general truths" were also stated:

Bengt: "One can see there is a general connection between cost, time and quality effects." (Elaboration seminar)

Bengt: "Increased delivery precision is always a consequence of shorter lead times." (Elaboration seminar)

Bengt: "It is a general insight, that more accurate information is received, if the system directly accesses the data bases, rather than involving conversions etc." (Elaboration seminar)

The discussion of the information dissemination from consultant to client members shows that the amount of information directly referable to the design of the solution increased as the project progressed. But the consultant, Bengt, strongly denied the suspicions of the project group members, that these ideas of the solution had been determined in advance. The visioning seminar was described as an open process, giving full freedom to the participants to design the organization. However, the idea of a team organization as a possible outcome of the design process, was brought to the seminar, according to Bengt, as a "supporting factor", as this type of organization was well grounded in Scandtel's culture and the participants' vision of how they would like to work.

After this discussion of the consultant's influence, I will now turn to the method. In assessing the method's influence on the final solution, many of the above-mentioned roles become relevant. The more specific solution to the problem, i.e. the new process organization, was formulated during the visioning seminar, and further elaborated on during the elaboration meetings. During these meetings, the consultants, as well as the method, played a central role in guiding the process of formulating and elaborating the vision. The creative phase of the visioning seminar was introduced by a presentation of "rules and principles" for good process design. Furthermore, the seminar leaders led the creative discussions based on a list of "process triggers" formulating questions concerning the process. These triggers were part of the method.

In formulating the more detailed vision, the structure for the process provided by the method and adapted by the consultant thus played an important role. The shared agendas for the creative discussions provided by the method are one important explanation of why the different groups arrived at quite similar visions. The coherent set of "rules and principles for good process design" and the agenda guiding the meeting also contributed to the formulation of a coherent solution following a process view. An example of the method's influence on the formulated solution was the application of the "generalist - specialist" rule. The basic working unit in the vision were regional teams, that should be able to handle most issues in their areas. But for more difficult issues, there was an expert panel available for advice.

The method thus provided concepts, relations as well as agendas and structures that were applied by the consultant in his guiding of the process. Through its character as a complete management concept, the method also potentially influenced the thinking of both the consultant and the client.

Looking at the congruence between the method and the solution, the BPR concept includes the team organization as a suitable organization in a reengineered business, which was clearly communicated during the mobilization phase. Also in relation to the presentation of “principles for good process design”, given during the visioning seminar, the team organization appeared in the examples given.

Finally, to the client members; these are the ones who officially designed the solution – under the guidance of the consultant. It is beyond doubt, that the consultant’s guidance, influenced by the method, had influence not only on the process, but also on its content, i.e. the produced solution. But how large was this influence? It may be smaller than suspected after the above discussion. Somewhat surprisingly, the project group members perceived themselves to have had a considerable influence on the results:

Anders: “I am very pleased with the results, which reflect what most people wanted to arrive at.” (Anders)

Erik: “The consultants contributed by establishing boundaries for the work and dealing with practical issues. We had a clear idea for how we wanted to work. The visioning seminar reflects our ideas.” (Erik).

The team organization was the preferred way of working in the project group from the outset. Several of the project group members claimed they had a pretty good picture of what kind of solution they wanted to design during the visioning seminar, i.e. a team-based process organization, and that the actually designed solution was very much in line with this. Furthermore, the project group members had a strong feeling of ownership for their solution. The solution was said to be well in line with what they had tried to achieve for a long time, but were not able to due to a lack of management support. The project group felt they “owned” the final report presented, even if the consultants were attributed a limited role in it.

This partly questions the perceived strong influence of the method and the consultant on the achieved results, and points to the client’s role in determining this. But this still leaves open the influence of Keith and the top management of Scandtel in determining the achieved results. A point Keith was very clear about, was that he would never hire a consultant without having a clear vision of the results. Scandtel’s top management may thus have had a hidden role in determining the results, but this is difficult to say, as this study was unable to track these kinds of dynamics.

Consequently, the answer to the initially posed question about who actually determined the character of the solution remains speculative, and based on conflicting evidence. On the one hand, the project group members felt strong ownership for the results, and claim that these were in line with what they

wanted. On the other hand, they felt very steered by the consultants. Furthermore, the team organization was claimed to be well grounded in Scandtel's tradition and culture, but it is explicitly mentioned for the first time by a consultant during the visioning seminar. It is also an important ingredient in the method. There thus seems to be no exclusive determinant. The character of the solution should instead be regarded a result of an interaction between the consultant, the method and the client.

Method - consultant interaction	Method - client interaction	Client – consultant interaction
Method provides structures, concepts, etc. as a basis for the consultant's guiding of the proces	Method provides structures and concepts for project group members' actions	Authoritative guidance of activities by consultant
Consultant adapts the structures, concepts, etc. to the situation	Client applies the structure, but has problems with "operationalization"	Consultant supports operationalization of the method
		Client accepts consultant's authority
		Consultant provides "information" guiding the client's thinking

Table 7.4. The consultant - method - client interaction in "Design solution"

Ensure support

The activity of "ensuring support" highlights the importance of gaining the support of the political system in the change process. As this study has mainly focused on the interaction between the consultant and the project group, the bulk of this activity lies outside the scope of this study. Only one important aspect of ensuring the political system's support will be discussed here, namely the consultants' activities of ensuring the support of top management, i.e. Keith. This was mainly observed in relation to the initial selling of the project, the management forum, and the contacts between Keith and Bengt in order to reach an agreement.

As in relation to the previous activities, the activity of ensuring management's support took place in the interaction between consultant, method and client. Consider first the role of the method. Bengt regarded the method as an important asset in assuring management support and used it repeatedly in his communication with Keith:

In the sales situation, the well-tested and detailed method conveyed an impression of competence creating confidence in the consultant. (Bengt)

It was also an important point in Alan’s presentation during the management forum. But as indicated, the ability of the method to convince was different in different contexts. Whereas it seemed to be very well accepted during the management forum, it was met with indifference by Keith.

For Keith, the personal characteristics of the consultant – Bengt – was the most important aspect. His previous positive experiences with Bengt had shown that he worked fast, which was needed in this case according to Keith’s analysis. Keith’s choice based on Bengt’s personal characteristics and his previous experiences of working with Bengt follows a recurringly observed pattern in studies on the client’s criteria for the choice of consultants (Clark, 1995; Poulfelt and Payne, 1994).

As indicated by the description of the process of selecting a consultant, Keith had a clear picture of what he wanted, and from whom he wanted it. According to Keith’s account, the consultant had a quite limited degree of freedom in defining the project or the approach. He was mainly hired as a tool for realizing the visions of management. This was also indicated in relation to the discussion on the determinants of the solution. This depicts the consultant as, to a large degree, in the hands of the client’s management. In order to get the support of management its orders have to be carried out. This confirms the point made by Sturdy (1997), that the managers applying consultants may not be the helpless victims they are depicted as in many studies of management consulting.

Method - consultant interaction	Method - client interaction	Client - consultant interaction
Method provides coherent and convincing thought models facilitating communication	Method creates trust in the consultant (in some cases)	Consultant repeatedly presents method to the client Client specifies task for the consultant Consultant complies

Table 7.5. The consultant - method - client interaction in “Ensure support”

Enable participation and create trust

The client members’ participation is repeatedly identified in the literature as a key success factor for achieving real change in organizations. The reengineering process’ openness to participation has already been discussed to some extent in relation to the activity “design solution”, where it was shown that the project group members felt ownership for the process and its results, in spite of an acknowledged strong steering from the consultant’s part. In the

following, I will focus on the creation of a willingness to participate among the client members.

The creation of the project group members' motivation to act in the reengineering process can be viewed as resting on three interrelated aspects of the situation. Brunsson (1989) identifies three conditions for organizational action – expectation, motivation and commitment. Expectation is about the potential participants' beliefs about whether their action will actually lead to an organizational action, i.e. produce change. The importance of this condition is exemplified by Anna's initial skepticism against participating in the process, as earlier efforts did not lead to anything. The second condition, motivation, concerns the assessment of the action's desirability – whether it is believed to lead to good or bad outcomes. This issue is illustrated especially by Anders' fears throughout the process that the change would not lead to what he regarded as good. Finally, the third condition, commitment, regards the social aspects of action, i.e. the creation of predictability of others' actions by them visibly committing themselves to it. At least management's commitment is in this case clearly signaled by the employment of a consultant, and I will thus not treat this in more detail here, but rather focus on the first two conditions for change – expectation and motivation. The interaction between consultant, client and method in producing these outcomes will be closer examined below.

Creating expectation – legitimating the process

Creating expectation is to a large extent about making plausible that the individual efforts put into the process will actually produce an organizational action. This was clearly an issue in the Scandtel case, where the experience of previous change processes was depressing. These had repeatedly been discontinued before any change was achieved. Consequently, an important prerequisite for the project group members' participation and trust in the process was to make plausible that it would be different this time. The consultant - method - client interaction provides some answers to how this was achieved.

Starting with the method, it was by the project group members perceived to play an important role for legitimating the activities of the consultant. The existence of a method conveyed confidence to the project group members:

The method is very important in creating confidence in the consultant. I would have had large difficulties in accepting someone who couldn't present a tested and widely accepted approach. (Martin)

But the mere existence of the method was not enough, the activities to be performed also had to be perceived as meaningful. Especially the activities related to mapping and measuring the process were partly perceived as tedious,

boring and sometimes quite meaningless. In communicating the meaning of the individual activities in the context of the whole process, the method was important. By repeatedly communicating the method to the project group members, a context for the individual activities was created, that made the activities meaningful.

Furthermore, the existence of a structured approach to the reengineering process could be perceived to support the project group members' participation in the process more directly. By giving them a road map of the process, the method made it possible for them to take own initiatives within the process – although within the boundaries of the method. This was observed during the visioning seminar, during which Martin took the initiative to go on with the process, when he felt that the consultant lost momentum. But this was only rarely observed in the Scandtel case, indicating that the trust in the consultant was high.

This leads us over to the consultant's role in making plausible, that the change process would actually lead to some result. As mentioned previously, his tight control of the process was perceived as an important contribution from the consultant to the perceived successful completion of the analysis and design processes. Even if this tight control created some occasional skepticism towards the possibility to participate in the process, it was largely perceived as positive, and, as argued in the preceding section, even increased the consultant's legitimacy in the client's eyes. An important basis for the consultant's legitimacy in the project group members' eyes was his experience of carrying out change processes. This was repeatedly referred to by the project group members when explaining the consultant's contribution in guiding the process.

In creating legitimacy for the reengineering process, both the method and the consultant are perceived as important by the project group members. The method is valued mainly as an insurance for a viable process and a map giving meaning to individual activities. The consultant is mainly valued for his individual experience and ability to find the right way in the specific situation. This points out a somewhat contradictory use of legitimization bases for the consultant's approach. On the one hand, the approach is legitimated by the general method. On the other hand, the consultant's approach gains legitimacy from the consultant's experience. This mixing of legitimization bases and views of the change process as predictable and general, on the one hand, and complex and idiosyncratic on the other is a rhetorical resource, that makes the consultant's arguments hard to question (Berglund and Werr, 2000).

Creating motivation – legitimating the content

The second aspect of creating a willingness to participate in the process among the project group members was about creating motivation based on making plausible that action would result in a desired outcome. As revealed in the case description, the coherence of the results of the reengineering process, with the desires of the individual participants, was important for their judgement of the process as successful. Several of the project group members, but especially Anders, could be observed to be very anxious about the potential results of the consultant's actions. As long as these were in line with the envisioned change, the freedom of the consultant was quite large, and the motivation of the project group members was ensured.

The question is thus how much was determined by the method or the bosses. But in the end, this doesn't matter, as the results fit very well with what we wanted to achieve. (Anders)

Below, I will discuss the interaction of client, consultant and method in creating motivation, i.e. coherence between the desires of the individuals and the outcomes envisioned by the reengineering process.

A first way of ensuring this coherence is through the project group members' participation in the reengineering process and the formation of its results. It is well-established knowledge in the change management literature, that the participation in the change process of the people affected by it is important for the creation of a feeling of ownership and thereby a motivation for change. In the Scandtel case, the project group members participated actively in the process, but their actual influence could be questioned based on the study of the process. Quite strict boundaries were set by the consultants for the clients' creativity. Still, the clients' perceived ownership of the results was strong. The method had a considerable role in supporting this.

The boundaries for the client's creativity, to a large extent, consisted of the concepts provided as the basis for mapping the organization as well as for formulating the results. During both the mapping and the reengineering phases, a central role of the method was the provision of concepts, i.e. language for the understanding of the organization as well as the formulation of the solution. But, as repeatedly pointed out above, the language could not be directly applied, but had to go through a process of adaptation, guided by the consultant but involving the project group members. Underlying this process of adaptation were the client's problems of applying the concepts, which led to their genuine desire to understand and use the concepts. It can thus be argued that the perceived problems of applying the concepts among the project group members in the following joint process of application, contributed to the

project group member's identification with the concepts introduced by the consultants.

This explanation of the client's perception of ownership in spite of the use of a number of concepts alien to the project group members is well in line with the reasoning of Huczynski (1993). According to Huczynski, an important reason for the popularity of management concepts is their "contribution - ownership potential" (p. 85), i.e. the freedom the concept leaves to the individual manager to adapt it to his own reality and thereby make it to his own property.

A second mechanism, supporting the coherence of the desires of the individuals in the project group and the overall goals of the reengineering process in Scandtel, is linked to the characteristics of the BPR method and its managerial philosophy. As has been argued by Huczynski (1993) and Watson (1994), package solutions such as BPR are powerful in changing peoples thinking. They provide a convincing line of argument for change, at the same time as their vague character makes it possible for the recipients of the concepts to filter out the aspects that resonate best with their own views. This filtering process was clearly observed in the Scandtel case. This makes it easy to create a sense of congruence between the content of the reengineering process as steered by the consultant and the client's desires.

Linked to this aspect is a third mechanism based not on the form of the method, but rather its content. Consulting methods are generally linked to overall change concepts, such as BPR, that gain their popularity from echoing important values and discourses in the organization's environment (Clark and Salaman, 1996b; Grint, 1994). This further facilitates the establishment of congruence between the method, the consultant's thinking and the client's thinking, as these values and discourses in the environment also influence the organization itself. This was clearly observed in the Scandtel case, where the thinking in Scandtel was to a large extent in line with the basic principles and proposed solutions of BPR.

A fourth mechanism, finally, through which the method contributes to the motivation of the project group members is again based on its provisioning of a package of arguments for change. As mentioned, a management concept can be a powerful device for formulating and advancing the project group members' own thoughts (Watson, 1994). The convincing discursive framework provided by BPR can be viewed as a way for the client members to formulate a general feeling of dissatisfaction. Given that the method is used in this way, it again contributes to the congruence between the goals of the reengineering process and the client members' desires. This was observed in the Scandtel case, where several of the project group members saw the method as a way of finally

formulating and advancing ideas that had existed in the organization for a long time.

In summarizing the consultant - method - client interaction for ensuring participation and creating trust, two different sub-activities were identified. First, the creation of expectations, making plausible that individual action would lead to organizational action, and second, the creation of motivation, establishing the process as leading to results in line with the preferences of the individuals participating in the process. The interaction of consultant, method and client in achieving this is summarized in Table 7.6 below.

	Method - consultant interaction	Method - client interaction	Client - consultant interaction
Create expectation	Method provides a structure for the change process Consultant adapts the method to the specific case	Method provides a structure for the change process Method creates trust in the consultant Method structure gives meaning to activities Method structure gives roadmap for action	Consultant repeatedly presents the method Client generally trusts the consultant's leadership Consultant contributes with his experience
Create motivation	Method provides concepts Consultant chooses and adapts concepts Method provides established and convincing thought models supporting congruence	Method provides concepts Method provides thought models supporting own thoughts Method provides established and convincing thought models supporting congruence	Joint, but consultant-led interpretation of concepts

Table 7.6. The consultant - method - client interaction in “Enable participation and create trust”

The roles of methods in the project work with the client

Summarizing the interaction between the method, consultant and client in carrying out key activities in the Scandtel project (see Table 7.7), a number of roles of the method recurrently appear. A first recurring role of the method concerns the provision of concepts or language used for describing and conceptualizing the client organization. This role of the method appeared in

relation to almost all the key activities as well as in relation to both the consultant and the client. A second recurring role concerns the method's provision of a structure, as well as checklists, for the activities to be carried out in the reengineering process. Again, this role appears both in relation to the consultant and the client, whose action is facilitated by the method. Finally, a third recurring role is captured by phrases such as "provides coherent and convincing account of problem situation" or "provides coherent and convincing thought models supporting congruence". This role concerns the method's ability to present a convincing management philosophy, describing the current situation, motivating a need for change as well as sketching out the contours of a future situation. This role, that facilitated communication and understanding, was not as widespread over the different key activities as the other two, but was observed both in relation to the consultant and the client. Below, I briefly summarize the character of these roles as well as their interrelation with the consultant and the client.

Providing language for reality construction

In this role, the method provides concepts and labels that are used in both depicting the organization as well as describing the vision and solution. In applying these concepts, the project group members' conception of the organization was partly changed. The concepts pointed out new aspects of the organization to study and the interpretation of the concepts given by the consultant influenced the aspiration levels of the client. What was earlier perceived as satisfactory was in the process of interpreting the concepts defined as bad and vice versa.

This introduces the role of the consultant in realizing the method's "language provision" role. The application of the concepts provided was problematic for the client. The client thus depended on the support of the consultant in operationalizing and interpreting the concepts in the specific context. Furthermore, the consultant was important in selecting the concepts used in the specific situation from the overall mass of concepts available in the method. The method's role as a provider of language was thus strongly mediated by the consultant. Consequently it is also dependant on the client's acceptance of the consultant's authority in adapting and interpreting the method.

The method's role of providing language is, as shown in chapter two, a relatively well-established one. It was acknowledged both by the more practically-oriented literature, where methods were seen to support the communication between consultant and client (Fristedt, 1995) and by the more research-oriented literature, where methods were seen to provide the resources in terms of concepts for the construction of this reality.

Key Activity	Method - consultant interaction	Method - client interaction	Client - consultant interaction
Understanding organization to be changed	<ul style="list-style-type: none"> • Method provides language • Consultant selects suitable concepts 	<ul style="list-style-type: none"> • Method provides language • Client struggles with application of language 	<ul style="list-style-type: none"> • Consultant assists client in application of method • Client follows consultant's guidance
Create and make visible dissatisfaction	<ul style="list-style-type: none"> • Method provides coherent and convincing account of problem situation • Consultant adapts account to situation • Method provides concepts • Consultant chooses concepts 	<ul style="list-style-type: none"> • Message is reformulated in order to fit personal needs • Method provides concepts • Client applies concepts 	<ul style="list-style-type: none"> • Consultant presents account in a convincing way • Client accepts consultant's account • Consultant gives meaning to concepts (establishes good and bad)
Leading the change process	<ul style="list-style-type: none"> • Method provides a checklist/structure "in order not to forget anything" • Consultant adapts the structure to the situation • The method as checklist provides security and thus enables confident action 	<ul style="list-style-type: none"> • Method provides a structure • Client applies the structure, but has problems with "operationalization" 	<ul style="list-style-type: none"> • Authoritative guidance of activities by consultant • Consultant supports operationalization of the method • Client accepts consultant's authority • Consultant acts confidently, which supports client's acceptance of consultant
Design solutions	<ul style="list-style-type: none"> • Method provides structures, concepts, etc. as a basis for the consultant's guiding of the process • Consultant adapts the structures, concepts, etc. to the situation 	<ul style="list-style-type: none"> • Method provides structures and concepts for project group members' actions • Client applies the structure, but has problems with "operationalization" 	<ul style="list-style-type: none"> • Authoritative guidance of activities • Support in operationalization of the method • Client accepts consultant's authority • Consultant provides "information" guiding the client's thinking

Continued

Key Activity	Method - consultant interaction	Method - client interaction	Client - consultant interaction
Ensure support	<ul style="list-style-type: none"> • Method provides coherent and convincing thought models facilitating communication 	<ul style="list-style-type: none"> • Method creates trust in the consultant (in some cases) 	<ul style="list-style-type: none"> • Consultant repeatedly presents method to the client • Client specifies task for the consultant • Consultant complies
Enable participation and create trust (Create expectation)	<ul style="list-style-type: none"> • Method provides a structure for the change process • Consultant adapts the method to the specific case 	<ul style="list-style-type: none"> • Method provides a structure for the change process • Method creates trust in the consultant • Method structure gives meaning to activities • Method structure gives roadmap for action 	<ul style="list-style-type: none"> • Consultant repeatedly presents the method • Client generally trusts the consultant's leadership • Consultant contributes with his experience
(Create motivation)	<ul style="list-style-type: none"> • Method provides concepts • Consultant chooses and adapts concepts • Method provides established and convincing thought models supporting congruence 	<ul style="list-style-type: none"> • Method provides concepts • Method provides thought models supporting own thoughts • Method provides established and convincing thought models supporting congruence 	<ul style="list-style-type: none"> • Joint, but consultant-led interpretation of concepts

Table 7.7. Summary table: method - consultant - client interaction in the change process

But these studies generally focused one-sidedly on either the consultant or the client and neglected the method. Consequently, the enabling roles of the consultant in supporting the operationalization of the language, as well as the client of accepting the consultant's authority, provide a contribution to the understanding of the method's roles in the change process. As the above two mentioned roles of consultant and client enable also the other roles of the method, I will come back to these in a more focused discussion of the method's consequences for establishing the consultant as a key actor in the change process.

Providing structure for action

A second role for the method observed above was the provision of a structure for the change process. This structure could concern a single interview (interview guide) or the whole change process. The method structured the process on a number of different levels, ranging from the entire process, where the method was found to be reflected in the project specification guiding the phasing of the project, to the design of a specific meeting for which the method provided the agenda. One important contribution of the structure was the support of both the consultant's and the client's action. For the consultant, the structure provided confidence and focus. The activities carried out during the reengineering process to a large extent overlapped with the activities suggested by the method, indicating its influence on the consultant's actions. However, the direct influence assumed in much of the more practically-oriented literature and the literature presenting methods could not be observed.

For the client, the method provided a road map enabling the taking of own initiatives within the overall structure of the process, as well as an understanding of the process giving meaning to individual activities.

But this action-enabling aspect also had its downside. In the above case, the consultant guided the process confidently and firmly, following a tight structure that was to a large extent based on the method. This firm guidance was occasionally felt as eliminating the possibility of the project group members to participate in the process.

The consultant played an important role also in realizing the method's role providing structure for action. The structure had to be adapted to the specific situation, e.g. the specific activities for the Scandtel case had to be chosen from the overall structure of the method. But the consultant's role didn't end there. The client, when left alone with the structure, had problems in applying it to his concrete case, creating a further role for the consultant in assisting the client with the application of the structure. But again, the above rests on the existence of a client who has confidence in the consultant and accepts his guidance. The

structure provided by the method, finally, has a role in creating this confidence in the consultant – at least among some of the project group members.

This role of providing structure for action is the one most often associated with methods. It is almost axiomatically linked to methods (see chapter two). The above investigation into this role and its interaction with the consultant and the client elaborates on the understanding of this role by pointing out some of its consequences, e.g. its potential effects on the client's perception of participation, the consultant's legitimacy among the clients, etc. The inclusion of the client and his views of the consultant's use of methods are only very seldom reflected upon in the existing literature (c.f. chapter two).

Providing a discursive framework for communication

The third role identified for the method concerns its ability to provide an entire discursive framework, i.e. a logical package identifying both the need for change as well as possible solutions. This aspect of the method was seen to be an efficient device for the consultant's communication of the need for change, and the possible future states to be achieved.

The message conveyed by the consultants in terms of the provided discursive framework was well accepted in the organization. It was interpreted in a way that fit with the recipients' personal interests, and was thus perceived as a way of articulating thoughts that had existed in the organization for a long time. The acceptance of the method was supported by the fact that the discursive framework provided by the method in the Scandtel case was based on the BPR approach, which is well in line with the current features of the managerial discourse. The congruence between the discursive framework provided by the method and the "Zeitgeist", was found to support the congruence between consultant and client, thus increasing the chances, that the client would perceive the changes proposed by the consultant as desirable and therefore worthwhile working for.

This role of the method is in congruence with what has been shown in studies of management concepts in management gurus' work (see e.g. Huczynski, 1993; Clark and Salaman, 1996a; 1996b). However, these studies most often focus on a managerial level and neglect the more concrete work carried out by, for example, consultants under the name of the management concept. In this study, focusing on the operational level, it was indicated that the method as a discursive framework was tightly linked to the operational aspects of the consultant's work. As will be elaborated below, the method could be observed to legitimate the consultant in order to make his work possible.

This summary of the roles of methods in the change process reveals, that the identified roles to a large extent depend on both the consultant and the client for

their realization. Notably the consultant was seen to play a central role in this context, as he was needed in order to adapt the generic method to a specific situation, as well as support the organization's members in the application of the method, i.e. guide their work in detail.

This double role of both setting the overall rules for the process and guiding the detailed day-to-day work within it, gives the consultant and his method a central position in the process. In the Scandtel case, the feeling that the client members to a large extent were in the hands of the consultant was recurrent, and the method must be viewed as a strongly contributing factor to establishing the consultant in this central position. This will be further elaborated on in the following.

Establishing the consultant as a key actor – method and consultant in symbiosis

In the reengineering process at Scandtel, the consultant supported by his method, had a prominent role. He was observed to guide both the mapping process, in which the problem in the network expansion process was defined, and the visioning process, in which the solutions to these problems were identified and detailed. The explicitness of this guidance varied and could, as indicated by the project group members' descriptions, at times be quite subtle. In all these activities, the method played a role in providing concepts and a discursive framework as inspiration to the client members' thinking.

These characteristics establish the consulting process as a process of management of meaning (Smircich and Morgan, 1982), or a process of control via linguistic artifacts (Czarniawska-Joerges, 1988a; 1988b) directed at the client members by the consultant and his method. Czarniawska-Joerges (1988b) identifies three variants of this process. The project group members can delegate their right to create their own meaning to the consultant (abdication of meaning), or the consultants can impose their meaning on the project group by force (imposition of meaning). Most typically, a third process, mixing the former two is applied. In this the creation of meaning is the result of ongoing negotiations involving both the abdication as well as the imposition of meaning.

At first sight, the Scandtel case looks very much like the abdication of meaning, with the project group members uncritically accepting the meaning created by the consultant. But taking a closer look, some limits to the consultants' mandate to create meaning are observed suggesting a process in which meaning is negotiated, but in which the consultant has a rather large degree of freedom. The boundaries of the consultant's freedom to define reality seem to be set by the client's perceptions of the desirability of the reality created by the consultant. This is clearly reflected in the view presented by Anders, that the

actual influence on the process did not matter, as long as the results of the process were in line with those desired by the project group members. As argued in relation to the creation of motivation among the client members to participate in the process, the preferences of the client members are not set once and for all. This makes the consultant's success in the negotiation of meaning with the client a question of the consultant's as well as the method's ability to reflect and modify the client members' meanings (c.f. Clark and Salaman 1996a).

In the Scandtel case, the consultant was relatively successful in the negotiations of meaning, as the client members had considerable confidence in him. As argued by Sturdy (1997), this is by no means given. In many organizations, skepticism towards consultants is large today. The same is true when it comes to their methods and abstract concepts (Watson, 1994). Based, for example, on Sturdy's (1997) observations of the skepticism of many managers against management consultants, we could have expected a rather negative reaction to the observed efforts to firmly direct the activities within the project group, steering both the definition of the problem and its solution. But this was not the case. Rather, based on the project group's perceptions of the consultant's role, it seemed as if the authoritative performances of the consultant increased his acceptance. The consultant's firm guidance of the process was repeatedly described as one of the consultant's most important contributions.

This can be understood based on the previous experiences of similar projects in the project group. These had all been discontinued before any changes had been achieved, which was partly attributed to a lack of expertise among those carrying out the process. Against this background, the experienced consultant, Bengt, was greeted with enthusiasm. But he still had to prove his superior knowledge. As management consultants lack any clearly identifiable and coherent knowledge base for claiming superior knowledge (Clark and Salaman, 1996b), they are dependent on the client's *beliefs* in this superior knowledge (Alvesson, 1993). The best way of claiming superior knowledge is by acting as if one had it, i.e. in a confident and authoritative way. Clark and Salaman (1996b), as well as Sturdy (1997), assert that this is a common picture of consultants conveyed:

To be successful and to survive in the management consultancy industry, consultants must convince clients of their expertise, knowledge and indispensability. To achieve this, they must appear authoritative, must behave confidently and must be in command of something, which clients seek and value. (Clark and Salaman, 1996b:175)

This strategy for achieving legitimacy was clearly observed in the Scandtel case and it was also reasonably successful.

But the central position of the consultant in the process, as well as his legitimacy, was not only a function of his personal characteristics and actions. It was also supported by the method. Starting with the consultant's position as the individual with the largely unquestioned privilege of interpretation – the consultant's interpretations of observations and data were only rarely questioned – this was strongly supported by the existence of the method. The main role of the consultant following on from the use of a structured method and the language provided by it, was the adaptation of the general tools and concepts to the specific situation.

By introducing a method into the reengineering process and running the process according to it the consultant establishes himself as a key actor, as he is the only one who can master the method. This use of the method is to a large extent similar to the use of concepts according to the doctor/mechanic school observed by (Czarniawska-Joerges, 1988b). Here concepts are applied authoritatively by the consultant and meaning is mainly defined by him, thus giving the consultant the privilege of interpretation.

The above asserts that the method contributed to establishing the consultant as a central actor in the reengineering process. But the observations in the Scandtel case also indicate that the method contributed to the legitimacy of the consultant, i.e. the client members' trust in him. This trust in the consultant was in its turn a prerequisite for the consultant's success in the negotiations of meaning. The existence of a detailed and structured method was a central prerequisite for the client members' confidence in the reengineering process at large, its specific activities, and the consultant's running of the process. As expressed by Martin, he would have had problems accepting the consultant's authority, if he had not had a method.

This emphasizes the legitimating aspects of the role of the method. Both in its roles as structure and discursive framework, it contributes to the legitimization of the consultant and the change process. As argued in the section "enable participation and create trust", the client members' willingness to contribute to the process and thus accept the consultant's guidance, was dependant on their trust that the results of the process would be favorable viewed from their personal perspective. The method as a discursive framework contributed to the creation of this perception by being open for interpretation, thus making it possible for the client to interpret it in terms of their personal interests and preferences (c.f. Watson, 1994; Huczynski, 1993; Clark and Salaman, 1996b; Sahlin-Andersson, 1996).

In the above discussion, a political perspective on the roles of methods has been introduced, highlighting issues of influence and control (c.f. Czarniawska-Joerges, 1993; Pfeffer, 1981). This analysis has highlighted the contributions of

the roles of the method in establishing and legitimizing the consultant as an actor with considerable power in the reengineering process. In summary, the argument was that the method's provisioning of concepts as well as structure, required the consultant's intervention in order to make them usable. Hereby, the consultant was established as a central actor. But the realization of this central position required the consultant's legitimacy in the client's eyes. Achieving this legitimacy was supported by the method's role as structure for action as well as its role as discursive framework.

Summary – problems and opportunities arising from the use of methods

The above analysis has primarily focused on the identification and discussion of the roles of methods in the reengineering process. Throughout these discussions, problems and opportunities related to the use of methods, both in relation to the client and the consultant, have been identified. In the final section of the chapter, I will summarize these problems and opportunities. In identifying these, the actors' perspective has been guiding. Problems are thus issues that were perceived as problematic by the client or consultant. Analogically, opportunities concern the instances where positive effects of the method were mentioned or where the method was used without problems. I will begin this discussion by illuminating the issue from the client perspective and then turn to the consultant perspective.

The client perspective

Based on Table 7.7, from a client perspective, a number of positive aspects of the use of methods can be identified. These opportunities emerge around three major themes linked to the roles identified above. These themes, which are interrelated, concern the creation of an understanding of the organization and the reengineering process, the client's ability to take initiatives in the process, and the establishment of confidence in the consultant and the reengineering process.

Methods support the creation of an understanding of the organization and the reengineering process. In its role as language and discursive framework, the method was observed to support the client in reframing his organization. The application of new concepts led to the creation of new insights. The method in its role as discursive framework also supported the client in creating a coherent and verbalizable account of the current problem situation, its causes and remedies. The method not only supported an elaborated understanding of the organization, but also conveyed insights into the reengineering process and its structure, which lay the ground for a second set of opportunities.

Methods support the taking of initiatives. The client members' access to the road map for the reengineering process and its different detailed activities provided by the method, enabled them to take own initiatives in the process. However, the method in this context was also strongly limiting, as it limited these initiatives to the activities foreseen by the method. The freedom observed for the client was thus the speed in which activities in the process were carried out.

Methods induce trust in the process and the consultant. As observed in the Scandtel case, the client members' uncertainty concerning the reengineering process was initially large, both concerning the process as such, as well as its contents and results. In this context, the method contributed to the reduction of uncertainty, by providing a trustworthy and well thought-through picture of these issues.

In spite of these positive effects, there were also problems associated with the use of methods in relation to the client. These problems mainly emerged from the repeatedly described need to adapt the method to the specific situation, which required extensive experience.

Methods create problems of application fostering consultant dependency. Besides the above mentioned opportunities, the use of the method in the Scandtel project created its own set of problems, related to the application of the method (its language, structure and discursive framework) in the specific situation. This application was largely described as experience-based, which thus created a central role for the consultant representing the method in the process. Consequently, the use of methods to some extent contributed to reducing the client's influence on the process as compared with the consultant's.

The consultant perspective

The problems and opportunities related to the consultant's use of methods in the reengineering project to a large extent overlap with the roles identified for the methods above. The opportunities can thus be summarized under the themes: provide language for understanding the client, provide a structure for confident action, provide a discursive framework for communication and support the legitimization of the consultant and his role.

Methods Provide language for understanding the client. The language provided by the method for mapping and measuring the client organization supports the consultant by directing his attention to a limited and manageable subset of data among the vast array of total data available (c.f. chapter three). Hereby, the method supports the reduction of the consultant's uncertainty leading to

confident action, which in its turn contributed to the consultant's legitimacy in the client members' eyes.

Methods provide a structure for confident action. The different structures for the reengineering process and its sub-activities provided by the method were valued as checklists "in order not to forget anything". Hereby, the method again contributed to the reduction of the consultant's uncertainty, thus supporting his confident action in the process.

Methods provide a discursive framework for communication. The consultant valued the method highly as a communication aid in the meetings with client members at all different levels. In these contexts, the method provided a basic set of coherent and convincing arguments about why the organization had to change, in what direction this change should head, and how it should be realized.

Methods support the legitimization of the consultant and his role. The use of the method in the project work with the client created a central activity for the consultant; that of adapting the language, structures and discursive framework to the client's specific situation as well as applying them in this situation. This was an expertise which was experience based, and thus unique to the consultant, giving him a central role in the reengineering process. Besides creating a central role for the consultant, the method also legitimated the role of the consultant, by inducing the client's confidence in the consultant and his actions.

Turning to the problems perceived by the consultant in relation to his use of methods in the reengineering process, one problem in particular emerges, concerning the adaptation of the method to the specific situation. Besides this issue, methods were mainly perceived as positive by the consultant.

Adapting the method to the specific situation. The most important task of the consultant in relation to the method was the adaptation of the method to the specific situation. This activity, described as crucial for success by the consultant, was mainly based on the consultant's extensive experience from similar projects. This activity thus involved uncertainty and made it potentially stressful.

This concludes the summary of the problems and opportunities related to the use of methods as perceived both from a client and a consultant perspective. The reader may be surprised over the mainly positive picture of methods resulting from the above analysis. Against the background of the review in chapter two, more problems could have been expected. However, many of the problems identified in chapter two were the result of a rigid following of methods, which was not observed in this case. Rather the consultant in the

Scandtel case applied the method in a relatively flexible way. This issue will be elaborated on in the final chapter.

In the next chapter, I will elaborate on the consultant's relation to the method against the background of the findings in this chapter. Given the centrality of the consultant's adaptation of the method to the specific situation, the next chapter will focus on the method's role in the consultant's problem solving. Issues that will be treated include questions such as how does the adaptation of the method by the consultant take place? To what extent does the method influence the consultant's actions? etc.

Chapter Eight

Methods as support for the individual consultant's problem solving

Background and Purpose

In the previous chapter on the interaction between consultant, method and client in a consulting project, strong interrelations between the method and the consultant were found. The method provided the consultant with a set of abstract interrelated concepts as well as a general activity structure, and the consultant contributed to the process by making these applicable to the specific situation.

The previous chapter focused on the identification of the above relationship, but revealed little about the actual nature of the processes underlying this interaction, although they are central for understanding the question in focus in this thesis, namely the role of methods in the work of management consultants. This chapter will thus focus specifically on this relation between method, consultant and action, where the action in focus is the consultant's problem solving. Issues that will be illuminated in this context are the method's influence on the consultant's problem solving and the mechanisms through which such a possible influence takes place.

As mentioned in chapter two, some studies on consultants' problem solving behavior exist (e.g. Rhenman, 1968, Karlsson, 1975), but these mainly focus on the content of the problem solving process leaving the character and the determinants of this process (which are in focus here) mainly unexplored. Still, Rhenman (1968) gives some insights by characterizing the process as to a large extent intuitive rather than analytical. A key factor for understanding the consultant's problem solving is said to be the consultant's "experience", although nothing is said about the specific links between different kinds of experience and problem solving behavior. The contribution of these studies to answering the questions in focus here is also limited by the fact that none of the consultants studied in these works mentioned the use of a formalized method.

Also the studies with a more direct focus on the use of methods in IT systems development or consulting, (e.g. Stolterman, 1991; Fristedt, 1995; Risling 1987, 1988) reported in chapter two, give little additional insights in relation to the above area of interest. They all conclude that methods are not directly used by

consultants, but have to be adapted, and that the consulting process has to a large extent an intuitive character, highlighting the importance of experience.

Given this lack of empirical insight from the consulting and IT literature into the area of interest here, I turned to more general theory in chapter three. Here some inspiration was found, in among others, Schön's (1983; 1987) work. Based on Schön, a tentative framework for understanding the link between methods and consultants' problem solving was formulated (see Figure 8.1). Given the theoretical nature of this model, there is a need for its empirical validation. An in-depth empirical study of management consultants' problem solving behavior is also justified by the identified lack of empirical studies in general in this area.

In order to shed light over the individual consultant's problem solving behavior, and the role of methods in this, this chapter reports an in-depth simulation study of seven consultants' problem solving behavior in relation to a standardized case. The case describes an organization and its problem. The task for the consultants is to sketch out a proposal for a project, based on the information provided in the case (the method will be described in more detail below). More specifically, the following two questions are to be pursued in this chapter.

1. *Does the method in use influence the consultant's problem solving and proposed solution in the proposal design phase?*
2. *Through which mechanisms does the method influence the consultant's problem solving? Is the model presented in chapter three (Figure 8.1) a satisfactory approximation of these mechanisms?*

A review of the conceptual framework

The overall theoretical frame of reference underlying this study has been presented in chapter three. In this section I will briefly summarize the main characteristics of this framework as a background to the following study.

In the introduction to chapter three, two traditions in the view of knowledge were identified – the theoretical tradition of knowledge and the practical tradition. In the theoretical tradition, knowledge is viewed as separable from the actor and codifiable in words or mathematical symbols. In the practical tradition on the other hand, knowledge is regarded as inseparable from the actor. Knowledge is in action and hard to codify separately from it.

Applying these two perspectives to the phenomenon in focus in this thesis revealed a somewhat ambiguous picture. While methods were clearly argued to be an offspring of the theoretical tradition of knowledge, the actions of consultants and other professional actors were found to be better understood in

terms of the practical tradition of knowledge. Several studies of the nature of consultants' actions, reported in chapter two, highlighted the intuitive aspects of consulting, thus reflecting the practical tradition of knowledge. Similarly, empirical studies of other professional actors, such as architects, also argued that the practical tradition of knowledge might give a more representative picture of the nature of professional action (see e.g. Schön, 1983).

Against this background, a framework was designed with the purpose of integrating the role of methods into a practical tradition of knowledge. The point of departure for this endeavor was Schön's (1983) theory of the "reflective practitioner's" actions. Central in this framework is the reflection in action process, in which a messy reality is transformed into a well-ordered problem. This process, which is the core of the problem solving process²³, is described as largely intuitive and experience-based. The practitioner's problem solving approach is consequently described as muddling through rather than rigid rule following.

This process of reflection in action is according to Schön (ibid.) based on and supported by four constants:

- The media, language and repertoires that are used to describe reality and conduct experiments
- the appreciative systems that are brought to the problem setting, evaluation and reflective conversation
- the overarching theories by which they [practitioners] make sense of phenomena
- the role frames within which they [practitioners] set their tasks and through which they bound their institutional settings. (Schön 1983:270)

These constants, that have been described in more detail in chapter three, "give the practitioner the relatively solid references from which, in reflection in action, he can allow his theories and frames to come apart" (Schön, 1983:270). The constants listed above are thus by Schön presented as the basis for understanding the reflection in action process.

The constants, it was argued in chapter three, potentially overlap with elements of the method, thus allowing for an influence of the method on the consultant's constants for reflection in action. Rather than directly affecting action, the framework designed in chapter three argued for an influence of the method via the consultant's constants for reflection in action (see Figure 8.1 for a graphical representation of the framework). This would allow a role and an influence of

²³ The term "problem solving" is here used in its common sense meaning, thus comprising both what Schön (1983) calls "problem setting" and "problem solving".

the method on the consultant's thinking and acting in a way compatible with the observed intuitive character of this thinking and acting.

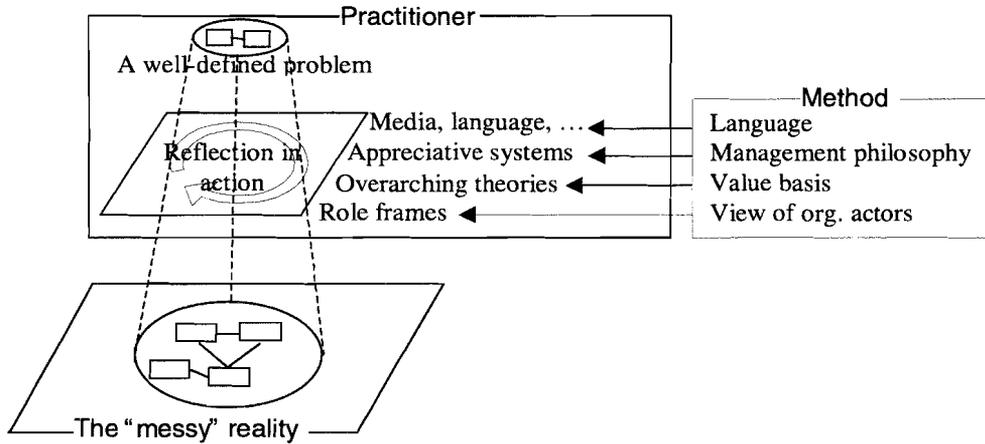


Figure 8.1. The method's role in making sense of messy situations

As this framework is based on theoretical concepts derived from several different studies, none of which dealt directly with the influence of methods on management consultant's thinking and acting, the validity of the model needs to be established through empirical testing. Some of the concepts included in the model, such as the constants for reflection in action, are also quite poorly described in their source (Schön, 1983), creating a need for an interpretive work clarifying the meaning of these concepts in this context.

Methodology – Studying the reflection in action process

The study of the reflection in action process is about capturing and understanding the consultant's thought processes in connection with problem solving. The study of individuals' thought processes has a long history in psychology in, among others, the field of judgement analysis (see e.g. Cooksey, 1996). Payne, Bettman and Johnson (1993) identify two techniques for the study of such cognitive processes – analysis of verbal protocols and analysis of information acquisition behavior. In the first case, the focus is on the test persons' thoughts during the completion of the task of interest, in the latter on the test persons' interest for different parts of the information available for the task. In this study, both these methods will be used in parallel. In the following, I will briefly describe the approach by which the data for this study were collected and analyzed. For a more detailed description and discussion of the methodological aspects the reader is referred to appendix A.

Data collection

The study of thought processes within psychology is most often carried out as controlled experiments in laboratory situations, as this makes it possible to control stimuli presented to the test persons as well as study their behavior in detail (Yin, 1989). These chosen methods for studying the thought processes of consultants (verbal protocols and analysis of information acquisition behavior) are hard to realize in real life situations. Consequently, the study in this chapter was designed as a simulation study.

The situation simulated in the study was the proposal writing phase of a project. The test persons were provided with a case description of an organization having problems with their efficiency. The fictitious client was the chief surveyor Gustavsson in a Swedish county, who had problems with the lead-times of the surveying office's services. The task for the consulting project as formulated by the client was the shortening of lead-times. Based on the information in the case, the consultants were asked to sketch out a project proposal indicating a definition of the problem, a delimitation of the project, a preliminary time plan, some possible results and an analysis of threats to the project. The content of the case is briefly summarized in Figure 8.2

The surveying authority in the county of Västmanland consists of three local surveying authorities and one chief surveying authority employing about 40 persons. The chief surveyor managing the surveying authority is Gustavsson. The surveying authority's main task is the parceling of land, as well as activities related to this. These activities are to a large extent financed by the public budget, but in recent years, the surveying authority has increased its services rendering direct income from different private customers. There is a desire to increase this line of business.

The main problem faced by the surveying authority are the lead times for their handling of cases. The current long lead times are problematic both from a customer service perspective as well as from a cost perspective. Several reasons for these long lead times are indicated, among others, cases that are submitted with missing information, a lack of interaction between personnel categories and organizational boundaries, as well as a large number of cases in the system. Some of these problems are linked to the system of financial control, requiring activities to be charged to specific cases.

The change is regarded as urgent by the chief surveyor Gustavsson, but he also points out that the change process may not disturb the ongoing business. The workload is high, and the change process should not interfere with this work. Work is already disturbed by a new IT system, that is currently developed on a national level for the whole surveying authority

The personnel is by Gustavsson described as somewhat tired of change. There has been a lot of change in the past year, both such that has really rendered change as well as a number of initiatives, that where discontinued before any results were obtained.

Figure 8.2. A brief summary of the case of the surveying authority providing the input to the simulations

The information available to the consultants to carry out this task consisted of forty-six “cards” in a computer application, each containing information on a specific topic. Examples of such topics are the client’s organization, the workflow, the client’s earlier experiences with change, etc. These cards were accessible to the consultant via a menu or via hypertext links within the text. (See appendix A for a more thorough description of the design of the case).

During the consultants’ work with the task, which typically took two to three hours, three types of data were collected. Firstly, the consultants were asked to think aloud while working with the problem, which generated concurrent verbal protocols. The consultant’s thinking aloud was captured on video, and transcribed *in extenso* as a basis for analysis. Secondly, the consultants’ movement through the information was logged, giving exact information about which cards the consultant looked at, for how long and in what sequence. The third kind of data generated during the simulations were the drafts of proposals produced by the consultants.

In addition to this information generated during the actual simulation some background information was also collected in interviews before and after the simulation. Before the simulation, data on the consultants’ background were collected. After the simulation, the consultants’ perceptions of it were discussed. Issues like whether the simulation was perceived as realistic were covered here (see appendix A for the interview schedule). These post-interviews also gave the consultants a possibility to summarize and explain their behavior. This generated data about the consultants’ post-test reflections.

In total, six simulations were carried out with consultants from two organizations, three from one and four from the other (in the latter case a simulation was carried out by two persons working together). The sample of consultants was controlled concerning the variable of experience. The consultants from each organization represent a spread from junior to experienced consultants.

Data analysis

The data generated by the simulations were both rich and varied, covering:

1. Interviews preceding and succeeding the actual simulation,
2. log data on the time different consultants spent looking at different data,
3. verbal protocols documenting the consultant’s reflections made and questions asked during the simulation,
4. project proposals produced during the simulation.

Given this richness of data, data reduction was central. In the following analysis, data are reduced in several steps. Against the background of the framework developed in chapter three, the two research questions formulated as a guide for this study can be elaborated on and three questions guiding the analysis are arrived at:

1. Which differences can be observed in the different consultants' reflection in action processes and the results of these processes?
2. Can these differences be understood in terms of differences in the consultants' constants for reflection in action?
3. In what way (if at all) are elements in the method reflected in the constants for reflection in action?

These three questions provide the basic structure for the analysis, that comprises three parts, each focusing on one of the three questions above. In the *first part* of the analysis, the reflection in action process and its results are studied on a level quite close to the original data. The focus in this analysis is on the comparison between the different consultants. As a first step, the consultants' information acquisition behavior is compared. This is done through a cluster analysis based on the time spent by the consultants on different information categories.

The results of the cluster analysis are in the second analysis step complemented and elaborated on by a qualitative analysis of the consultants' interpretations of the collected data. In this step, the consultants' verbal protocols, i.e. their reflections during the process, are analyzed and compared. In order to facilitate the comparison, these reflections were thematically categorized into twelve categories, using the computer software NUDIST (see Appendix D for a listing of NUDIST categories used in this study). The identified categories mainly concerned four different areas – understanding the organization, constructing problems, designing the change process and ensuring success. (See appendix B for the summarized reflections of the consultants). Comparisons between the consultants' reflections within the twelve categories generate three dimensions that are regarded as meaningful in capturing the differences in the consultants' reflection in action processes.

In a *second part* of the analysis, a deepening of the understanding for the differences between the consultants is focused on. According to the framework presented in chapter three, the constants underlying the consultants' reflection in action are a key to understanding these differences. These constants are thus investigated for the different consultants in this second part of the analysis. The analysis shows that there is a large overlap between the contents of the

constants and the contents of the consultants' reflections, thus indicating a possible causality between the two.

Having identified the constants in reflection in action, I turn to the question of the method's role in this process in the *third part* of the analysis. This focuses on the congruence between the identified constants and the methods available to the consultants. The content of the methods mentioned by the consultants is compared with the content of the constants. Again congruence is found, indicating a validation of the model proposed initially. (A more thorough discussion and description of the approach to the analysis is provided in appendix A).

The test persons' background

In this section I will briefly present the participants in the simulation, in order to give some insight into their background. The way of working and the toolboxes of the two consulting companies will also be briefly described.

International

International is a large, international consulting organization with about 300 consultants in Sweden and over 60 000 consultants worldwide. Projects within International vary significantly in scale and scope – from a few months for one consultant to five-year projects involving 200 consultants. Each project in practice often consists of two parallel, integrated processes – one focusing on the organizational and human side of the change, the other on the technical, i.e. information systems development. The following focuses mainly on methods for the first type of process.

Organization of the proposal writing process

In International, the work with a proposal always involves several persons. The initial contact with the client is normally taken by a partner, who also “owns” the client relation during the entire project. The actual work with preparing and writing the proposal is carried out at lower hierarchical levels. This task is normally the responsibility of a manager, who in turn delegates portions of it to more junior consultants. A normal procedure is that the manager meets with the client for a first discussion of the problem. The information gained during this meeting is then conveyed to the junior consultants, who prepare a first draft of the proposal based on this information and information from a search of the internal database concerning the client, the business, etc.

This draft is then discussed with the managers, and other colleagues with relevant specialist knowledge. During the work with the proposal, additional

contacts with the client normally take place in order to collect complementary information or discuss the content of the proposal.

Before the proposal is finally submitted to the client, it has to be approved by a consultant with extensive experience. In the Stockholm office about twenty to thirty persons have this role of approving proposals. Consequently, proposals are said to look quite similar. Before being submitted the proposal has thus been seen by at least two to four persons. Each project also has to be approved by the European head-office in order to assure an efficient resource allocation on the European level.

The test persons

From International, three consultants participated in the simulations. All of them had some experience of working with proposals, but the amount of consulting experience varied significantly from two to ten years. In order to facilitate the further reading, the test persons have been labeled I1, I2 and I3 in order to indicate their company background (International) and their experience. I1 is the least experienced consultant and I3 the most experienced. In accordance with the proposal process described above, neither I2 nor I1 would actually be responsible for the proposal process. Rather they would work together with I3 or someone at his level. The respective consultants' backgrounds are summarized in Table 8.1. Interesting to note in this table is that all the consultants started their careers in International directly after their education and have stayed in the company since then.

	I1	I2	I3
Education	Mechanical engineer M. Sc. in Business	Engineer	Mechanical engineer, some education in business
Career	1995 International after university	1992 International after university	1987 International after university
Experience at Inter- national	Change Management	Computer supported education Opportunity assessments Several jobs in Finland	Systems development Reduction of set-up times, planning systems Strategic issues
Knowledge of methods	Several within specific areas	Common sense Several in specific areas	Business Integration Several in specific areas
Work experience	2 years	5 years	10 years
Consulting experience	2 years	5 years	10 years

Table 8.1. Some data on the background and experience of the International consultants

Applied methods

The consultants in International did not refer directly to any specific method, when asked which method they had used in the simulations. Instead, they referred to an overarching model of thought, as well as ingrained knowledge – “like riding a bicycle” that had guided their action as well as the design of the proposal.

I don't know if you can call it method, but what you have ingrained in the back of your mind is a general division into these four areas: strategy, process, organization and technology. We also have a process perspective, in which we try to look past both the organization and IT completely in the beginning. (I2)

The method used here is primarily the project design for a pre-study. But what is recurring in my thinking is the Business Integration model, pointing at the areas strategy, process, organization and technology. I am also observant to the client's possibilities to succeed with the change, and to build in the prerequisites for success from the very beginning. (I3)

The structure for a proposal is something you know more or less – this is the way to structure a proposal. But I have not consulted any handbook. This knowledge is handed down from generation to generation. I know that these issues have to be included in a proposal. (I1)

Recurring in the consultants' accounts is the Business Integration Model, which seems to be an important basis in their thinking. This model is rather simple, specifying a number of areas (strategy, process, organization and technology) as important to consider in an organizational analysis.

No concrete step-by-step methods are mentioned by the consultants. Their existence is acknowledged, but they are not explicitly referred to during the simulation. Instead of methods, old proposals play an important role as models for the design of the proposal. These are described as an important source of information when in doubt about the proposal's structure, or the design of the time plan for the project.

Even if the consultants do not explicitly apply methods in the design of the project studied here, they refer to a large number of methods and tools. These mainly exist in order to support the solving of specific and limited problems within different areas, such as product development, process development, sales and logistics, etc.

When asked about methods, International consultants also refer to “best practices”, which indicates a rather broad definition of “method” in International. In order to illustrate current and future best practices, International has created a number of “Centers of excellence” (I3) (also referred to as Competence centers (I2) or Business solution centers (I1)), where business environments illustrating these best practices have been created. The purpose of

these centers, where state-of-the-art practices within retail or product development for example, are illustrated, is to provide a source of inspiration to both consultants and clients before engaging in designing new processes.

ABB-MAC

ABB-MAC is an internal consulting company within the ABB concern. Its main market consists of the companies within ABB and their suppliers. ABB-MAC is considerably smaller than International, employing about forty consultants in total. A different strategy for recruiting is applied here, as most consultants are recruited with some line experience from ABB's subsidiaries. Another significant difference, compared with International, is that the projects within ABB-MAC often are smaller in size and vary considerably in character, ranging from re-energizing a failed project through a one-time activity to an intensive support throughout an entire change process.

Organization of the proposal writing process

No formal hierarchy, as the one observed in International, exists in ABB-MAC. After a short period of introductory education, all the consultants become responsible for their own projects – from the first contact with the client to the finalization of the project. Even if there is a stated ambition to create projects where two consultants work together, this is seldom the case as the projects often are too small to “bear this extra cost”.

Against this background, the proposal processes within ABB-MAC are relatively individualistic. Formal procedures for control and alignment of proposals between consultants do not exist. However, a more informal exchange of ideas takes place, where project designs are discussed with colleagues and these are asked to read through and comment on proposals before they are sent to the client. Every consultant is said to have his own templates for proposals and preferences for the design of the proposal process.

The work with proposals is also said to take place in an increasingly close collaboration with the client. Discussing a draft of the proposal with the client before it is finally submitted is usual. In many cases the proposal is also drafted in a joint process with the client. The proposal in ABB-MAC is thus more of a confirmation of what has been agreed than a basis for choosing consultant.

Test persons

Four test persons from ABB-MAC participated in the simulations. Two of these – M3 and M4 carried out the simulation in collaboration. The test persons' experience varies between two and five years. Their work experience after education varies between ten and fourteen years (see Table 8.2).

	M1	M2	M3	M4
Edu- cation	Physics	Mechanical engineer	Management	Engineering Msc.
Career	Trainee Responsible for change project in a division ABB-MAC in 1995	Planning system for small companies (1 year) Planning and logistics manager (3 years) ABB-MAC in 1990	Financial control, controller ABB-MAC in 1993	Trainee Project manager in a change project ABB-MAC in 1991
Experience at MAC	Support to change projects Change management education	Logistics T50 ²⁴	Activity Based Costing (ABC)	T50 Process Management
Knowledge of methods	Time Based Management (TBM) Rummler & Brache method (RBG)	RBG	ABC Customer driven change	Process management Teambuilding
Work exp.	14 years	11 years	12 years	10 years
Consul- ting exp.	2 years	5 years	4 years	5 years

Table 8.2. Some data on the background and experience of the ABB-MAC consultants

Applied Methods

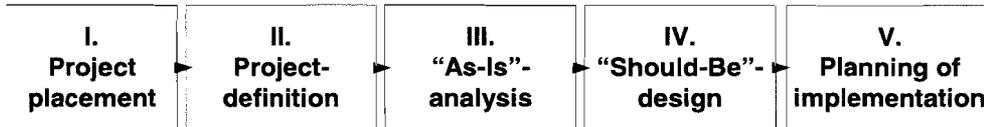
The consultants from ABB-MAC referred to two different methods as a basis for designing the activities in the change process. M1 and M2 used the Rummler & Brache Group (RBG) method, which is the organization's standard method for process improvement projects. This method is licensed from Rummler & Brache and was introduced in ABB-MAC at the beginning of the

²⁴ T50 was a concern-wide change program within ABB aiming at the reduction of cycle times by 50% (see e.g. Shani and Stjernberg, 1995).

90s. M3/M4 used a method called accelerated ABC (xABC), which at the time of the simulations was just being introduced into the organization. M3/M4 are among the first to have participated in a course presenting the method²⁵.

The RBG method consists of five phases (see Figure 8.3). Each of these phases contains a number of different activities. In total, sixty-seven steps are described in terms of who is responsible, deliverables, required time, pitfalls, etc.

Phases:



Tasks:

Choose critical processes to improve and ensure management support	Define process improvement goals for the project and assign a process design group	Determine how the process works and identify improvement possibilities ("disturbances")	Design a new or improved process that satisfies the project goals and eliminates or reduces disturbances	Implement improvements necessary to realize the "should-be" process
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Figure 8.3. The phases of the RBG method (translated from Swedish)

The different steps of the method, and their deliverables, are highly integrated as the whole method is based on a systems model of the organization. Three system levels are identified and worked with – organization, process and individual (Rummler and Brache, 1990). The method’s tools are designed in a way that facilitates the crossing of system levels, i.e. integrating the individual with the process and the process with the organization in order to make them consistent. In addition to the overall RBG method, M1 and M2 also referred to more specialized methods designed to handle soft issues, such as group dynamic training.

The use of methods is described as following by M1 and M2 respectively:

I haven’t used the entire RBG method, but I have used some of its tools, so an RBG method user would probably recognize the basis of the project. [which of the tools did you use?] I have used tools both for the mapping and to design

²⁵ A more general picture of the availability and use of methods in ABB-MAC has been given earlier in chapter four

the “should-be” process, and partly for how to implement the solutions. In addition to this I have taken a lot from my experience. (M2)

I have used the RBG method in the important parts [where did you not use it?] Well, at this stage I use it. At a later stage, I might skip this first introduction.... (M1)

The accelerated ABC (xABC). The underlying aim of the Activity Based Costing (ABC) method is to gain a better understanding of an organization’s cost structure. Traditional methods of cost accounting have employed simple and standardized ways of distributing overhead and other shared costs within the organization. These ways of distribution were often related to direct labor or material. But this way of distributing the shared costs often obscured the real cost structure within the organization. The main aim of ABC is to create a more insightful view of the distribution of costs in the organization by directly assigning overhead costs to products, customers or markets, thus creating insights into the real costs of a certain product, customer or market (Keen and Knapp, 1996). In this way, ABC is a suitable tool in process improvement, as it supports the cost analysis of business processes, and puts the customer in focus (Drucker, 1995). ABC projects can be seen as the starting point for process improvement projects. The ABC analysis, compared with the Rummler & Brache method, is more externally-oriented through its focus on the customer, products and markets. An ABC analysis can be used in order to identify the processes, which are in most need of redesign.

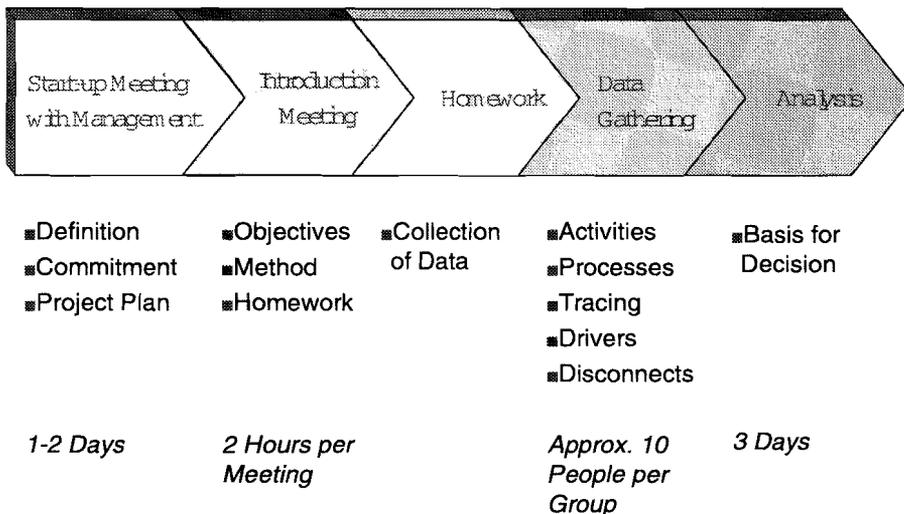


Figure 8.4. xABC – the approach (ABB-MAC)

The basic approach to xABC comprises five overall phases, which are described in some detail in the method. The overall phases are depicted in Figure 8.4. The xABC process begins with a start-up phase, where top management support for the project is established and a basic understanding of the organization is gained covering e.g. a description of the business, key strategic initiatives, existing products and service lines, major markets served, revenues, etc. After this meeting, information meetings with all the employees are held where the xABC approach is explained and a “homework” for data gathering is presented. Having done this homework, the employees are gathered for group interviews aiming at complementary data collection (see Figure 8.4). Based on the collected data, analyses are made by the consultants which are presented to top management in the last phase of the project. Some of the deliverables at this stage comprise calculations of tasks/activities at cost center level, their relation to markets, customers, products, process model, etc.

The methods described above concern the approach to the change process. For the proposal writing process, no methods exist. Here consultants instead refer to their experience and proposals written earlier or by others.

Analysis part 1: Similarities and differences in reflection in action

The description of the consultants’ background and use of methods may, at first glance, show more differences than similarities. Still, all the consultants were asked to carry out a BPR project and they all accepted this without objections (except M3/M4 who suggested an ABC approach instead. The ABC approach is however closely linked to BPR). All the consultants (except M3/M4) thus base their approaches on the same overall change concept – BPR.

Based on the similarities and differences in the consultants’ background we would expect both similarities and differences in the consultants’ way of working. Based on the above-presented frame of reference, I will frame these differences as differences in reflection in action. Different professionals will frame the problem differently, collect different data, and draw different conclusions from the collected data.

In the following section, being the first part of the analysis, the different consultants’ approaches in respect to the collection of data and the conclusions drawn from these will be compared. The collection of data is monitored in terms of the relative time that consultants allocated to different categories of information. The differences in interpretation of data are discussed in terms of the comments and reflections consultants made, while thinking aloud during their problem solving.

Information collection

What data did the consultants focus on in their data collection, and what are the similarities and differences between different consultants in this respect? In order to investigate this question, the relative time spent on different types of information by different consultants was analyzed in some detail²⁶. In order to make the data more manageable, the forty-six different information cards were sorted into fourteen information categories (see Appendix A for a description of the process of defining these categories). The percentage of the total data collection time spent on each data category was used as the basis for analysis.

As a first step, the question of similarities and differences was focused on. Which consultants had similar approaches and which differed from each other? In order to investigate this question, a hierarchical cluster analysis was carried out, the results of which are reported in Figure 8.5.

The cluster analysis aims at identifying homogenous groups, clusters of consultants, that show similar patterns concerning their data collection. These clusters are established based on the distance between different consultants. In this case, the distance measure used is the Euclidian distance, which is calculated as the square root of the sum of the squared differences between the times spent on the different information categories for two consultants. These differences are displayed in the table in Figure 8.5. This shows for example, that the distance between I1 and I2 is 0,236 whereas the distance between I1 and I3 is 0,171, which means that I3's allocation of time over the different information categories is more similar to I1's than to I2's.

Based on the calculated distances between the different consultants, clusters of consultants are identified in the next step. In this process, consultants are grouped together in a step-by-step procedure. Firstly, the two most similar consultants are combined into one cluster. Secondly, a new cluster of two consultants being second most similar to each other is created, or a consultant being similar to the first cluster is added to this. In combining the consultants into clusters, the average linkage method is applied, which calculates the distance between two clusters as the average of the distances between all pairs of consultants in the two clusters.

This step-by-step procedure of clustering is visualized by the dendrogram in Figure 8.5, which shows in which order clusters were formed and the relative

²⁶ The choice of analyzing and comparing the consultants' relative times spent on information of different categories rather than the absolute times is motivated by the large differences in the total time spent gathering data by different consultants. The use of relative values thus eliminates the effects of differences in e.g. the consultants' reading speed etc.

distance at which they were formed. The first cluster formed in this case consists of I1 and M3/M4 who combine at a relative distance of one. The second cluster formed is that of M1 and M2, which combine at a distance of eight. At a distance of fifteen, I3 is added to the first cluster, and at a distance of twenty-four, I2 is added to the second cluster (M1 and M2). (For further information about cluster analysis see Norusis, 1994).

Proximity Matrix

<i>Chapter One Euclidean Distance</i>						
Case	1:I1	2:I2	3:I3	4:M1	5:M2	6:M3/M4
1:I1		,236	,171	,308	,195	,137
2:I2	,236		,350	,272	,264	,261
3:I3	,171	,350		,370	,282	,266
4:M1	,308	,272	,370		,178	,293
5:M2	,195	,264	,282	,178		,192
6:M3/M4	,137	,261	,266	,293	,192	

This is a dissimilarity matrix

Dendrogram using Average Linkage (Between Groups)

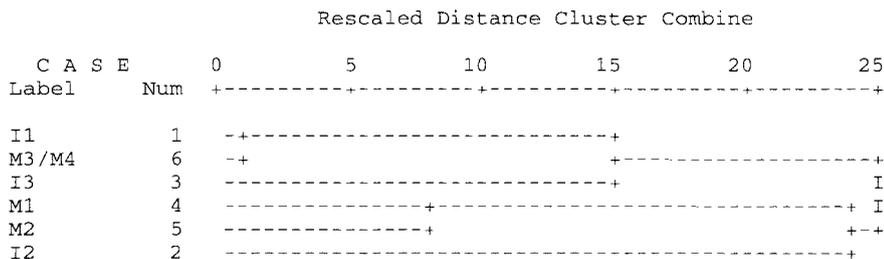


Figure 8.5. Cluster analysis of the different consultants' approaches based on the relative time spent on different information categories²⁷

The cluster analysis reveals large similarities between I1 and M3/M4 as well as between M1 and M2. I3 also shows rather large similarities with I1 (see proximity matrix in Figure 8.5). I2's approach, on the other hand, is quite dissimilar to the others' approaches, even if it resembles the approaches of M1 and M2 more than that of I1, M3/M4 and I3.

Setting the limit for the relative distance at which clusters are formed to fifteen (of twenty-five) thus identifies three clusters (see dendrogram in Figure 8.5).

²⁷ The cluster analysis was calculated with SPSS 8.0 using the 'Average distance between groups' method for combining clusters and Euclidian distance for measuring distance.

The first cluster consists of I1, M3/M4 and I3, the second cluster of M1 and M2 and the third cluster finally is made up by the sole I2. This reveals that two of the three consultants within each company show quite similar approaches (I1 and I3 as well as M1 and M2), whereas one consultant in each company departs considerably from the pattern shown by his/her colleagues. In the case of M3/M4 the untypical behavior was linked to the use of a different method – xABC rather than the RBG method used by M1 and M2.

The cluster analysis reveals the relative similarity of different consultants' approaches to data collection, but it says nothing about the content of the approaches chosen by the consultants in the different clusters. In order to get a first grasp of this, the consultants' information gathering was examined closer in regard to the consultants' priorities. In Table 8.3, the five most important information categories for each consultant, as reflected in the relative time spent on the category, are listed. The numbers represent rank orders, where one designates the information category, on which the most time was spent. The numbers in parenthesis following the rank present the proportion of the total information gathering time spent on that category.

	Cluster 1			Cluster 2		Clus. 3
	I1	M3/M4	I3	M1	M2	I2
Background (3)*	1 (25%)	1 (31%)	3 (22%)	1 (48%)	1 (37%)	1 (31%)
Organization (4)	2 (15%)		2 (22%)	2 (17%)	2 (20%)	3 (12%)
Workflow (5)	4 (9%)	2 (15%)			4 (11%)	
Business (5)	3 (12%)	3 (9%)	1 (24%)			
Market (5)	5 (8%)	5 (8%)	4 (9%)			
Leadership style (1)		4 (8%)		4 (9%)	3 (13%)	
Personnel (1)				3 (10%)	5 (6%)	
Attitudes to change (1)				5 (6%)		4 (12%)
History of change (1)						5 (8%)
IT-support (1)			5 (5%)			2 (14%)

* Number of information cards within each category

Table 8.3. Ranking of information categories according to proportion of information gathering time spent on respective category

Information on the background of the problem and the consulting assignment, as well as the organization, is central to all the consultants as shown in Table 8.3. In the information category “background”, the surveyors' (i.e. client's) own problem definition and goals for the project are presented. In the category “organization”, information about the central and local structure of the land-surveying authority is presented both verbally and graphically. The importance of this information indicates that the client's own definition of the problem is an

important point of departure when writing proposals. Even if the consultants to larger or lesser extent question the client's problem definition, they all take it as their starting point (this will be discussed in more detail in a following section).

Besides these similarities, there also exist differences between the consultants, and especially the clusters of consultants identified in the cluster analysis above. The comparison of the approaches taken within clusters one (I1, M3/M4, I3) and two (M1, M2) reveals one notable systematic difference. The consultants in cluster one seem to focus more on the external aspects of the organization (business, market), whereas the consultants in cluster two devote more time to the internal and people-oriented aspects of the organization (leadership style, personnel). Within these areas, the overlap between the clusters is small.

Areas of reflection

The comparison of the different consultants' data collection revealed some significant differences both within and between companies. In this section, the understanding of the similarities and differences between the consultants will be elaborated on based on more qualitative data.

During their work with the proposal, the consultants, in their thinking aloud, produced comments and questions about the data collected. In this section these comments and reflections will be compared and discussed. For the ease of comparison, the consultants' reflections have been thematically grouped. (See appendix A for a description of the analysis procedure). The following overall themes, with sub-themes, were generated through this thematic grouping of the reflections (see appendix B for a summary of the consultants' reflections in the different areas):

- *Understanding the organization:* This theme describes the consultants' effort to understand different aspects of the organization, namely the client and his position, the organizational structure, the business, the IT project and the culture.
- *Constructing problems and solutions:* This category is concerned with the identification of problems and solution ideas. It comprises the consultants' comments on the problems identified by the client, and the consultants' additions to the client's view.
- *Designing the change process:* Under this heading the focus is on the consultants' reflections on the delimitation of the project, its organization and timing as well as the activities in the change process.
- *Ensuring success:* This theme summarizes the consultants' reflections on the risks and success factors in the change process. What do consultants reflect

upon in relation to the possibilities of carrying out a successful change process?

In the following, I will go through these four categories, comparing the different consultants' reflections within each of these categories. This procedure aims at generating a more elaborate understanding of the differences in terms of content in the different consultants' reflection in action processes. (See the brief summary of the case provided in Figure 8.2, p. 195 as a background and context for the reflections discussed below).

Understanding the organization

In order to sketch out a project proposal, all consultants saw it as necessary to gain at least a rudimentary understanding of the organization. The consultants reflected upon a number of aspects of the organization, namely the client's mindset and his situation, the organizational structure, the business as such, the IT system and finally the organizational culture. These aspects were generated on the basis of a thematic grouping of the reflections made by the studied consultants (see Table B.1, appendix B, reporting a summary of the reflections made).

A similarity in all the consultants' efforts to understand the organization is an interest in the organization's structure and especially the client's position in this structure. It seemed as if the organization chart, even in these times of process orientation, still has a large amount of information value when trying to understand an organization. Only M3/M4 devoted more time to the description of the actual work process than to the structure (see Table 8.3). The organization structure is applied as a basic structure, which is also used to structure other information such as the process flow (e.g. "does the process cover several organizational units?" (M1)) and the competencies in the organization (e.g. "do the competencies differ between different units?" (M2))

Except for this similarity, there are a number of differences distinguishing clusters of consultants from each other. M1 and M2 comprise a first cluster, showing quite similar approaches. Their efforts to understand the organization are overall quite limited. The comments made mainly focus on the internal and "soft" aspects of the organization. The overall culture of the surveying authority is quite extensively commented on, especially with regard to its effects on the readiness for change in the organization (e.g. "conservative organization, that doesn't really believe in change"). Similarly, the mindset of Gustavsson (client representative and chief surveyor in the case) in relation to the change process is reflected upon (e.g. "does he really want change?" (M2)). The IT project, as well as the business and market aspects are either discarded as uninteresting in this early stage, or not reflected upon at all.

A second cluster with similar approaches is constituted by the consultants M3/M4, I3 and I1. As opposed to the consultants in the previous cluster, M3/M4, I3 and I1 put a large amount of effort into understanding the business aspects of the surveying authority (I1 is here somewhat less detailed than the others, but the issue is still covered). The issues that are commented on cover customer demands, pricing, the future market development, etc. The IT situation is also commented on, by all except I1, in regard to the planned project and its effects on the change work to be carried out by the consultant.

In addition to the more business-related aspects, M3/M4, I3 and I1 also comment on the culture. I3 and I1 to a lesser degree than M3/M4. The reflections about Gustavsson partly overlap with the first cluster's, but with the difference that the focus is expanded from Gustavsson's mindset to understanding also his situation within the organization – “What are the pressures from different stakeholders forcing him to change?” “What are his underlying motives?” This wider focus is in line with the observed interest for the organization's business as a whole.

Finally, I2 doesn't fit directly into any of the above clusters. Instead he shows similarities with both, even if the similarities with the first cluster may be greater. Like M1 and M2 in the first cluster he has an internal focus when trying to understand the organization. Business issues are not reflected upon. Instead, there is some focus on understanding issues of competence and organization. Also when trying to understand Gustavsson, I2 shows some similarities with the first cluster, as he is quite focused on understanding the mindset of the client – “What is his perspective?” Some reflections also regard the organization culture, but no conclusions are drawn. Rather questions about the culture are formulated. In terms of IT, finally, I2 is more similar to the second cluster, as the IT project and its potential effects for the planned change process are thought about and commented on.

These differences in focus when trying to understand the organization reflect very well the differences in time devoted to different types of information (Table 8.3). The clusters created through these differences also fit well with the clusters generated by the cluster analysis above.

Summary:

On a high level of abstraction, the differences between the consultants' efforts to understand the organization can be summarized by the dimension internal - external, where M1 and M2 are mostly oriented towards understanding internal aspects of the organization, focusing on the organizational culture and its effects for the possibilities to carry out change. M3/M4, I3 and I1, on the other hand,

have a more external orientation in their efforts to gain an understanding of the organization, focusing more on business and market aspects (Table 8.4).

	Cluster 1 (M1 & M2)	I2	Cluster 2 (I1, I3, M3/M4)
Understanding the formal organization	Focus on organizational structure	Focus on organizational structure	Focus on organizational structure
Understanding the client representative	Focus on Gustavsson's mindset	Focus on Gustavsson's mindset	Focus on Gustavsson's mindset Overall situation of client
Understanding the business (external focus)	No effort	No effort	Focus on links to external stakeholders (customers, "owners", etc.)
Understanding IT	No effort	Focus on the IT project's effect for the planned change	Focus on the IT project's effect for the planned change
Understanding Culture	Strong effort to understand the organization's culture, especially with regard to "readiness for change"	Moderate effort to understand org. culture. More questions than conclusions.	Moderate to strong effort to understand the organization's culture

Table 8.4. Summary of the consultants' reflections in relation to understanding the organization

Constructing problems and solutions

Having looked at the consultants' efforts to understand the organization, I now turn to the problems and forces driving change and the ideas for solutions identified by the consultants during their work with the case. Looking at the identified problems and ideas for solutions (Table B.2), it is hard to find a consistent clustering of consultants over both categories. I will therefore treat each category separately.

Concerning *problems and drivers for the change process*, most of the consultants (four out of six) make a distinction between symptoms and causes, where the problems described by the client are described as symptoms. The questioning of the client's picture considerably more often occurs in the cases of I1, I3 and M3/M4, who devote significant time in their reasoning to the identification of the underlying problems.

When turning to the problems, as identified by the consultants, the consultants can be grouped into two clusters, based on the orientation of the identified

problems and drivers for change. Like in the above category, the dimension internal - external is a suitable descriptor of the differences. A first cluster is composed of M1, M2 and I2. The problems and drivers of change identified by them focus on the organization, competencies, culture and work processes. A second cluster is composed by the remaining consultants. In comparison with the first cluster, they demonstrate a more external focus in their problem formulation. Clients and the market are identified as the main driver for change. A lack of businessmanship is also characterized as a problem (M3/M4). The internal aspects of the organization are, in this second cluster, covered to a varying degree. To a lesser extent in the case of I1 and to a quite extensive extent in the case of M3/M4, who also identify work process and cultural problems. Not surprisingly, the orientation of the identified problems correlates with the information collected in order to understand the organization. The dimension internal - external is also a suitable descriptor of the differences in problem identification.

In relation to the consultants' *solution ideas*, three different clusters can be identified. The first consists of M1 and M2, who focus on organizational issues (how should the work be organized?), competence and cultural issues (new management style, competence widening). This is in contrast to I3 and I2, who also discuss organizational issues, but in addition have some ideas about more formal control systems (wage system, reporting system, etc.). In-between these two groups, we find M3/M4 focusing on both competencies (customer orientation) and more formal systems (pricing system). I1 did not present any solution ideas. The differences observed here can be viewed as reflecting underlying differences in the consultant clusters' assumptions about the nature of employees. These differences can be characterized in terms of Barley and Kunda's (1992) distinction between a rational and a normative ideology in the management discourse. According to the normative ideology, employees are viewed as follows:

As sentient, social beings, employees were said to perform more diligently when they were committed to a collective whose ideals they valued. Control therefore rested on shaping workers' identities, emotions, attitudes and beliefs (Barley and Kunda, 1992:384)

This view of the employees is reflected in M1 and M2's suggestions, focusing on culture as well as competence.

According to the rational ideology on the other hand, rational, systemic structures for control are emphasized. Barley and Kunda describe the view of this ideology of the employee in the following way:

Employees were said either to understand the economic advantages of an efficient system or to be powerless to resist a well-designed structure. Since

compliance was therefore unproblematic, control could be readily exercised by manipulating systems. (Barley and Kunda 1992:384)

This ideology is reflected in I3 and I2's suggestions focusing on the formal organization and the control and incentive system.

Summary:

The differences observed in the consultants' approaches to the construction of the problem and its solutions followed different patterns for the different themes (Table 8.5). With regard to the problem definition, the dimension internal - external was found to be a meaningful description of differences. Regarding the solution ideas, on the other hand, two different ideologies (normative and rational), representing different views of the employee were identified. The differences in the consultants' solutions could be summarized in terms of this dimension.

	Cluster 1 (M1, M2, I2)	Cluster 2 (I1, I3, M3/M4)	
Problems/ change drivers	Mostly internal (organization, competencies, work processes, culture) Weak questioning of the client's problem definition	Both internal and external (Customer demand, competitive situation) Strong questioning of the client's problem definition	

	Cluster 1 (M1 & M2)	M3/M4	Cluster 2 (I2 & I3)
Solution ideas	Organization Competence (Normative view of employees)	Pricing policy Competence (Both normative and rational view of employees)	Organization Control/incentive systems (wages, reporting, etc.) (Rational view of employees)

Table 8.5. Summary of similarities and differences in the consultants' treatment of problems, change drivers and solution ideas

Designing the change process

Having described the consultants' efforts to understand the organization, as well as their construction of the problem and its solutions, I will turn to the different consultants' suggestions for the design of the change process. These will be compared in terms of the delimitation of the project, the organization of the project in time and manning and the suggested approach in terms of activities in

the change process. The different consultants' reflections on these issues, and the final suggestions made in the proposal sketch, are listed in tables B.3 to B.5.

Delimitation

Comparing the delimitation of the project made by the consultants in their reflections and their writing of the project proposal (Table B.6), two dimensions of comparison can be identified. The first dimension concerns the handling of the initial project request and the degree to which the consultant thinks about a redefinition of this. In regard to this dimension, similarities and differences seem to follow company boundaries. Whereas ABB-MAC consultants to a large degree accept the client's project request (M2 suggests a limiting of the project, but within the limits of Gustavsson's authority), International consultants, especially I1 and I3, reflect upon a widening of the project outside Gustavsson's authority. Their suggestion is to widen the project also to other regions of the surveying authority. The clusters thus differ in the degree to which they question the client.

The second dimension concerns the categories, by which the project is delimited. Almost all consultants limit their project in terms of two dimensions – functionally and process wise. But International consultants are characterized by yet another dimension, namely the scope of the analysis (e.g. to include IT and customers (I3) or to map strategy (but without questioning it)).

	Cluster 1 (M1, M2, M3/M4)	Cluster 2 (I1, I2, I3)
Delimitation	Delimitation within the authority area of Gustavsson	Delimitation outside the authority area of Gustavsson (lifting the project in the org.)
		Delimitation in terms of scope of analysis

Table 8.6. Summary of similarities and differences in the consultants' delimitation of the project

Project organization

Studying the reflections concerning the project organization (Table B.3), differences in two respects can be identified – the proposed organization and staffing, and the proposed timing. Looking at the proposed project organization, there are clear similarities within consulting companies and clear differences between them. These differences concern both the composition of the project group and the choice of project leader. ABB-MAC consultants propose a quite large, cross-functional project team, working part time on the project. Gustavsson is not seen as a possible project manager, on the contrary, he is

actively rejected as such. Instead, a young and “up and coming” surveyor is proposed.

International consultants on the other hand suggest a much smaller project group working full time on the project. The ratio of consultant to client representatives is also higher. International consultants propose the engagement of two consultants together with two project group members, led by a half-time project manager (possibly Gustavsson) from the client company.

When turning to the proposed timing of the project, the company clusters that emerged in relation to the previous dimension are partly broken up, with M3/M4 moving in the direction of the International consultants. M1 and M2 reveal a very flexible attitude towards the timing of the project. The distribution of activities in time is made contingent on the workload and desires of the client. Stretching it in terms of time (within certain limits) is not seen as problematic. The International consultants, on the other hand, argue for a very tight schedule. It is explicitly claimed that it is important the project is completed rapidly. A motive for this is to test the seriousness of the client. M3/M4 are somewhere in-between these extremes, suggesting a fixed time frame, but not presenting any reasons for either an especially tight or a loose time plan. These differences in the organization of the project reflect differences in the view of the client, that are reminiscent of those observed in relation to the delimitation of the project. The differences observed here are accounted for in the more general dimension “degree of questioning of the client”. If the questioning of the client is strong, the consultants puts large efforts into creating their own diagnosis, as well as finding their own solutions. If the questioning is weak, the client’s diagnosis of the situation is to a large extent accepted, at least as a point of departure.

	Cluster 1 (M1, M2, M3/M4)	Cluster 2 (I1, I2, I3)	
Organization/ staffing	Cross functional project group 6-8 participants, 1-2 consultants (part-time) Not Gustavsson as a PL	Project group 4,5 participants (2 consultants) full-time Gustavsson as a PL	
	Cluster 1 (M1 and M2)	(M3/M4)	Cluster 2 (I1, I2, I3)
Timing	Timing dependent on customer preferences. Project can be stretched due to lack of time (Accept client’s view)	6-8 weeks calendar time	As fast as possible ca. 6 weeks (Challenge client’s view)

Table 8.7. Summary of similarities and differences in the consultants’ suggestions of the project organization and project timing

Approach

Analyzing the consultants' reflections concerning the change process (Table B.4), a difference stands out that separates M1 and M2 on the one hand from I3 and I2 on the other hand, with M3/M4 (again) somewhere in-between. A focus in M1 and M2's reflections is on the question of *how* to design the analysis process and which persons to involve in it ("is it possible to involve the management team in the problem analysis?" (M1), "try to engage the project manager in the initial mapping" (M2), etc.). The focus of the reflections of the International consultants I3 and I2, on the other hand, is more on the question of *what* data to gather for what purpose ("Important to understand IT development and customers' requirements" (I3), "competence mapping important" (I2), etc).

This pattern is in line with the observations made above concerning the terms in which the project was delimited. While all consultants shared the delimiting dimensions function and process, all the International consultants in addition thought of delimitations in terms of what data to collect. This pattern is further confirmed when looking closer at the excerpts from the proposals presented by the consultants. Again it can be observed that M1 and M2's proposals contain more information on how to do things, than I3 and I2's proposals. International consultants' proposals on the approach are quite general, in terms of what analyses to carry out and what data to gather, whereas the ABB-MAC consultants on a more detailed level describe what is to be done, how and by whom.

These differences in handling the design of the change process are congruent with the above-identified normative - rational dimension. M1 and M2, with their normative view, focus more on the details of the change process and the organization members' part in it. I3 and I2, representing a more rational view, focus more on the actual data collection in order to obtain "hard facts".

One consultant though, is deviating from the above pattern, namely I1. The most junior International consultant does not reflect on the design of the change process. Instead, the proposal draft reveals a focus on the design of the actual proposal. I1 has thus interpreted the task differently than the other consultants. Instead of sketching an approach to a project, he sketches a structure for the proposal. This is not surprising, given I1's experience of proposal writing. The description of the proposal process in International reveals that I1 would never have the full responsibility for designing a project. The focus of his attention in a normal proposal writing process would be on the design of a quite limited part of the proposal. The link to "reality" is indirect and goes through a senior consultant. Consequently, it is not surprising that I1's reflections on the overall design of the change process are scarce.

	Cluster 1 (M1 & M2)	M3/M4	Cluster 2 (I2 & I3)	I1
Approach to change	Reflections focus on how to design the process (who does what in which way?)	Reflection on both how and what	Reflections focus on what kind of data to gather and what analysis to make	No reflections

Table 8.8. Summary of similarities and differences in the consultants' proposed approach to change

Ensuring success

After having compared the consultants' reflections about the change process, and their proposed approaches, I will turn to the last category, namely the consultants' reflections concerning success factors and barriers to a successful change process (Table B.5).

A search for patterns with regard to the consultants' views of the barriers to change, as well as the success factors, again leads to a clustering of M1 and M2 in one cluster, I3 and I2 in a second cluster, with M3/M4 somewhere in between. As in the previous category, I1 does not reflect on the issue.

The reflections, and the stated threats to and success factors in the change process, can be distinguished by the categories economic, cultural and political. Among the economic barriers and enablers we find monetary and time resources. Among cultural barriers and enablers we find the mindsets of the members of the organization (e.g. a negative attitude to change, a conservative culture, etc). In the category of political barriers and enablers, the power distribution and political assets are regarded.

The analysis of the barriers and success factors in the change process shows that the focus in the M1 and M2 cluster is on cultural barriers and success factors. Economic and political factors are also mentioned, but to a much lesser degree. The focus of this cluster is very much on the commitment of the participants in the process, and the prerequisites for creating such a commitment.

The second cluster comprised of I3 and I2, focuses more on the economic factors (time and money). Also the political issues play a more important role than in the previous case. For example, I3's reflections on the possibilities for a successful process circle around the issues of political, and monetary resources. Cultural aspects can be found in the reflections, but play a much lesser role than in the previous cluster. But there are also some significant differences between I3 and I2. I2's reflections on the opportunities and risks in the project are much more scarce than I3's. M3/M4 again occupy a middle position, with reflections

representing political, economic, and cultural issues. None of these are clearly dominant.

Relating these differences to more general dimensions, the normative - rational dimension seems a suitable descriptor. M1 and M2 with their focus on cultural barriers to change reflect a more normative ideology, whereas I3 and I2, focusing on economic and political barriers reflect a more rational ideology.

	Cluster 1 (M1, M2)	M3/M4	Cluster 2 (I3, I2,)	I1
Barriers and enablers to change	Focus on cultural aspects	Cultural, political and economic aspects	Focus on economic and political aspects	No reflections

Table 8.9. Summary of similarities and differences in the consultants’ reflections on opportunities and risks in the project

Three dimensions summarizing similarities and differences

In the first part of the analysis, the focus has been on investigating the similarities and differences between the studied consultants’ approaches to the simulation task. I began with a quantitative investigation comparing the consultants’ time spent on different information categories. This analysis was elaborated on in a second more qualitative step, comparing the consultants’ reflections in action in relation to a number of different themes.

A closer look at the similarities and differences in the consultants’ reflections reveals three underlying dimensions that to a large extent capture the identified differences. These dimensions represent differences in the consultants’ view of the organization (external - internal), its employees (normative - rational) and the client (the degree of questioning of the client’s view).

The *internal - external* dimension mainly captures differences in the consultants’ efforts to understand the organization, and in their identification of the organization’s problems. Consultants with an internal orientation focus more on information and problems related to issues such as culture and organizational members’ mindsets, which reflects a view of the organization as to a large extent depending on its employees for success. Consultants with a more external orientation, on the other hand, have a larger interest in the organization’s link to its environment. Consequently, in their view, the organization is strongly interlinked with its environment and dependant on this for success.

The second dimension that can be used to distinguish consultants from each other concerns the consultants’ *view of the employees*. Barley and Kunda’s

This comparison of the different consultants' positions along the three identified dimensions indicates that the dimensions are, in some sense, related to each other. The consultant's position on one dimension is related to the position on the other dimensions. Two clusters can be identified: The first, represented by M1 and M2, view the organization mainly in terms of its internal characteristics, with the culture playing a large role. They have a normative view of the employees and do not question the client to any large extent. The second cluster, represented by I1 and I3, instead focuses on the external aspects of the organization, have a rational view of the employees and question the client to a greater degree. These patterns are quite consistent. In the next section, an effort is made to find underlying structures that can deepen our understanding of these patterns.

Analysis part 2: A search for underlying structures – introducing the constants

In order to further deepen our understanding of the similarities and differences between the different consultants' approaches to the simulation task, I will now turn to the second part of the analysis. This part links to the framework presented above, identifying a number of constants underlying the reflection in action process (Figure 8.1). According to Schön (1983), these constants are what can help understand variations in the reflection in action process. In the following, I will investigate the consultants' role frames, appreciative systems in regard to the proposal process, the media and language used in the process and finally the overarching theory of the consultants.

Role frame

It is through the role frame the practitioners set their tasks and bound the institutional settings in which they act. According to Schön (1983:274), "the role frame helps to determine what knowledge is seen as useful in practice and what kinds of reflections are undertaken in action."

One way of operationalizing the consultants' role frame is by their view of the project organization and the client's involvement in this. On an overall level, the suggestions for the project organization are very similar. All the consultants suggest a project group that involves both consultants and client personnel. All the consultants also emphasize the importance of the client's participation in the actual work with the analysis. But a closer analysis, looking at the specific roles in the project group, reveals important differences.

The ABB-MAC consultants have a quite consistent idea about how to organize the actual work in the change process. This is to be carried out by a project group consisting of one to two consultants and six to eight members of the

client organization. The project leadership is to be carried out by a member of the client organization. The division of work within the project group is most clearly articulated in the proposal by M3/M4 (see Table 8.10).

Consultant	Client
<ul style="list-style-type: none"> • Support in using the method • Project management support • Knowledge and experience transfer 	<ul style="list-style-type: none"> • Project leadership • Data collection • Resource allocation • Documentation • Do the work

Table 8.10. The division of work between consultant and client according to M3/M4’s proposal

This division of roles indicates that the consultant is more of a facilitator of the client’s problem definition and problem solving. The basic logic conveyed by this division of tasks is that the consultant’s role is to help the client solve his own problems rather than solving them for him. This can further be illustrated by the following citations from M1 and M2:

They have to change their own jobs. I see my role as to come in and help them to think in new ways, so that they can change their jobs, not to throw a bundle of papers at them telling them how it should look in the future. (M2)

You have to be careful as a consultant not to take over too much responsibility. Our contribution is the method and our experience. We pose the stupid questions, but the practical issues have to be solved by them. They have to continuously own the change, otherwise it won’t happen. (M1)

The consultants thus, to a large extent, see themselves as a support function in the change process. Their main asset in this support is experience from earlier change processes as well as a method and knowledge of using this method. Paraphrasing the above, I will define the espoused role frame of the ABB-MAC consultants as *“Helping the client to solve his problem by providing methods and experience”*. This means leaving the initiative in both the diagnosis and in problem solving to the client²⁸.

The International consultants, as the ABB-MAC consultants, also directly involve the client in the project work, but the way of doing this is different. The International consultants suggest composing the project group of two and a half client persons and two and a half consultants who are to work together on equal

²⁸ This has also been shown in the brief description of ABB-MAC in chapter four above. The client’s participation in the change process was described as one of the basic values in the company. The value was derived from the extensive experiences with the T50 project.

terms. The half (0,5) participants represent a shared project leadership. This difference in proposed staffing represents a more profound difference in role views, which is revealed by a closer look at the motives for client involvement. The rationale for involving the client members presented by ABB-MAC above was the clients' ownership of the process, the feeling that both the diagnosis and the proposed solutions were the result of the project group's work, rather than the consultant's work. The motive put forward by International consultants is different:

The client's involvement is extremely important if the change is to succeed. They must not get the view that the consultants come in and tell them what to do, then they won't buy into the proposed changes. (I3)

This indicates that the consultants view themselves as analysts and problem solvers, who "involve" the client organization in the problem solving process, in order to facilitate the acceptance of the solutions generated by the consultants. The word "involvement" used to describe the client's participation is significant. Involvement has a more passive meaning compared with the expressions used by ABB-MAC consultants – "own the change" and "they have to change their own jobs".

The view of the international consultants, that the consultants are the ones in control of analyzing and suggesting solutions, is further indicated by the following citations:

If this is to succeed, it is not enough to give them a report stating "this is what you should do". We have to help set in motion a change motor, to create a positive picture of this to avoid the reaction "This was an interesting consulting report, but it cannot be realized". We have to create a belief in this internally. (I3)

Based on experience I can say, it is always the case that we have a much higher pace in the project and leave the client behind very easily. In many cases, our project manager is the one who leads the project, but he guides, communicates with and involves the client's project manager. (I2)

Looking at the initiative in the diagnosis and the problem solving process, the International case differs from the ABB-MAC case. While the ABB-MAC consultants actively work on leaving the initiative to the client, International consultants describe how they normally are in control of the process. Paraphrasing the underlying role frame it could be described as "*Solving the client's problem and ensuring the solution's acceptance*".

According to Schön (1983), the consultant's role frame is a possible explanation for the observed differences in the knowledge seen as useful in practice and the reflections made by the consultants. Which of the differences in the consultants' reflections in action can be understood in terms of differences in role frames?

One of the basic dimensions distinguishing the consultants from each other in the above cases was the degree of questioning of the client's view. This was displayed in the reflections on the problem definition, the delimitation of the project (suggested to be widened) and the timing of the project ("the client doesn't have time, but complete it rapidly anyway"). These differences were referred to as differences in the consultants' view of the client. Consequently, we would expect these differences to co-vary with the consultants' perceived role frame. This is confirmed when looking at the clusters on the dimension "degree of questioning". I3, I2 and I1, whose role frame was described as "solve the client's problems...", represents the "strong questioning" end of the scale, whereas M1 and M2, having a role frame focusing on "helping the client to solve his problem...", represent the "weak questioning" end of the scale. The only exception, showing an inconsistency between role frame and degree of questioning are M3/M4, who espouse a role frame focusing on helping the client's problem solving, but display a moderate rather than weak questioning of the client in the proposal writing phase.

The differences between consultants with different role frames, when it came to questioning the client's view, can be exemplified by looking at the reflections on the problem identified by the client. In this case, the client defined the lead times as the problem. But most consultants did not regard these as the problem, but as symptoms of an underlying problem. To a varying degree all the consultants questioned the defined problems, but the consultants with a role frame focusing on the consultant's problem solving (International consultants) put a considerably stronger effort into gaining their own understanding of the organization during the proposal writing phase. The consultants with such a role frame saw it as an important part of the proposal writing process to really understand the organization and its problems.

Causes and effects seem to be mixed up if you look at the situation. The basic problem is stated as long lead times. The next question is what actually causes these lead times, the lead times are what they have identified as the basic problem. When beginning the project, you have to go to great lengths in understanding the causes of the problem, in order to be able to prescribe the right medicine. (I3)

In a real situation, I would of course put more effort into the problem formulation and then make Gustavsson accept this in order to assure, I have really understood, what the actual problem is. (I2)

When writing a proposal, it is important to really understand the problem, its background and delimitation, particularly in more complex situations. (I1)

Such a focus on building a problem definition independently of the client's view is not revealed as strongly in the ABB-MAC consultants' approach, which is based on a role frame focusing on helping the clients to solve their own

problems. Especially M1 and M2 put considerably less effort into the discussion of the problem. M3/M4 are an exception from the ABB-MAC pattern. Even if they do not explicitly emphasize the importance of the consultants' own understanding, they put a lot of effort into the search for the "underlying problem". They also actually redefine the problem by adding pricing as a new problem area. In the case of M3/M4 there seems to be a gap between the espoused theory and the theory in use. This is no unusual situation when it comes to consulting based on high values of participation (Tichy, 1974).

Looking back at the descriptions of the role frames, the observed pattern seems quite reasonable. Focusing on helping the client solve his own problems leaves the initiative in the process to the client. Consequently, the client's view is to a large extent accepted, at least initially. On the other hand, focusing on the consultant's problem solving makes it important to be in control and take the initiative in both problem formulation and solution. This quite naturally means questioning the client's perceptions, in order to suggest better alternatives.

Media and Language

This category refers to the "media, languages and repertoires that practitioners use to describe reality and conduct experiments". The media, language and repertoire "make up the 'stuff' of inquiry, in terms of which practitioners move, experiment and explore" (Schön 1983:270-271). Differences in media and language would thus be expected to correlate with differences in the description of the organization.

Operationalizing Schön's concept "media and language" means looking for the media, with which the consultants interact in trying to make sense of the situation. Which is the media, by which the situation talks back to the consultant? Two different media can be observed in the cases. The first is represented by the conversation with the client, the second by a conversation with "hard facts" and analysis models represented by numbers or a process description.

All the consultants show proof of using both media, but the importance attributed to different media differs for different consultants. At the one extreme, strongly focusing on the conversation with the client and impressions from the client company, we find M1 and M2. The other extreme, focusing strongly on "hard facts" and analysis models as media, is represented by I1, I2 and I3. M3/M4 represent an intermediary position.

M1 and M2 in their analysis process focus on the conversation with the client and their mere presence in the organization. It is mainly in categories related to the client's view and the organizational culture that the consultants construct their picture of the organization. Consequently, the consultants are very

interested in the client's perceptions (as opposed to "hard facts"). This is reflected in a focus on collecting data by letting the client talk and exploring what comes up in the conversation.

I mainly ask them to talk, and in these conversations, a lot of information is revealed. Following another structure here feels strange

...

And I normally ask why a lot. Why do you want to achieve this specific goal?

...

I would also ask him about what demands he foresees for the future, what is currently demanded of the organization, what have been success factors and what will be success factors in the future. (M1)

The focus on the conversation with the client as the media for constructing the problem is further illustrated by the fact, that both M1 and M2 suggest to draft the proposal in direct collaboration with the client. The problem is thus constructed in collaboration with the client, rather than as a solitary analytical activity by the consultant.

I have learned that it is better to draft the proposal together with the client as far as possible, there and then, because you have the attention of the client and can ask questions directly. (M1)

In focusing on the client's view, it is not only the content of what is said that the consultants are interested in. Instead, reading between the lines and interpreting weak signals from the organization is seen as at least as important. Experiences of the organization culture are consequently also of importance. This kind of information, the consultants lacked in the case:

What is difficult in relation to the way information is transmitted and the problem solving situation in the simulation is that you can't look at what is written and you can't see expressions on the faces. I miss the feeling of walking around in the organization, of seeing how people scrutinize you, if they look frightened or expectant, such things, which I think I register in a normal case. I can't get this here. (M2 answering questions about flaws in the design of the simulation)

The interpretation of the situation thus depends on the ability of M1 and M2 to "read" the client, his ambition and agenda, as well as the organizational culture. To conclude, the media in terms of which M1 and M2 construct the problem is the dialogue with the client. It is the consultant's ability to handle this dialogue and interpret it and other observations in the organization, that characterizes the "good" consultant.

M3/M4's use of media in the reflection in action process somewhat differs. Here a reflective conversation with "hard facts" is mixed with a reflective

conversation with the client. This mixing of the two media is reflected in the consultants' approach to the proposal process:

It may be that we first meet the client and receive the information we received with these cards today. Then you do some thinking, as we did here, and design an approach to the project. You do not produce an entire proposal, but a project design and some ideas.

Then we get back to the client and ask additional questions and have a discussion about the project design. So you check with the client, what is his reaction when we present the project design? Is he unsympathetic to any ideas? Does he seem enthusiastic? (M3/M4)

There are thus two reflective processes indicated in this citation, using different media. The first is based on the information gathered in the client organization, the second on the conversation with the client. In the first case, the reflective conversation is between the consultant(s) and his knowledge of the organization. Based on this information, the consultants build a virtual "model" of the organization, from which the problems are derived. An example of this is the analysis leading to the identification of pricing as a problem:

M4: A keyword they come back to all the time is increased business mindedness. M3: Improving the handling times is one way of improving the business mindedness. M4: Yes, but reading between the lines, you can see that it is about charging the right prices for the services. It is also about introducing more of a customer orientation, not seeing oneself as a public authority but as a part in a supplier – customer relation. M3: They were thinking about business cycles too, even if the fees were so high, that the potential clients chose alternatives to their services. (M3/M4)

Another example of this reflective conversation with "hard facts" is M3/M4's quite extensive analysis of market data, carried out in order to understand the dynamics of the market – "Why are they expecting growth, when the historical trend doesn't indicate it?"

The second process indicated is, as in the case of M1 and M2, the conversation with the client, in which the ideas generated during the analysis are tested. The meetings and the visits in the organization are not mainly regarded as arenas for information gathering, but rather as arenas for understanding the client (Gustavsson) and his underlying rationale. This interest for "softer" data, concerning the mindset of the client is also illustrated by the difference between a real situation and the simulation situation:

In the simulation, I missed the feeling of walking around in the organization, of being shown around, talking to people about their reality. There was some information about this in the case, about newly restored offices with people looking tense, but that was it. When I am there, I see much more of this. I get a feeling of how the organization works... You only have to look at the notice board. Are there two square notes in order, or are there notes all over? (M3)

Like in the above case, there thus seems to be an interest in the informal aspects of the organization, covering issues such as culture, Gustavsson's motives, etc.

The mastery of these media requires both an ability to interpret organizations and their cultures, and a repertoire of analysis methods and models that can be used to model different aspects of the organization. The models suggested by M3/M4 for later use in the process are ABC and process optimization.

In the case of I1, I2 and I3, the reflective conversation with the client is less important as media for constructing the organizational problem. Instead, the consultant's fact-based understanding of the organization is the medium for reflection. In order to share this understanding and involve colleagues in the reflective conversation (which is repeatedly done as indicated in the description of the proposal writing process in International), the written proposal is another important media, where the consultant's understanding is manifested.

This fact-based understanding is on a high level guided by the "business integration model", that identifies four key areas for understanding an organization – strategy, organization, processes and IT. The construction of problems in the organization thus depends on a satisfactory understanding of all these organizational aspects. This is reflected in data gathering. The five most important information categories (Table 8.3) in the cases of I3 and I1 cover at least three aspects of this systems model.

Against this background, it is not surprising, that the interaction with the client to a greater degree than in the case of the ABB-MAC consultants aims at information transmission rather than joint reflection.

This is important: "if you lack information you can also plan a complementing meeting". If we have a meeting like this, we almost always ask for another meeting before handing over the proposal. This second meeting is necessary, as the first meeting initiates a number of thought processes which require, that we meet the client again to get some clarifications and get a confirmation from the client that we have understood this accurately, before leaving a proposal. (I3)

I3's description of the proposal writing process is very similar to M3/M4's description above, with the difference, that the meeting's purpose is described more as information gathering. But still, the softer aspects, as well as weak signals are also regarded as important in order to really understand the situation, which is I3's I2's and I1's primary aim:

It is above all the interaction that is missing. To be able to look at the client, how he reacts when you pose certain questions, to get to the bottom and understand him, how he is as a manager. Has he bought into this? Has he confidence? (I3)

You can read so much between the lines when you sit and talk face-to-face with a person. (I2)

Main flaws in the simulation? I would have liked to know some stuff, like when the project was meant to start, what kind of project he pictures, how big it is. I would have liked to ask him what he believes. If he had answered “this is something which could be done in a couple of weeks”, you feel directly that something is wrong. (I1)

In the quest for really understanding the situation, facts rather than peoples’ impressions are important. Both I2 and I3 underline the importance of the analysis to be carried out in the project to be “fact-based”, meaning that large amounts of raw data are to be collected, that are then analyzed in several different dimensions and with different analysis models.

The as-is analysis is very fact-based, like the client asked for. It is based on interviews and available data. Several different types of analysis are carried out. In relation to the process, for example, you analyze the current lead time and try to identify the critical path. This generates a mapping, where the lead time consists of several factors... (I2)

It is important that he [the client] understands that we have to have a good definition of the problem. We would carry out interviews, but also collect other types of data. This is not a journalistic product, but a fact-based product establishing, for example how long the lead times really are. (I3)

The reflective conversation, leading to a thorough definition of the problem and ultimately its solution, is expected to be with facts. It is also supported by a large set of analysis models (e.g. a set of lead-time definitions), that are used as a language to depict the organization. An analytical ability and knowledge of methods and tools is what characterizes mastery among these consultants.

After having characterized the consultants in terms of the media they prefer in reflection in action, I will turn to the question regarding the link between the use of different media and the reflection in action process.

As has been shown above, different kinds of media focus on different kinds of data and support different kinds of insights. In the conversation with the client as a media for reflection in action, the consultant obtains a thorough insight into the *client’s understanding* of the organization at large and the problem situation more specifically. Using data and models as a medium for reflection in action generates insights into the more *formal systems of the organization* (e.g. structure, process flow, management and control systems) and their performance. These differences in insight gained through the use of different media are close to the differences in the reflection in action process earlier labeled the normative - rational dimension. More precisely, the use of media seems to go hand-in-hand with differences in the generation of solution ideas, the reflections on the approach to change as well as the identified problems and success factors in change.

Consultants focusing on the conversation with the client as the main media, focus more on the “human” side of solutions, approaches and success factors. They emphasize the need for competence and culture changes, are more detailed in terms of how to actually carry out different steps in the process, and mainly view cultural and “mind set” issues as the main problems in change. Consultants focusing on data and models as language for reflection in action make other reflections, more strongly focused on the “systemic” side of the organization. They suggest changes in the control, reward and pricing systems, mainly reflect on the data to be collected in the change process, and see economic and political issues as the most important barriers to change.

In the description of the different consultants’ approaches, it was also indicated that different media require quite different expertise in terms of both knowledge and skills. M1 and M2 for example, who use the conversation with the client more extensively as a media, need to have a good interpersonal knowledge, in order to be able to interpret the client and “read between the lines”. M2 explicitly mentions knowledge of the behavioral sciences as one of her contributions to the process:

My contribution is experience of change and a method and tools, and some knowledge of the behavioral sciences. (M2)

The consultants, more focused on the conversation with data, instead require skills in analytical thinking and a large arsenal of analysis tools. This observed importance of analytical skills is reflected in I1’s description of the work in the project group, where the consultants are described as much faster than the members of the organization. In regard to analysis methods, the description of the different consultants’ use of methods above also indicates a difference in the number of analysis tools available. International consultants here have a considerably larger selection.

Appreciative system

The appreciative system is the third of Schön’s constants. The appreciative system “makes possible the initial framing of the problematic situation” and helps the professional to determine when the problem is solved. Differences in the appreciative system can help to understand why different professionals, entering the same situation, produce very different results. (Schön, 1983:274). The examination of the different consultants’ appreciative systems can potentially become very complex. I will therefore focus on a single aspect of the system, which I hold as most important in this case, namely the appreciative system at work when approaching the proposal writing process. With which norm system do consultants approach the proposal writing process? What is seen as the main purpose of this process? Three different norm systems can be identified among the consultants studied here.

For M1 and M2 the main aim of the proposal process is to check the possibilities for a successful change process, and laying the grounds for it. The main characteristic of such a successful change process is, according to M1 and M2, the client's active participation. Consequently, assessing the client's willingness to and ability for such a participation is a main aim of the process.

During the proposal process, you try to hint to the client that the change process will create demands on him too – are you prepared to take this? – in order to be really sure, that you have an acceptance from the client. There is no point in initiating a process, where the client resists when we have come a bit. He has to get a chance to mature, to chew and swallow during the journey, otherwise it won't work. (M2)

Another important aspect of the proposal process is to make the client a participant from the very beginning, ensuring coherence in the view of the approach to change between consultant and client. This is reflected in the observation, that both M1 and M2 often work together with the client on sketching the proposal

The important thing is that we agree on how we should act in order to solve the problem, rather than spending a lot of time arguing and sending papers to each other. This only takes time. (M2)

The proposal process is thus regarded as a relatively informal process. This appreciative system of M1 and M2 is congruent with the role frame for these consultants. M1 and M2 were above characterized as having a role frame aiming at “helping the client to solve his problem...”, thus leaving the initiative in problem formulation and solving to the client. The success of the change process as a whole is thus seen as depending on the client's willingness, as well as ability, to constructively participate in the change process.

It is my conviction that it goes much faster, at least in total, if you involve people. I believe, a consultant can never come and tell the client “this is the way it should be”. I have positive experiences of working with a group that has a whole lot of questions. Together, we design a solution. (M1).

Consequently, the appreciative system's focus on the client's ability and willingness to participate in the change is well understandable.

This view of M1 and M2 is to be contrasted against the view of I1, I2, I3 and M3/M4, who see, the “good” proposal process as generating solution ideas, that convince the client.

We can start with looking at the results, which often, in my opinion, are what sells the project. The important thing is to describe why they should do this, what benefits it renders them. (I3)

This solution-focused approach requires, that the consultant during the proposal process acquires a thorough understanding of the organization and its problems, to be able to present some new solutions to the client's problem. In the analysis

of the consultant's role frame, it was shown that the thorough understanding of the organization and its business was valued highly by I1, I2, I3 and M3/M4. This is further validated by the following citation, that also underlines the importance of communicating the understanding to the client:

In this phase in reality, you would have had more time. You would have tried to understand the background to the problem – what do they see as the problem. We really build up our own understanding of the situation. This is important later on, when presenting a proposal, to be able to show that you understand the business of the client, the world they live in. (I1)

Again, the appreciative system is congruent with the role frame (except for M3/M4). I1, I2 and I3 were all shown to have a role frame establishing them as the central problem solvers, thus requiring them to keep control of both the process and its content throughout the process. This naturally requires a thorough understanding of the organization.

Given these differences in the appreciative system about the proposal process, we would, with the support of Schön (1983), expect differences in the reflection in action process regarding the efforts to understand the organization and its problems (described by the internal - external dimension). These efforts can be compared both in terms of quantity and focus. Comparing the total time spent on information collection (Table 8.11) reveals that M1 and M2 spend considerably less time on information collection than the remaining consultants. They also look at fewer cards and thus expose themselves to less information.

	M1	M2	M3/M4	I3	I2	I1
Time spent on information collection (min)	25,7	22,9	34,9	34,3	38,1	86,47
Number of cards (incl. repetitions)	22	28	52	34	60	150

Table 8.11. Time spent on information collection by the different consultants

Based on the differences in the consultants' appreciative systems, the differences in effort spent on information collection become understandable. Given M1 and M2's focus on understanding the prerequisites for change, it was argued, they would not require as thorough an understanding of the organization as the other consultants. The other consultants saw the production of selling ideas for solutions as an important aspect of the proposal and thus required a deep insight into the organization and its business.

Turning to the reflections in relation to understanding the organization, M1 and M2 are seen to represent the "internal" end of the dimension internal - external that was presented as a relevant descriptor of the differences between different

consultants. M1 and M2's reflections mainly focus on the culture and its readiness for change. The main aspects of the organization to be understood are the prerequisites for carrying out a change process, where the organization's members are highly involved:

The organization makes a stiff impression. That's why I started by looking at the management style and the climate. It is most often there you see, whether there are possibilities for initiating a change process. (M2)

This focus of data collection is very much in line with the appreciative system of M1 and M2, viewing the proposal writing process as a process aiming at assessing the organization's readiness for change and laying the grounds for a successful participation of the client.

This approach to understanding the organization is to be contrasted against the approach of M3/M4, I3 and I1, who represent the "external" end of the scale. As indicated in Table 8.11, information about the organization seemed more important to them than to M1 and M2. A closer look at the information gathered, and the reflections made on the organization and its problems reveals, that it was mainly information on the organization's relation to its environment, that was in focus (Table 8.3). The rationale for collecting this information was among other things to gain a real understanding of the problem:

This is about understanding their market situation. What drives them? What are the demands? How does their competitive situation look? You have to understand what goals the client has to fulfill. It is also important not to ask "how much better can we become" but ask "what are the requirements? How much better do we have to become in order to survive?" (I3)

Again, this more external focus in information collection, aiming at understanding the organization's market position, fits well with the appreciative system identified in the case of the consultants I3, I2, I1 and M3/M4. Understanding the organization and identifying the cause of the identified problem requires information not only about internal aspects, but also about the organization's position in relation to its environment.

But the link between appreciative system and the efforts to understand the organization is not all consistent. I2 has an appreciative system focusing on understanding the organization and the underlying problems as an important aspect of proposal writing. Still, this focus of data collection and reflections is mostly internal and focused on the organization's culture and thus similar to the approach of M1 and M2.

Finally, I will look somewhat more closely at the differences within the group of consultants, focusing on the deep understanding of the organization as a main aim of the proposal writing process. Comparing the identified problems of M3/M4, I3 and I1 reveals differences in the elaboration of the organization's

problems. I1 seems to have the least elaborate picture of the problem situation. The problems identified in the proposal and his reflections are close to the client's claims. The most elaborate picture of the problem situation, on the other hand, is provided by I3, who identifies problems based on interpretations of the collected data. M3/M4 are also quite elaborate in their picture of the problem, but the level of detail is not as high as in I3's case. These differences in the elaboration of the problem picture co-vary with the consultants' experience. I1 has been a consultant for 2 years, M3/M4 for four and five years respectively and I3 for ten years. The ability to interpret organizational information thus seems to be something that is learned with experience. This is confirmed by Schön (1987:23ff) who claims that "good" professionals are better at rapidly reading a situation and thus gaining an elaborate picture based on relatively scarce information (see also Ericsson and Charness, 1994)

Overarching theory

The fourth and last constant to be discussed is the overarching theory. This is the least well-defined of the four constants underlying the model for consultant action providing the background to this study. The overarching theory is, as opposed to the other three constants treated above, not a necessary component of the constants in Schön's (1983) framework. Not all practitioners have access to an overarching theory.

According to Schön (1983), the overarching theory provides a basis for the practitioner's sensemaking of phenomena. The overarching theory, together with its associated method of inquiry, provides language and themes, through which the practitioner can restructure a situation in a way that makes it possible for the practitioner to explain. As an example of an overarching theory, Schön names the psychologists' use of psychoanalytic theory as a framework for making sense of a patient. The existence or non-existence and the content of the overarching theory are described as explanations of differences in practitioners' reflective conversations (Schön, 1983:274)

Against this background, two questions in relation to the overarching theory emerge. The first concerns the existence of the overarching theory – do the consultants studied above have one? The second question becomes relevant given that the first is answered positively and concerns the content of the overarching theory.

Against the background of this description of the constant "overarching theory", this emerges as having a somewhat different character, being more comprehensive than the other three constants discussed above. Schön (1983) presents the overarching theory as one of four constants without discussing the relations between these. However, based on Schön's conceptualization of the

overarching theory, it can be hypothesized, that it comprises or at least has consequences for, the remaining constants media and language, appreciative system and role frame. Such a hypothesis is supported by the fact that an important part of the overarching theory is a language for constructing a situation, which thus indicates an overlap with the constant “media and language”. Similarly, it can be assumed that the overarching theory also has consequences for what role to take as a practitioner and the appreciative system that helps distinguish between good and bad in different aspects. Consequently, operationalizing the existence of an overarching theory, this should be reflected in the other constants in terms of a common and stable theme throughout the role frame, media and language and the appreciative system.

Comparing the contents of the role frame, the media and language used and the appreciative system for the different consultants, reveals that there seems to be some interrelation between the different constants. A consultant’s position in relation to one constant seems to be related to her position on the other constants, which is reflected in the emergence of two clusters of consultants with a consistent set of constants (see Table 8.12). The first cluster is most clearly represented by M1 and M2 and the second cluster by I3 and I1.

	Cluster 1 (M1 and M2)	Cluster 2 (I3 and I1)
Role frame	Helping the client solve his problem by providing methods and experience	Solving the client’s problem and ensuring the solution’s acceptance
Media and language	Focus on the conversation with the client	Focus on the conversation with data and analysis models
Appreciative system	The proposal process should ensure that the client is able and willing to participate in the process, and lay the ground for participation	The proposal process should produce a thorough understanding of the problem and interesting solutions

Table 8.12. A clustering of consultants according to similarities in constants

Looking more closely at the contents of the different constants in the respective clusters also reveals the existence of a common theme reflected in all the constants. In cluster one, this emerges around the client’s willingness and ability to solve his own problem. In cluster two, the consultant’s problem solving and search for solutions is in focus. Against this background, a first conclusion is that the consultants studied here have an overarching theory concerning the nature of the consulting process and how change is achieved in organizations.

Having established the existence of an overarching theory, the question of its contents remains to be answered. In cluster one, the focus is very much on the

client and his willingness and ability to participate in the process. This is reflected in the role frame, where the consultant plays a relatively peripheral role in order to leave the initiative with the client. It is also reflected in the media and language, which focus on the conversation with the client and provide concepts for the description and discussion of soft aspects such as group dynamics. The appreciative system further supports the focus on the client's problem solving by defining the "good" proposal process as one that checks for the client's willingness to actively participate in the process, as well as lays the ground for this participation in the process to come.

In cluster two the theme recurring in the different constants is the focus on the right diagnosis and the best possible solution. This is reflected in the role frame, focusing on the client's understanding of the situation in order to design the best possible solution. The client's participation in the process is seen as a way of increasing acceptance and thereby the possibilities of realizing this solution. The media and language used by the consultants in cluster two supports this view of the consulting process by providing concepts for a holistic analysis of the organization. Also the appreciative system supports this theme of creating a deep understanding of the organization in order to find an optimal solution by making this the main goal of the proposal process.

These two briefly identified overarching theories are no private inventions of the consultants in this case, but rather reflect two opposing positions concerning the nature of the consulting process recurrently referred to in the literature, namely the distinction between process consultation and expert consultation (see e.g. Greiner and Metzger 1983, Schein 1988). According to the expert consulting model, the consultant emphasizes his or her ability to contribute to the solution of organizational problems. The expertise lies in the ability to diagnose and to analyze and prescribe solutions. Schein (1988) presents the "purchase of expertise" model and the "doctor – patient" model, as different versions of the expert model, distinguished by whether the consultant acts as if the client knows his problems or not.

The process consultation model on the other hand, depicts the consultant as someone who provides feedback and engages in a series of interventions by which the actors in the client organizations manage to change their understanding of the processes they take part in and manage to change their behavior. At the core of the process consultation model is the activity and initiative of the client. Process consultation is about helping the client to "remain proactive in the sense of retaining both the diagnostic and remedial initiative". (Schein, 1988:11)

Based on the above, I conclude that the consultants studied here had access to an overarching theory. This overarching theory concerned the nature of the

consulting process and was reflected in all the consultant's other constants. This overarching theory provided the basis for the consultant's understanding of the situation presented in the simulations. To put it very briefly – whereas the consultants in cluster one framed the situation as a problem of client willingness and ability, the consultants in cluster two saw it as a matter of information, political support and economic resources.

Discussion of causalities

Having identified the constants for reflection in action and their links to the consultants' actions in the reflection in action process, a question of causality emerges. Can it, based on the above analysis, be claimed that the constants for reflection in action determine the actions of the consultants?

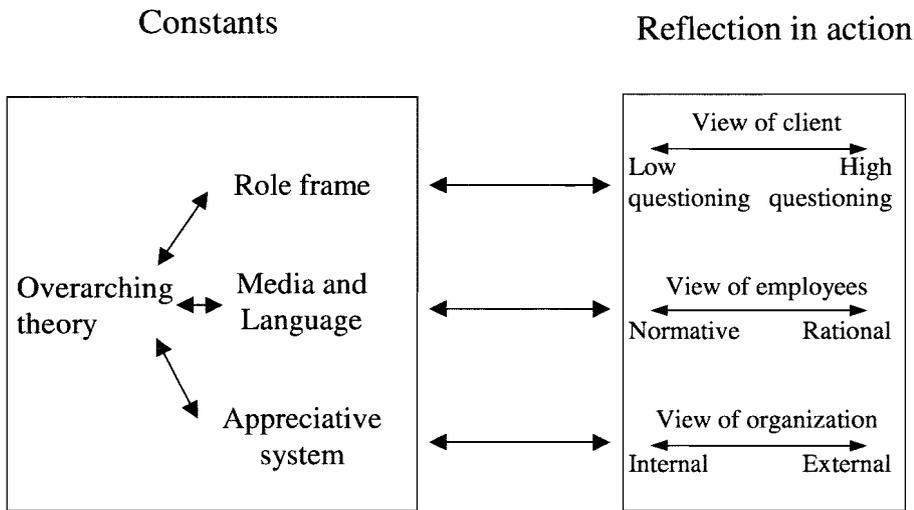


Figure 8.7. Summarizing the relations between constants and observed differences in reflection in action

I have previously consciously tried to talk about covariance and congruence in the analysis rather than about causality. The main reason for this is that the data on the reflection in action process, and on the constants, comes from the same source – the simulation with the consultants and the interviews prior to and following it. Still, I believe that the identified covariances show a valid pattern, as the type of data on which they are based is somewhat different in character. The patterns of the reflection in action process have to a large extent been identified on the basis of the consultants' reflections on the specific information in the case and thus present more of a theory in use. The constants on the other hand have been identified mainly on the basis of more general information from the consultants provided in the pre or post interviews, and during the

simulations. They represent comments of the kind “in a “real” case I would...” “in a situation like this I normally...”, etc.. These constants thus represent more of the consultants’ espoused theory. Against this background, I refrain from claiming any causality between constants and characteristics in reflection in action. What I do claim is that different configurations of constants support different patterns of reflection in action. Given a certain stability of constants (as indicated by their name) I thus view them, if not as determinants of the process, as at least limiting the range of possible forms of it. The patterns concerning the relations between the constants and the differences in reflection in action identified above are summarized in Figure 8.7.

Analysis part 3: And how about the method?

Let me now, in the third part of the analysis, get back to where I started, namely the question of the method’s role in the consultant’s problem solving. The exploration of the constants revealed that these can help understand the variations found in the data collection and the reflections of the consultants. More specifically, the consultants’ role frame was found to co-vary with their view of the client, their media and language co-varied with their view of employees, and finally, their appreciative system was congruent with the differences in their view of the organization (see Figure 8.7).

If the constants help to understand the differences in reflection in action, the search for the method’s influence on the reflection in action process should go via these constants, as proposed by the framework presented in chapter three (summarized in Figure 8.1). The question is thus, whether, and in what way, the methods used by the consultants are reflected in the constants for reflection in action. I will now turn to the examination of possible links between the method available to the consultants and the different constants.

The role frame and the method

Two different role frames were identified among the consultants in this study. The ABB-MAC consultants shared a role frame focusing on their support to the client’s problem solving, whereas the International consultants shared a role frame focusing on their own problem solving, but ensuring the acceptance of the solution among the client members. Were these role frames coherent with the respective consultants’ methods?

In the case of M1 and M2, the role frame clearly correlated with the division of work between consultant and project group members suggested by their method. The consultants regarded themselves mainly as facilitators, which is also what the method suggests (see Table 8.13).

The consultant – Process improvement facilitator	The project group – Process team
1. Teaches the team process improvement concepts and tools	1. Carry out analyses
2. Recommends tools for certain situations	2. Design improvements and solution measures
3. Helps the process team to use these tools	3. Plan implementation
4. Documents the team's work	4. Recommend and/or make changes
5. Assists in important meetings	
6. Consults to the management team/ decision making group	

Table 8.13. The role of the consultant and the project team according to the RBG method

Furthermore, the role frame adopted by the ABB-MAC consultants is to a large degree coherent with the underlying view of the consultant's role, that is expressed in promotional material by the method provider, the Rummler & Brache group:

Maybe it's because just about every Rummler-Brache consultant has worked as a manager in business or industry, but we are highly suspicious of consultants who come with the answer to their question. We know that every company is unique, and demands solutions that are uniquely designed to meet its needs and work with its people. We do not enter into a client relationship with a bias toward organization redesign, or training, or information technology – or any specific type of solution. We do not come in with a program to overlay – or undercut – your other initiatives. Our solutions begin with where you are and where you want to go. What client organizations want, and get, when Rummler-Brache is their partner are:

- Sustained performance improvement, not short-lived programs
- Tools, not concepts
- Internal design and ownership of changes, not consultant design
- Measurable results, not activities
- Diagnosis-based actions, not panaceas
- Self-sufficiency, not consultant dependency.

(<http://www.rummler-brache.com/results/results.html>, 22.8.1999)

But also M3/M4's role frame seemed to be influenced by the RGB method, even if they claimed their approach to be a mixture of xABC and the RBG method. Both consultants had worked extensively with the RGB method earlier and their role frame was obviously strongly influenced by the division of work suggested in it.

The International consultants on the other hand, claimed that their overall approach did not follow a detailed method. Rather the approach in proposal writing as well as to the project design and organization, was described as

something everybody knows how to do. Still, the role frames, displayed in the different International consultants' approaches were very similar. This indicates that even if International consultants do not refer to an overall method guiding their perception of role frame, they share an internalized view of how change projects are to be carried out, and what the consultant's role is to be in these.

The media/language and the method

In comparing the different consultants' use of media and language in their reflection in action, it was concluded that all consultants use both data and the conversation with the client as a media in reflection in action, but in different proportions. While M1 and M2 focus more on the conversation with the client, the International consultants put more effort into the conversation with data and formal analysis models, with M3/M4 somewhere in-between.

This is reflected in the toolboxes of the consultants. The International consultants in their work with the proposal refer to a large number of analysis tools that could be used in order to create a deep understanding of the organization. Such a detailed toolbox with analysis methods and tools is to a large extent missing in the work of M1 and M2 especially.

The strong focus on analysis tools among International consultants is illustrated by their above mentioned emphasis on a "fact based analysis". Their mapping process included several different measures and aspects of the process. M1 and M2's view of the mapping phase instead focused on a simple mapping of the process flow and the identification of problems in this flow within the project group.

In addition to the "harder" analysis models referred to by the International consultants, M2 mentioned a number of "softer" models, more appropriate in supporting the reflection in action in connection with the conversation with the client. Such methods mentioned were methods and models for developing trust in groups, teambuilding methods, etc.

This congruence identified between the available toolbox and the use of media in the change process, finally, is also valid for M3/M4, who were identified as standing somewhere in-between, regarding both the conversation with data and with the client as important. The toolbox the two consultants had access to was equally ambiguous, including both fact-based analysis methods (xABC) that were supported by a computer application, as well as "softer" methods focusing on the development of groups, etc.

The appreciative system and the method

Only one aspect of the consultants' appreciative system was analyzed above, namely the appreciative system constituting the "good" proposal writing

process. This analysis revealed two distinct appreciative systems – one focusing on understanding the organization and its underlying problems in depth (M3/M4, I1, I2, I3), the other were more concerned with understanding the cultural aspects of the organization, which were seen to be the prerequisites for a successful change process (M1 and M2).

The focus on really understanding the organization observed among International consultants can again be linked to the method available to the consultants. The only method the International consultants mentioned as guiding their overall approach to the design of the change process, was the “business integration model”, identifying the elements strategy, process, technology and people as important in order to really understand the organization:

We have this business integration model. This might not be a method, but it is always in the back of my mind when investigating an organization. It makes me really try to understand the strategy, what is important for this company. Even if we are not all strategy consultants, we really try to understand the driving forces in the organization. Often, the first thing you hear is not the actual problem, but you have to go deeper. This often reveals, that even the organization itself does not understand the driving forces.

The elements identified in the business integration model were more or less explicitly covered by the International consultants (except for I2, who does not treat the strategic level).

Also the external focus of M3/M4’s data gathering and reflection, aiming at an understanding of the organization in its context can be understood by a closer look at the method. The xABC method prescribes the collection and analysis of cost data in the organization in relation to a number of external aspects – customers, products and markets. It is to a large extent the focus on these aspects that distinguish M3/M4 from their colleagues M1 and M2.

Compared with M3/M4, as well as the International consultants, M1 and M2 disregard both the strategic and the technology elements in their data gathering and analysis. These two elements are not very prominent in the RBG method, that focuses on the three elements organization, process and actor. The method also acknowledges the “softer” aspects of the organization, with one of its creators having a background in the behavioral sciences. Thus, it seems as if the organization model underlying the method is reflected in the consultants’ efforts to understand the organization.

The overarching theory and the method

Identifying and comparing the overarching theories of the consultants revealed the existence of two opposing overarching theories. One set of consultants, mainly represented by the ABB-MAC consultants, were found to work

according to a process consultation theory, whereas a second set, mainly from International, followed an expert consultation theory. According to the process consultation theory, the consultation process is about supporting the client in his own processes of identifying and solving his problem. According to the expert consultation theory, the focus is more on the consultant's diagnosis and solving of the client's problem.

Looking at the methods used by the respective consultants, these different theories were not represented explicitly within the method. Rather, they were reflected in the method's layout and content. The differences identified in relation to the other constants very well capture this. The RBG method used by the ABB-MAC consultants, having a process consultation theory, established the consultant as a facilitator rather than problem solving expert, provided them with a language that supported a direct conversation with the client personnel, and an appreciative system focusing on the personal and cultural prerequisites for a change process.

The method available to the International consultants similarly supported their more expert-oriented overarching theory. The method establishing the consultant as a problem-solving expert, provided a language supporting an in-depth understanding of the client organization and its situation and reproduced an appreciative system valuing the thorough understanding of the organization and its problem.

This representation of the overarching theory in the method fits well with the concept's description above, where it was established as a concept at a somewhat higher level than the other constants. The overarching theory, to some extent, comprises the role frame, the media and language, and the appreciative system. The overarching theory is thus not directly presented in the method, but can be observed through the study of the other constants.

The method as blueprint for design?

A main purpose of this chapter has been to test a framework for understanding the influence of methods on the consultants' problem solving processes. This framework was proposed as a reaction to the somewhat unsatisfactory handling of methods in both the theoretical and practical traditions of knowledge presented in chapter three. In the theoretical tradition of knowledge the view of methods was naïve, presenting them as containers of knowledge to be directly realized in practice. In the practical tradition, the methods were given only a very limited role, restricted to the well-defined problem solving processes, during which the method is most often "put to work" through reflection in action processes (Schön, 1983). The view of methods as something to "put to work" also limits their influence in largely intuitive processes.

The alternative framework, proposed as an elaboration of Schön's framework, indicates a more fundamental role for methods, as it hypothesizes their influence on the reflection in action process in general, covering problem setting, problem solving and method application. Hereby methods can be seen to have an influence on the problem solving process, even if it is to a large part intuitive and experience-based, and no direct references to the method are made.

In this study, the intuitive and experience-based elements in the consultants' reflection in action were clearly dominant over more conscious analytical processes or processes of method application with direct references to the method. Very few direct references were made to the method or the content of the method in the consultants' reflections or the results of these reflections. Comparing the different consultants' approaches proposed in their proposal sketches shows, that even if the consultants use the same method, they structure the suggested approach differently, using partly different labels for the different phases (see Table 8.14 for the consultants' proposed approaches).

Looking at M1 and M2's approaches, clear differences in the wording and sequencing of the process can be observed in spite of the existence of an underlying common method providing a detailed step-by-step model for the mapping phase. This indicates that the design of the approach to change is not directly and mechanically linked to the method. Instead of the design being a rational process of choosing activities from a larger menu, it seems to be a largely intuitive activity, based on the consultants' accumulated experiences. A similar pattern was identified in chapter six, where the situational adaptation of the method was found to follow the method in logic but not in detail (See also Stolterman, 1991 who identified similar patterns among IT consultants).

The intuitive and experience-based aspects of the problem solving process are also highlighted by the consultants themselves in their reflections on the problem solving process. M2 for example describes her approach in the following:

I haven't used the entire RBG method, but I have used some of its tools, so an RBG method user would probably recognize the basis of the project. In addition to the method, I have also used a lot of my experience – how should we do this? What are the requirements for a project leader? The method provides a basis for answering these questions, but it is more about experience. Especially some of the things I have thought of for the transition to the “should-be” phase: thinking visionary, being future oriented and letting go of the old. These things are experience-based, a result of what we have collected over the years. The method provides the basic building blocks, but the more concrete aspects, how to do it in practice, are provided by experience. (M2)

M1	M2	M3/M4	I1	I2	I3
4 As-Is mapping. Preferably through interviews. Project group members + steering committee + possibly customer	Interviews. Consultant + project leader interview process members (project group members + some additional) Workflow, good routines, disturbances, evident improvements. Current situation compiled by project leader + consultant (process map + list of disturbances). 3-5 days/process (project group 20%)	* Activity analysis (5 days) Process analysis (3 days)	Analysis of current situation (strategy, organization, processes, management and control processes, IT	AS-IS: 1. Strategy - understand 2. Process - structure documentation - process documentation 3. Organization - competence mapping - where in organization are tasks located 4. IT - structured mapping 5. Customer relation 6. Management processes - management style	3 weeks problem definition [more detailed description of content in reflections]

Table 8.14. The suggested approach to the mapping phase in the consultants' proposals

Even if some references to the method are made here, M2 presents her experience as her main source of knowledge during the problem solving process. This picture of the problem solving process being to a large extent experience-based and intuitive, is further confirmed by the International consultants' descriptions of their design processes. Even if International consultants do not claim to base their approach on a common detailed method, the business integration model and especially earlier cases are pointed out as important points of departure for the design of the proposal.

Even here, one could expect direct references to these cases and explicit processes of reflecting on the applicability of approaches found in earlier cases. But again, experience and intuition are claimed as the central ingredients in the project design process.

When I write a proposal, I search in "knowledge exchange" to check whether it contains something relevant. I also make a local check – we did something similar there, he did this, and this material is available there. You have a basic structure, but this is somewhat subconscious. I don't sit down with the "method for proposal writing", but the procedure is there anyway, in some way. The first time you are involved in a proposal process, you learn the way to do it, the general structure. This now very much exists in the back of my mind. (I1)

The design of a proposal is merely a question of experience. I believe the results between different consultants are relatively similar. When we talk about designing a solution in a case like this, it's very much a task for the experienced project leaders and the partners. In the Stockholm office, twenty to thirty persons do these kinds of tasks. They make the adaptations to the respective companies. This limits the differences that can emerge between projects. Within this boundary, adaptations are made. The differences are not very large. People who have worked for ten, fifteen, twenty years have a history, that leads to similar results. (I3)

[Which method have you mainly worked with?]

They are more a kind of feeling, an ingrained knowledge – like riding a bicycle. I don't know if you could say that it is experience and common sense, which is influenced by the method. (I2)

This confirms the view of the design process as a to a large extent based on the individual consultant's personal experience and intuition, and lacking direct references to methods or other types of shared and formalized knowledge within the organization. But in spite of the absence of a direct use of methods, similarities in the approaches between consultants using the same method or analysis model could be observed, indicating a role for methods even though they were not directly applied.

The hypothetical explanation for this observed influence by the method, proposed by the framework developed in chapter three, is that methods, do not

exist “outside” the individual and are “applied” by her. Rather, methods are internalized, influencing the constants for the reflection in action process.

The above empirical investigation of the relation between the reflection in action process, the constants and finally the methods available to the consultants, reveals that this is a reasonable view of the relation between methods and the consultant’s problem solving. The constants proposed by Schön as contributing to the understanding of differences of practitioners’ reflection in action processes were all found to be meaningful in capturing and explaining the observed difference between consultants. Furthermore, an overlap between the constants and the methods available to the consultants was observed, making a link between the method and the consultants’ problem solving plausible.

Against this background, a more powerful position for methods than that following from Schön’s original framework is proposed. Rather than being something which is applied by the consultant in the problem solving phase, methods are proposed to influence the basis for the consultant’s problem solving – the constants for reflection in action.

This conclusion, establishing the method, and solution models as important elements in the problem setting phase, is supported by Hillier, Musgrove and O’Sullivan (1984) who, based on the study of architectural design, identified “internal variety reducers” as aids for understanding the outcome of a specific design process. These “reducers” were described as:

...an expression of the designer’s cognitive map, in particular his understanding of *instrumental sets and solution types*. (Hillier, Musgrove and O’Sullivan, 1984:257, my italics)

These writers thus acknowledge the influence of both methods and solution examples on the problem definition process.

The consequences of the identified link between the method and the constants for reflection in action, range over a field covering potential biases in the consultants’ problem definition and the possibilities for learning. To start with problem definition, the method’s influence on this process gives some fuel to the saying “if you have a hammer, everything looks like a nail”. Such tendencies could be observed in the above cases, where for example the strategic issues were more actively considered by the consultants, who had the strategic aspects included in their methods. But this effect of a method, focusing the consultant’s attention on a limited number of central issues, is not only negative. The consultant entering an organization finds herself in a highly complex situation. In handling this situation, a delimitation has to be made. The use of an explicit, well thought-through method, ensures that the choice of focus of attention and action is not entirely arbitrary:

The reason for somebody to design guidelines is probably based on a desire to help the designer, who works with complex tasks with many influencing factors. The idea underlying guidelines is that they limit the designer's set of possible actions, and thereby reduce the complexity of the design work. (Stolterman 1991:122, translated from Swedish)

The conscious use of a formalized approach can also be argued, to lift up for discussion, some of the choices, which the "method-less" consultant pursues intuitively. Given this argument, a structured, formalized approach to the problem may actually increase variation and adaptation to the client, rather than decrease it. But looking at the proposal process above, few such signs were observable, as the process was to a great degree intuitive.

The limiting effect of the method on problem setting also works in the other direction, limiting innovative aspects of learning. Defining the problems in the same terms as the method to be used to solve them reduces the reflections about alternative approaches and minimizes the chances of disconfirmation of the method. This aspect will be treated in more detail in the next chapter.

Finally, the link between constants and methods has some important implications for the content in the consultant's toolbox and their possibilities to switch between methods. The above analysis indicates that there is congruence between the constants and the consultants' methods. This limits the possible methods used by a single consultant to the ones congruent with her constants. As the constants are claimed to be relatively stable, it also means that consultants in the short-run cannot switch to methods that are incongruent with their set of constants.

Against the background of this conclusion, the consultants' acceptance of the client's wish to implement BPR is interesting. As shown above, only M3/M4 suggested an alternative to the BPR approach. All the other consultants accepted the client's wish for a BPR project. Given the observation of the link between the consultant's constants and the range of possible methods, this acceptance becomes problematic. In the analysis, two groups of consultants were identified, sharing distinctly separate sets of constants. Looking at the characteristics of BPR listed in chapter one (radical, top-down, IT-enabled, process focus), only I3 and I1's set of constants is fully compatible with the concept. M1 and M2's constants, on the other hand, are quite far from BPR's basic concepts, especially in terms of the top-down orientation and the radical nature of the change.

The discrepancy between BPR as a concept and the approaches presented by the consultants emerges even more clearly when looking at the consultants' actual practice. None of the consultants mention "radical goals", IT is not focused in a significant way, and the approaches of the ABB-MAC consultants emphasize a bottom up rather than top down approach. There thus seems to be a very weak

link between the management concept BPR and the actual practice carried out by the consultants. Very different approaches can be sold under the label of a single management concept. Rogberg (1995) found a similar pattern in his study of TQM programs. He described TQM as a protecting “umbrella” under which a number of different activities, not necessarily tightly related to TQM, could be carried out.

The level of analysis has until now been the individual, and this with a purpose. But before ending this chapter, and as an indication of what is to come, I will briefly turn to the organizational level. The analysis of the consultants’ constants revealed more similarities between consultants within a company than between consultants from different companies. This indicates that the constants, even if they are an individual concept, have links to the organizational level. Schön (1983) acknowledges such a link in situations, where reflection in action takes place in organizational settings (c.f. chapter two). In these situations, the practitioner both draws on existing organizational knowledge and contributes through his individual learning to the development of this knowledge. Transferred to methods, this would mean that these not only influence the constants but that these constants also influence the methods. This line of argument will be pursued further in the next chapter, which focuses on the method’s role in the overall knowledge system of the consulting organization.

Overall summary – A model of consultant action

The focus of this chapter was the influence of methods on the individual consultants’ problem solving activities. These activities were framed as “reflection in action” activities (Schön, 1983), and studied through a simulation, where seven consultants from two consultancies were asked to sketch out a project proposal based on standardized, computer-transmitted information. The information obtained during these simulations consisted of data on time spent reading different types of information, reflections, comments and questions asked about the transferred information as well as sketches of proposals produced by the consultants. The data collection also included interviews preceding and succeeding the simulations. The interviews covered the consultants’ general view of the change process and their background and toolbox.

These data were analyzed in several steps, with the overall aim of identifying and understanding differences between the consultants’ framing of the problem and their proposals for solutions. A first analysis compared the consultants’ time spent on different types of information, their reflections and proposed solutions. In this comparison three dimensions were identified, that captured the observed differences between the different consultants. These were named

“internal - external”, “normative - rational” and “degree of questioning of the client’s view”. These dimensions represent differences in the view of the client company (internal - external), the view of the nature of people in the company (normative - rational) and finally the view of the consultant’s role in relation to the client’s personnel (degree of questioning) (see Figure 8.6).

In order to elaborate on the understanding of these differences a next step of analysis focused on the constants for reflection in action, which in Schön’s (1983) framework are essential for understanding differences between different professionals’ reflection in action processes. These constants (role frame, media and language, appreciative system and overarching theory) were investigated based on the interview data and consultants’ statements during the simulations. This examination showed that differences in constants were consistent with differences in the consultants’ reflection in action. More specifically, different constants were seen to co-vary with different dimensions identified above (internal - external, normative - rational, degree of questioning the client’s view).

The role frame was found to most directly co-vary with the degree of questioning of the client’s view. The use and availability of different media in the proposal writing phase co-varied with the dimension normative - rational. Finally, the appreciative system, here delimited to the view of the proposal writing process, was consistent with the internal - external dimension (Figure 8.8).

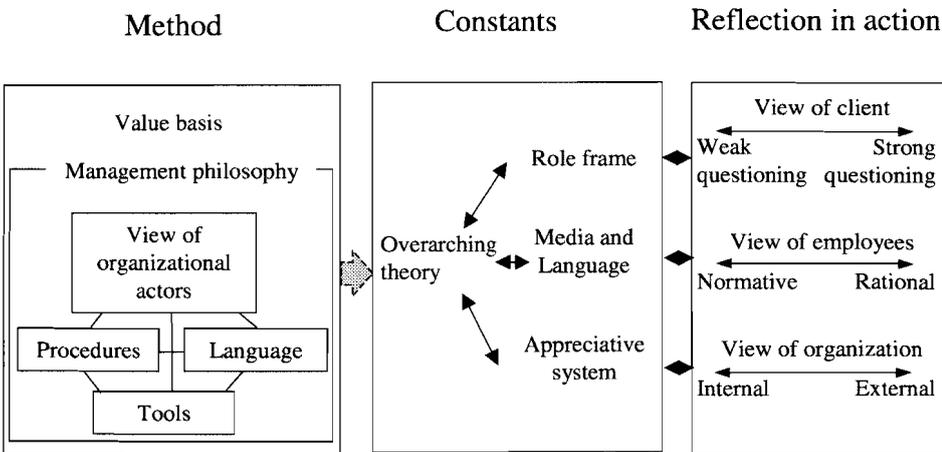


Figure 8.8. A summarizing model of the relation between the method and the reflection in action process

In the third step of the analysis I examined whether the identified constants were consistent with the range of methods that the consultants claimed they were using. This analysis revealed a good fit between the constants and different aspects of the method available to the consultants. This led to the conclusion that the framework presented in chapter three, identifying a role for methods within a more practical tradition of knowledge has some empirical support. It indicates a rather important role for methods as they are seen as influencing the prerequisites for the consultants' problem solving behavior. At the same time, it also explains the influence of methods on processes that are mainly tacit and lack direct references to a method.

Chapter Nine

The Knowledge System in Management Consulting Companies

Background and purpose

The previous chapter focused on the *use* of the method in a *specific case* by an *individual* consultant. Focus was on the interplay between the method and the individual consultant's problem solving process. But as I concluded in that chapter, the organization's methods and the consultant's constants overlapped, indicating a link between the individual consultant's constants and knowledge at an organizational level, e.g. methods.

Schön (1983) supports the existence of such a link between the individual's reflection in action and knowledge at an organizational level. He argues, that the individual reflection in action process in an organizational setting is tightly linked to an organizational level, as it draws on organizational knowledge (knowledge shared within the organization) as well as contributing to this knowledge through individual learning, which updates the shared knowledge. This chapter aims at creating a deeper understanding of the processes underlying this interaction between individual and organizational knowledge.

The interaction between the individual consultant's actions, expertise, values and norms and knowledge at an organizational level in the form of methods, tools, procedures, rules and an "organizational culture" has been the subject of some research, as mentioned in chapter two. The review of two studies, with a main focus on the control mechanisms within consulting companies, revealed the importance of non-obtrusive control in consulting organizations. Both Alvesson (1992) and Orlikowski (1988) found that control in the consultancies studied by them was exercised through the consultants' assumptions, beliefs, criteria and symbol systems.

Hereby, common frameworks and practices with which to approach a specific situation were created. These frameworks and practices increased predictability, which in its turn was found to be an important prerequisite for a number of practices facilitating the utilization of the knowledge accumulated through experience within the consulting organization. Examples of such practices were the ability to transfer personnel between projects, to "leverage" the work of

experienced consultants (delegate less complicated tasks to less experienced consultants) etc. (Orlikowski, 1988).

At the same time as these unobtrusive control mechanisms were highlighted, an important role for formalized methods was also identified, as they were found to support the realization of the control mechanisms. Both Alvesson (1992), but especially Orlikowski (1988) highlight the role of methods in supporting the creation and maintaining of the common culture, which again highlights the link between an individual and an organizational level of knowledge.

Against this background, I will in the present chapter take a broader perspective as compared with the previous chapter. The perspective will be widened from understanding the method's role in the individual consultant's problem solving to understanding the method's role within what will be called "management consultancies' knowledge systems". This involves the identification of the knowledge system as a first step and the investigation into its dynamics (i.e. its evolution over time) as a second step.

The choice of the term "knowledge system" is made mainly to highlight two aspects. According to the dictionary, a "system" is defined as:

An organized or connected group of objects. A set or assemblage of things connected, associated or interdependent, as to form a complex unity... (Oxford English Dictionary)

This identifies two central aspects of a system, namely the existence of a number of parts or elements in this system and a number of meaningful relations between these different parts (see also Katz and Kahn, 1969). Understanding the knowledge system is thus about identifying different knowledge elements, their interrelations and their development.

My definition of knowledge in this context is rather broad, covering both the definition of the theoretical tradition of knowledge, focusing on articulate and abstract knowledge, as well as the definition of the practical tradition, viewing knowledge as inseparable from the actor (see chapter three). In identifying the different knowledge elements, the interview persons' views were guiding, as the knowledge elements were identified based on the interview persons' views stated and by my observed sources of knowledge.

The following, more detailed questions will be approached in this chapter:

- 1. Which kinds of knowledge do consultants use in their day-to-day work?
(What are the elements of the knowledge system?)*
- 2. How are the elements in the knowledge system interrelated?*
- 3. What are the dynamics of the knowledge system?*

- a) *How is the knowledge available in the organization appropriated by the individual?*
- b) *How is knowledge generated in projects transferred to the rest of the organization?*

An outline of the chapter

In order to answer these questions, an analysis in three steps following the research questions is carried out. I start by identifying the elements in the consulting company's knowledge system. I then turn to the relations between these elements. Finally, I will turn to the question of the dynamics of the knowledge system over time, i.e. how it is maintained and developed. The treatment of these different issues is based on diverse empirical material, covering three consulting organizations, which by now are familiar to the reader – Ernst & Young Management Consulting (E&Y MC), International, and ABB-MAC. The main empirical basis of the chapter is a close study of the planning and coordination aspects of a large project (the alpha project) in Ernst & Young MC. The conclusions drawn from this case are compared with the cases of International and ABB-MAC in order to validate and extend the findings from the E&Y MC case.

In order to facilitate the discussion and understanding of the empirical material, I will begin the chapter with a brief presentation of the method used in collecting and analyzing data, followed by a presentation of a typology of knowledge in organizations. Following this, I will turn to the main case – the alpha project carried out by E&Y MC. The focus in the presentation of this case is the internal organization of the project, the approach to the planning of the project and the knowledge sources observable in the different phases of the process.

A first step of the analysis of the alpha case reveals three basic elements in the knowledge system – individual consultants' experience, documentation of cases and methods. Having identified these three elements of the knowledge system, I leave the alpha case in order to describe the knowledge system in E&Y MC more generally in terms of these three elements. To further validate the three elements of the knowledge system, they are also tested and found relevant in describing the knowledge systems of International and ABB-MAC.

Based on the cases of E&Y MC, International and ABB-MAC, I then turn to the *second step of the analysis*, aiming at the identification of the interrelations between the three elements of the knowledge system. This reveals a complex set of interdependencies, where the different knowledge elements enable each others' knowledge-carrying ability. A central conclusion of the analysis of the

knowledge system and its interrelations is the leading role of the element “experience”.

The importance of this knowledge element in the consulting organization raises the question of how experience is transferred from the individual to the organization. This is one important issue in the *third and final analysis step*, treating the dynamics of the knowledge system, i.e. its maintenance and development over time. More specifically, this process is divided into two parts that are treated in separate sections. The first section is concerned with the transfer of knowledge from an organizational level to the individual, whereas the second section treats the transfer of knowledge from an individual to an organizational level. Again the empirical bases for the treatment of these issues are the cases of E&Y MC, International and ABB-MAC. In relation to the processes of the development of the knowledge system, the differences between the consulting companies in terms of size and character become salient. Whereas the focus when identifying the elements of the knowledge system and their relations has been on similarities between the cases, the discussion of the dynamics of the knowledge system will make use of the differences observed between the cases.

In a concluding section I summarize the findings of the chapter, underlining the interlinked character of the knowledge system, and the dynamics of it. In this analysis, the findings from chapter eight concerning the link between methods and the individual consultant’s actions are integrated into the knowledge system identified in the present chapter.

Methodology

Data collection

This chapter is mainly based on two empirical sources. The first and main study is an interview-based case study; the second complementary empirical source is represented by material gathered in connection with the simulations reported in the previous chapter. The material gathered during the simulations is used mainly to validate and extend the findings from the case study.

As reported above, the main interest of this chapter is the analysis of knowledge in the context of the consulting organization. In order to understand this, a large project in E&Y MC was chosen and studied in regard to the internal organization, and the consultants’ perceived sources of knowledge in different phases of the project as well as more generally. The project had a hierarchical organization (see below), and the project leader, an experienced consultant and one of two sub-project leaders, who was less experienced, were chosen for recurring, semi-structured interviews. During the project, two interviews with

the project leader and three with the sub-project leader were carried out. The interviews were spread over the whole mapping and visioning phase, which was the focus of this study. One internal planning meeting was also observed. A complementary interview was conducted with the person responsible for coordinating the development of the method (Henrik).

The interviews related to the project were semi-structured and mainly focused on the concrete events in the project, aiming at understanding the coordination of the project and the sources of knowledge consulted in its different phases. This produced information both about the specific project and the consultants' more general perceptions of the knowledge system's working within the organization. The majority of the interviews were taped and transcribed (six out of seven). The internal planning meeting was documented through intensive note taking. The transcriptions and notes were entered into NUDIST for analysis (see Appendix D for a listing of NUDIST categories used in this study).

The second data source was the interviews in connection with the simulations reported in the previous chapter. Both before and after the simulation, an in-depth interview was carried out with the test persons regarding the sources of information for writing the proposal and the discrepancies between the laboratory situation and a "real life" situation (see appendix A for an interview schedule). It is mainly the information gathered during these interviews that provides the basis for the case descriptions of International and ABB-MAC.

This design of the data collection made it possible to be very specific regarding the consultants' use of different kinds of knowledge in the proposal writing phase. However, it also imposes a risk, that the descriptions of the knowledge system reveal information only about the knowledge available and used in the early phases of a project. In order to reduce this risk, the above-mentioned data have been complemented with interviews about the availability and use of methods for process improvement projects within the two consultancies, more generally. Due to the data collection's focus on process improvement projects, the below descriptions should be viewed as valid mainly for consultants involved in these kinds of projects.

Analysis

The analysis in this chapter is mainly inductive, departing from the knowledge obtained on the alpha project, and on the three cases E&Y MC, International and ABB-MAC. In line with the abductive method described in chapter five, the analysis follows the general procedure of first identifying patterns in the empirical material and then relating these patterns to existing theory. In order to make the first step in the analysis – the identification of patterns in the empirical

material – as transparent as possible, a rich account of the empirical basis will be given here. Hopefully, this background will give the reader a possibility to follow my analysis of the data leading to the patterns identified as a result of this study.

The analysis in this chapter is carried out in three steps. The *first step* focuses on the identification of the elements of the knowledge system. These elements are identified based on the knowledge sources described by the consultants in the project and my observations regarding their work. By knowledge sources I here mean the different sources of knowledge the consultants referred to in order to determine what actions to take in the project. This analysis revealed three recurring knowledge sources. These three I viewed as the elements of the knowledge system. The meaningfulness of this description of the knowledge system was tested on the cases of E&Y MC, International and ABB-MAC by describing the knowledge sources identified in these cases in terms of the knowledge elements. As it was found that the three identified elements of the knowledge system accurately captured the knowledge sources in these cases, the elements were regarded as reasonably valid.

The focus of the *second step of the analysis* was the identification of the relations between the different elements of the knowledge system. This to a large extent took place based on the descriptions of the knowledge systems in the alpha project, E&Y MC, International and ABB-MAC, which had been prepared on the basis of the interview data. Within the interviews, some instances of comparison between different knowledge sources could also be found. These provided important inputs to this second step of the analysis.

Finally, the *third step of the analysis* focused on the dynamics of the knowledge system. This was subdivided into two sub-steps, the first focusing on the transfer of organizational knowledge to the individual (individual learning), the second focusing on the spreading of the individual's knowledge to the organization (method development). In relation to individual learning, the consultants' statements about their own learning, as well as the learning in their organizations, were used as a basis for the case descriptions, that were searched through for patterns. A similar procedure was used in relation to the method development within the different organizations. The patterns identified based on the case descriptions were again compared and discussed in the light of available theory. Throughout the analysis, the NUDIST software supported the access to data, relevant to the different analysis steps.

A typology of knowledge in organizations

Given the purpose of this chapter, to identify the knowledge system in consultancies, a framework for the labeling and discussion of knowledge in

organizations is required. A first effort in this direction was made in chapter three, identifying a number of different kinds of knowledge (among others theory, techne and phronesis). Two dimensions were identified as capturing important differences in the character of the different kinds of knowledge. These dimensions characterized knowledge according to whether it is tacit or articulate and abstract or specific.

In the following section, I will elaborate on these dimensions somewhat and add a third dimension. The focus of the discussion of knowledge in chapter three was mainly on an Individual level. In order to introduce the organizational level, a third dimension is added which characterizes knowledge on an individual – organizational dimension.

In addition to discussing these three dimensions of the character of knowledge, the following section will also discuss movements along the dimensions (see Figure 9.1). These have traditionally not been discussed to any great degree in the literature, but this has changed in the more recent literature, in which trends towards more dynamic theories of knowledge can be observed. These trends have contributed to turning the interest to the relations and the processes of transformation between knowledge of different character (Hedlund, 1994; Nonaka, 1994; Nonaka and Takeuchi, 1995).

Three dimensions describing the character of knowledge

Articulate vs. tacit knowledge. The first dimension describing the character of knowledge is the articulate – tacit dimension (Hedlund, 1994; Nonaka, 1994; Nonaka and Takeuchi, 1995). Articulate knowledge is verbalized, or easily verbalizable and thereby easily transferable from one person to another. Examples of articulate knowledge in consulting organizations are different types of checklists, manuals, etc. describing appropriate actions in different situations.

In the definition of tacit knowledge, I follow Polanyi (1967), who describes this knowledge as non-verbalized, often even non-verbalizable and intuitive. The non-verbalizable character of this knowledge makes it difficult to transfer to others. Polanyi describes the process of transferring tacit knowledge as a process of “indwelling”, in which a novice tries to enter the thoughts of the expert (see chapter three). This is facilitated by extended face-to-face interaction generating shared experiences (Nonaka, 1994). An example of tacit knowledge in management consulting is the consultant’s judgment of the client’s organizational culture. Consultants often have a quite clear understanding of what this is about and the related do’s and don’ts, but they seldom can articulate the procedures and clues through which they arrive at this understanding.

Abstract vs. specific knowledge. A second dimension capturing important aspects of the character of knowledge concerns its level of abstraction, which will be referred to as the abstract - specific dimension (Lillrank, 1995). By abstract knowledge I mean knowledge that “goes beyond the directly observable in understanding the meaning and dynamics of business processes in their original context” (Lillrank, 1995:975). This knowledge is relatively distant to its empirical basis but on the other hand has a wide applicability. Abstraction also facilitates the transfer of the knowledge from one context to another. An example of abstract knowledge is the type of knowledge presented in the consultancies’ promotional material about concepts and methods.

Specific knowledge, on the other hand, is close to a specific empirical situation and therefore more complex than the abstract knowledge. This complexity makes it more difficult to transfer widely, but given that an identical situation with regard to central variables is found, it can be easily transferred through a process of copying (Lillrank, 1995). Examples of specific knowledge are the growing databases of cases of “best practice” consulting companies accumulate. (See also chapter three).

The abstract - specific dimension partly overlaps with the dimension representational - narrative knowledge presented by Tenkasi and Boland (1993). Narrative knowledge represents the construction of an experience in terms of a story and is in this sense preceding the creation of the more general and abstract representational knowledge that emerges as a result of a synthesis of narratives. The advantage of the specific, narrative knowledge represented for example by documentation of completed projects is its ability to transfer among consultants, what is normally viewed to be tacit knowledge by making the implicit and tacit possible to infer from the story (Boland and Tenkasi, 1995).

Individual vs. organizational knowledge. A third dimension capturing differences in the character of knowledge departs from the sharedness of the knowledge – is it “known” only to the individual, or is it shared by the whole organization? In my study of knowledge in consulting companies I found examples of checklists both on the individual level (developed by a specific consultant and used exclusively by her) and on the organizational level (part of the company’s overall method and widely used by all consultants) (c.f. chapter six). Knowledge on the organizational level can be stored in a number of different ways. Starbuck (1992) identifies three such “containers” of organizational knowledge – capital, routines and organizational culture.

Processes of knowledge transformation – movements along the dimensions

Movements along the three described dimensions are important to the generation, storage and transfer of knowledge within consulting companies. Hedlund (1994), who in his model of knowledge categories and transformation processes, uses the first and third of the above-described three dimensions, suggests the terms “articulation” and “internalization” for movements on the tacit - articulate dimension and “extension” and “appropriation” for movements along the individual - organizational dimension.²⁹ Finally, based on Lillrank (1995), the terms “generalization” and “application” are proposed to designate movements on the abstract - specific dimension (see Figure 9.1).

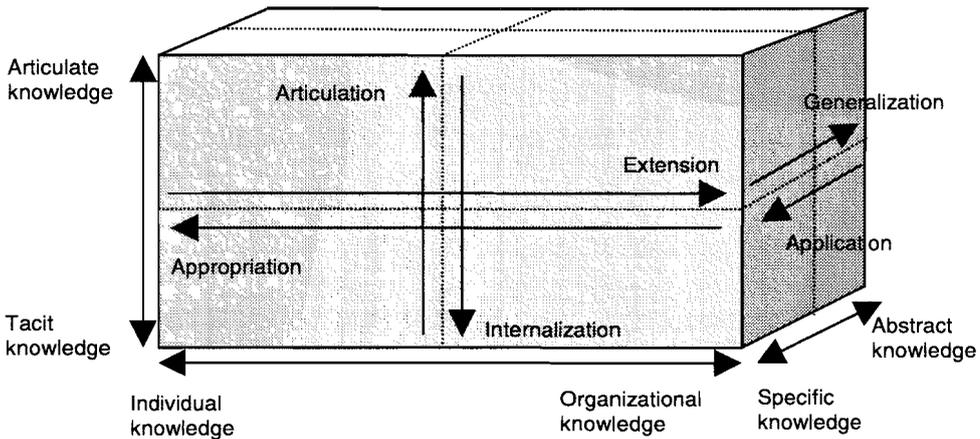


Figure 9.1. A model of knowledge categories and processes of transformation between them

In the process of *articulation*, tacit knowledge is made articulate (as far as possible). The articulate character of knowledge facilitates its transfer. It is also important for the development of the knowledge, as it allows for its critical scrutiny and testing.

The opposite to the process of articulation is the process of *internalization* in which articulate knowledge is internalized by the individual consultant, making the knowledge available with less cognitive effort and attention. Activities earlier requiring large efforts of analysis and thought become routinized. (Hedlund, 1994)

²⁹ In Hedlund (1994), the individual – organizational dimension is more elaborate, containing the categories Individual, Group, Organization and Interorganizational domain.

When going from individual knowledge, towards organizational knowledge processes of *extension* are at work. In this process the individual shares his knowledge with the rest of the organization. When this sharing concerns articulate knowledge it will often take place by means of written or spoken language, if it concerns tacit knowledge it will require face-to-face interaction in real-life situations – such as the senior consultant coaching the junior consultant in a project. Nonaka (1994) terms this process “socialization”, emphasizing the transfer of mental models from one person to another.

The reverse process, in which knowledge generally available in the organization is transferred to an actor’s (e.g. a newcomer’s) own knowledge is termed “*appropriation*”. An example of this process is when young consultants are provided with the organization’s method manual, or “socialized” into the organization’s specific culture during the day-to-day work. As the alert reader may have realized, the processes of extension and appropriation are hard to keep apart when it comes to tacit knowledge.

In the process of *generalization* lessons learned in specific situations (client projects) are put together and analyzed in order to find generally applicable patterns (Lillrank, 1995). This process often goes hand in hand with a process of articulation, for example, when new methods are formulated on the basis of consultants’ accumulated experiences. But this need not be the case. Patterns can well be recognized “tacitly” and enacted in the consultant’s future actions (Weick, 1995).

Moving from abstract knowledge to specific knowledge to be used in an idiosyncratic situation, finally, is termed “*application*” (Lillrank, 1995). In this process, the abstract, general knowledge is made applicable to a specific situation. More or less explicit choices are made regarding the knowledge’s suitability and the need for its adaptation in the specific situation. Application can also involve the redefinition of the situation in the light of available knowledge. A very similar process labeled “translation” is described by Czarniawska and Joerges (1996).

Knowledge in management consulting – The alpha project

With this theoretical typology of the character of knowledge in organizations as a background, I will now turn to the empirical material regarding the use and handling of knowledge in consultancies. The main case in this respect is E&Y MC and more specifically the alpha project. In the following, I will describe this project in more detail, focusing on the ongoing planning activities in the project in order to understand the sources of knowledge in these activities, and the organization of these activities.

The alpha project

The alpha project is a quite large PER (Package Enabled Reengineering) project, that features the same consulting company as the case in chapter six (Ernst and Young Management Consulting). The client is a Scandinavian company, and the project is concerned with the redesign of the company's processes in the human resource function. Two processes out of a total of eight processes identified in a pre-study were chosen as a focus for the project. The first process is labeled "fulfillment of agreements" and concerns the administrative functions such as the issuing of paychecks, etc. The second process is concerned with "organization and management development" within the company.

For the consulting company, the project has a high priority. It is one of its largest projects ever, generating billings in the two-digit millions SKr. and involving a number of consultants for about twelve months.

The basic design of the change process can be divided into two broad phases. The first concerns the redesign of the processes and the second the configuration and implementation of the chosen standard system. Two different methods are used for the two phases. The first phase, comprising the activities "mapping of the current situation", "envisioning the future situation" and "elaborating the vision", is carried out according to the BPR-Norden method, described in detail in chapter six. The second part of the project, focusing on the prototyping of the new processes in the chosen standard package, and the subsequent implementation, is carried out according to a PER method adapted to the chosen SAP package.

In the following, I will concentrate on the activities during the mapping and redesign phases. But before looking more closely at the planning activities in these phases, a brief description of the organization of the project will be given. In this context, the consultants under study and their backgrounds will also be briefly presented.

Organization and key persons

The alpha project concerns the redesign of two distinct processes. These processes have few interdependencies and differ substantially in character. Consequently, the need for coordination between the two is limited. In the following I will focus on the organization of the first project, concerning the process "fulfillment of agreements".

The organization of each of the two sub-projects is built on two parallel structures (Figure 9.2). One is made up of the client's personnel and the other of E&Y MC's personnel. On the project leader level there are two project leaders

– one from the client company and one from E&Y MC. The same is observed on the sub-project level, where there is one sub-project leader from the client organization and one “method support” from E&Y MC (see Figure 9.2). This structure creates two lines of command – one for the client company personnel (internal project leader → sub-project leader → project group) and one for the E&Y MC personnel (project leader E&Y MC → Method support). The integration between these two hierarchies takes place through meetings, where planned activities are discussed. This is elaborated on in the next section.

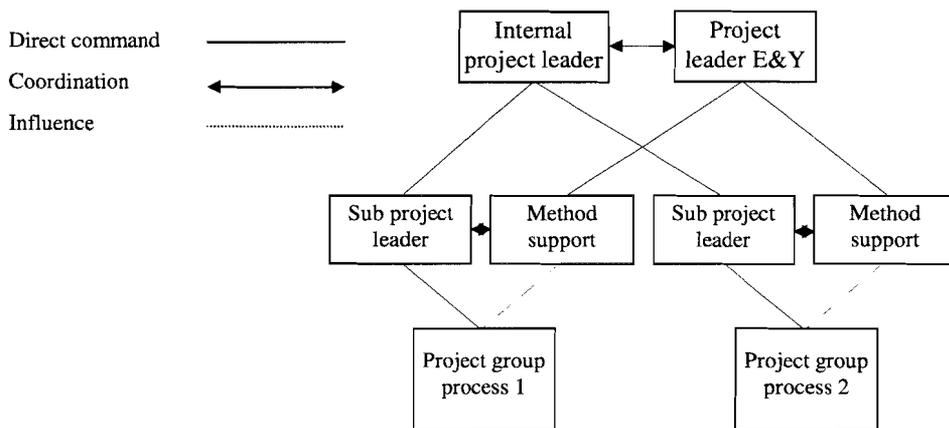


Figure 9.2. Organization of the alpha project

The two parallel hierarchies have different responsibilities in the process. The client hierarchy is said to be responsible for project leadership, whereas the consultant hierarchy is responsible for process leadership:

She [sub-project leader] deals with all the practical issues, and I [method support] deal with issues related to the method and the activities in the project. She is responsible for the presence of the participants, when we start and stop, as well as the contents in the results of the process. (Philip)

The main responsibility of the E&Y MC project leader and the method support is the realization of the process, i.e. to ensure that the project is successfully taken through the different activities identified by the method. The following analysis of the planning activities in the project and the knowledge sources in this planning, focuses on the first sub-project concerned with the redesign of the “fulfill agreements process”. The consultants involved in the work with this process (project leader and method support) will be briefly presented in the following.

Andrew – the project leader. Andrew is in his early thirties. He took his degree in civil engineering at the end of the 1980s, and started his career at a competing consulting company, which he left for E&Y MC about ten months

before the launching of the alpha project. Andrew began his career at E&Y MC on day one with a project, for which he had the sole responsibility. This forced him to quickly learn E&Y MC's method:

I learned the method through being responsible for my own project from day one. I studied the method in the evening and applied it to the project the morning after. This is in my opinion the only real way of learning a method. You can study a whole lot of methods but you don't really understand them before you start working with them. This was the way I learned the method and it was no problem. (Andrew)

Philip – the method support. Philip, who is in his mid twenties, is also quite new in the E&Y MC organization. He entered the company about eight months before the start of the alpha project, coming directly from the university, where he had studied a number of different subjects ranging from political sciences to economics. During the last term, he participated in a management program, with a practical focus. In this program he carried out a reengineering project in a company.

Since then, Philip has been involved in five projects. In the first two projects, which took place in parallel, he had the role of documenter, assisting a senior consultant. This gave him a thorough understanding of the consultant's role and the methods of the organization. In the following projects, he took increasing responsibilities for different tasks in the change process. His current role as a method support in the alpha project gives him an increase in responsibility as compared with previous roles.

Approach to planning

In order to understand the structure of the knowledge system in the ongoing design and redesign of a consulting project, an understanding of the approach to planning is necessary. This understanding will be provided in this section.

The planning of the activities in the alpha project can be described as taking place in three different steps. As a first step, the premises for the project are set and time and budget constraints are determined. In the second step, the detailed structure of the redesign phase of the project is determined. The third step in the planning process is the recurring detailed planning of the specific seminars. In the following the procedures and responsibilities for each of the planning steps will be described in more detail.

Step 1 – Setting the boundaries. The first step in the planning process of the project was carried out in connection with the proposal process and the following negotiations between the client and the consultant. In this process, the premises for the project in terms of time, money, overall focus and approach

were defined. This work was carried out by a senior consultant, one of the founding partners of the consultancy.

Step 2 – Defining the process. Following the acceptance of the proposal by the client, the responsibility for the project was transferred to Andrew. The first question to determine was the choice of the method to be applied. The alternatives were the local BPR-Norden method or the international Fusion method. Based on a comparison of the methods' content and a judgment of the consultants' experience of the methods, the BPR-Norden method was chosen for the initial redesign phase.

Based on the overall premises set out in the proposal, the detailed design of the project plans for the two sub-processes was initiated. The detailed project plan specified, on a meeting-to-meeting basis, what should be done when. For each meeting, the overall theme was determined, as well as its necessary inputs and desired outputs.

As a background to the planning of the two projects, Andrew collected a number of project plans from completed similar projects. These were available in E&Y MC's computerized knowledge database, where the documentation from all completed projects is stored. A second important aid for Andrew in this process was E&Y MC's "automated method environment" (AME). This computerized tool, based on E&Y MC's "Fusion" method, was used to produce a first draft of the project plan. Andrew then altered this draft in order to fit with the chosen BPR-Norden method and the budget agreed for the project. Some of the activities prescribed by the method could also be omitted, such as the activities related to the choice of IT application. This was already chosen as a prerequisite for the project. Andrew's design of the activities in the different sub-projects was then discussed with the method supports in the sub-projects, in order to obtain their comments, and check the design with their competence profiles.

Step 3 – Determining the detailed layout. Following the design of the process in terms of which meetings should be held with whom and when, an iterative process concerning the exact layout of the respective seminars was initiated. The planning process preceding each project group meeting is described in the following way by Philip, the method support in one of the sub-projects:

I normally start from the phase we are in. This is in the back of my mind all the time. You have to be clear on the context in which you are acting. Then I have a look at the project plan to find out what the meeting should include and what we should have accomplished after the next meeting in order to keep to the schedule. Certain activities have to be carried out at certain times in order to ensure that the results are there when they are needed.

If I need help, or don't understand something, I can consult the method. The project leader [Andrew] and I also have a meeting before each project group

meeting, where we talk over what we want to cover in the next meeting. We start talking about how the project is going, how the previous seminar went, how it feels, whether there are any problems, etc. Then we design a step-by-step agenda for the content of the next meeting. As he has the overview, he also tells me what deliverables should be produced at the meeting. It's very much a discussion. I don't get a note where it says "do this..". The project leader is more experienced, which is why it is efficient for me to listen to him and make use of his experience.

I then take the agenda and plan it in detail. How I realize it – how I start the meeting, which techniques and tools I want to use, etc – is up to me. Here I can consult the method, and see, whether it recommends any specific approach. But I haven't done that much. I know these methods by heart.

I then have a meeting with the client's project leader. I present my view of the project, the problems as I see them and the agenda for the next project group meeting. Of course, I explain the motives behind each step. I also ask the client project leader, whether she wants to add anything. Then we decide on the final agenda and realize it during the meeting.

The agenda is used in a similar way during the seminar. I start with presenting the agenda, and ask whether anybody wants to add anything. Then we start working according to the agenda. But you have to be flexible – add or skip steps, allocate more time to activities that feel important, etc. (Philip)

In this iterative planning process, the exact content of the redesign process is gradually determined – most often within the set boundaries, i.e. the predefined project plan. But in some cases this was also altered, changing the number and sequence of meetings as a result of client wishes. The project plan is seen as an overall structure for the process that is to be filled with content as the process proceeds. The reason for this iterative planning, according to Philip, is the need for adaptation of the process to the specific situation. It is hard, it is claimed, to plan a seminar that will be held in a couple of weeks in detail, as the knowledge of the situation then and the client's preferences is limited:

You have to continuously adapt the approach to the client. The client and us have to go hand in hand. Therefore it is impossible to plan the details in advance. You have to be sensitive and flexible to the client's wishes and demands. (Philip)

The planning of the activities in the change process is thus an ongoing, iterative activity involving a number of different actors. The main actor in this case is the method support Philip, who is responsible for the realization of the sub-project. In his planning process he seeks input from both the E&Y MC project leader Andrew, with his greater experience and overview of the project, and the client's sub-project leader, who has the detailed knowledge of the client's characteristics, intentions and wishes.

Noteworthy in this description of the planning process is its hierarchical organization. The detailed planning process carried out by the sub-project

leader Philip with the support of the project leader takes place within the boundaries set by the project plan defined by the project leader Andrew. This project plan in turn is limited by the budget negotiated by the responsible partner. This indicates that increasingly experienced consultants are involved, the more holistic the design task becomes.

Sources of knowledge

Having described the planning process on different levels, and the division of labor in this process, I will now turn to a closer analysis of the sources of knowledge referred to by the consultants in the two phases of designing the project and realizing it. A source of knowledge is defined as something, which is referred to by the consultant in order to determine what actions to take.

Knowledge in project design

The first step in the more detailed design of the project was the determination of the activities to be carried out in the process and their distribution over time. In this phase especially three sources of knowledge were identified. The first was the project plans from similar completed projects, that were obtained as a source of inspiration from the knowledge database. The second source of knowledge were E&Y MC's methods. The automated method environment, containing the Fusion method, generated a first set of activities for the project. This list of activities was then adapted to fit the BPR-Norden method, the specific characteristics of the project (e.g. the standard package to be used had already been chosen) and the set of budget constraints. No external guidance is mentioned in regard to these adaptations, which leads me to the identification of a third source of knowledge – Andrew's experience of carrying out similar projects.

Knowledge in project realization

Having looked at the sources of knowledge in the overall design phase of the project, I will now turn to the sources of knowledge (inspiration/ideas) in the ongoing process of determining the actions in the project.

A reading of Philip's brief description of the planning process (page 264) gives a first insight into some sources of knowledge. The point of departure for the planning process is claimed to be Philip's internalized knowledge and intuitive understanding of the process, which "is at the back of [his] mind all the time". But in order to get a more detailed picture of the requirements in the specific case, the project plan is also studied in order to find out "what we should have accomplished after the next meeting in order to keep to the schedule". In the

case of ambiguities in the project plan or otherwise, the method can be consulted.

Having acquired this background, the meeting with Andrew (the project leader) takes place. In this meeting, the detailed layout is determined in a discussion. Philip here underlines the importance of Andrew's experience. "The project leader is more experienced, which is why it is efficient for me to listen to him and make use of his experience". Finally, when it comes to the exact determination of techniques to be used, Philip again mentions the method as a source of inspiration, even if he now knows the relevant methods by heart.

In this brief description of the process of planning the details in the change project, three sources of knowledge are identified. The first one mentioned is "experience". Philip refers both to his own experience as reflected in his internalized view of the method and to Andrew's greater experience, which is described as a very important input. A second source of knowledge is the method, which is consulted for clarification of and inspiration for activities in the process. Finally, the project plan is mentioned as a source of detailed knowledge of the specific approach in the alpha project. These three sources of knowledge – experience, methods and documents produced in projects, are not specific to the planning process (page 264), but are repeatedly mentioned as knowledge sources during the entire visioning phase of the project.

As already indicated in the above description of the planning process, the knowledge source "experience" – both own and that of colleagues – seems to have a superior position compared with the other knowledge sources in the detailed planning process. This confirms the observations in the previous chapter, which indicated that the consultants' choice of action is to a large extent intuitive, in the sense that it is not based on a direct application of the method in use. Instead, "the right way to do things" is constructed by the consultants in the interactive planning process. In this process, Philip claims Andrew's experience to be an important resource, that is partly a substitute for the detailed use of the method:

I listen a lot to him [project leader] and take advantage of his experience instead of consulting the method.

You can approach this in two ways. Either you consult the method and follows this rigidly, or you use the experience of the project leader. I think it is better to trust the project leader's experience and use the method as a backup. (Philip)

The primary role of experience as a source of knowledge, as compared with the method, is by the consultants attributed to several facts. Firstly, the alpha project is described as similar to projects run previously by both Philip and Andrew. Therefore they knew what to do, without directly consulting the method:

I have run so many [visioning seminars], that I don't feel, I have to look in the method. (Andrew)

But familiarity with the approach is not the only reason held forward for the importance of experience as a source of knowledge. Some of the choices to be made were also described as difficult to capture in a method. An example of such a choice is the exact layout of the visioning seminar. The overall agenda for the seminar is highly standardized, but the application of it and the exact activities under the agenda items depend on the specific situation. In determining these, the method gives little support, and again, the consultant's experience is identified as a key factor.

But even if "experience" seemed to be the major source of knowledge in the detailed planning of the project, the method occasionally came to a more direct use as checklist. In a few instances, the consultants said they had directly looked in the method in order to "check that one had not missed any issues on the agenda" (Philip) in the meeting that they were planning.

Besides the methods, the consultants also mentioned their own, and others', completed cases as sources of ideas for meeting agendas and process structures. The cases were even regarded as more important than the methods:

I return to the previous cases. I do not consult the method, but look at how I did it the last time when I prepare my meeting with Andrew, and I presume that he acts in the same way. You may glance into the method in order to ensure that everything is included. (Philip)

In the database of completed projects there are a large number of documents illustrating how different documents in the visioning phase can look. There you can get ideas for how to summarize the results of different steps of this phase, etc. (Andrew)

Others' cases were to a large extent found via the company's computerized knowledge database, where all completed projects were documented. These cases were used both to generate ideas about the process (e.g. agendas, documentation templates) and solutions.

But the input from other projects often took a more direct route via formal and informal encounters within E&Y MC. In the latter phases of the project, when it came to the visioning phase and the elaboration of the vision, the idiosyncrasies of the project increased. This created a need for client-specific solutions. In this phase Philip drew heavily on his personal network and the computerized communication networks within E&Y MC. An example of knowledge sought for were humorous stories about the business of the client. These should be used as an icebreaker in the visioning seminar. Philip sent out a question via the mail system and got back some useful articles.

The analysis of the knowledge sought and applied in the more detailed planning of the consulting process reveals very similar sources of knowledge as the ones identified in relation to the activities of the overall planning of the process. Recurring are the experience of the consultants, the methods and documentation from other completed or ongoing projects within the consulting organization.

Three elements founding the knowledge system

In the brief description of the sources of knowledge in the overall design of the alpha project, and the detailed design in one of the alpha sub-projects, three different sources of knowledge were recurrently identified. These are the individual consultant's experience, formalized methods and documentation of cases (see Table 9.1). The consultants recurrently consulted these sources of knowledge in order to determine their day-to-day activities. These three sources of knowledge are what constitutes the basic elements of the knowledge system.

The knowledge element "the individual consultant's accumulated experience" comprises the knowledge, which the consultant has internalized as a result of his involvement in different consulting projects. It represents the consultant's feeling for "the right thing to do" in a specific situation. Blackler (1995) characterizes this "embodied knowledge" as action-oriented and mostly tacit. It is also primarily individual in terms of the knowledge typology developed earlier. The tacit character of this knowledge element represents both its strengths and weakness. Due to its tacitness, it is available to the individual consultants with a minimum of cognitive effort (Hedlund, 1994). But the tacitness also makes it hard to transfer it to others in the organization. The transfer of tacit knowledge generally requires sustained interaction between individuals in relation to concrete projects.

The second knowledge element found was methods, which the consultants refer to as checklists and reminders. Methods document the "ideal" change process in terms of a large number of activities, which describe in detail what is to be done why, when and by whom. Tools provide specific support for these activities, in the form of checklists, questionnaires, etc. Methods thus represent articulate, abstract, organizational knowledge that is meant to be generally applicable to all change processes of a specific kind (e.g. process improvement projects). The main strengths of methods are their high level of abstraction, which makes them relevant to a large number of specific projects and their articulate character, that supports an easy transfer between individuals. But in the abstract character of the method also lies its drawback. The main challenge for the consultants is how to act in a very specific case. Here the abstract method is often of less help, especially in situations that are not highly predictable and stable (c.f. the characteristics of methods as a kind of *techne* identified in chapter three).

The third observed knowledge element includes all kinds of documents produced in connection with previous cases, such as project proposals, process maps, final reports etc. In terms of the typology of knowledge, these old cases can be characterized as articulate, organizational and specific. The strength of the knowledge element “old cases” emerges from their being articulate and specific. Being articulate makes them easy to distribute via the computerized knowledge system. Their specificity makes it easy for the consultant – given that he has found *similar* projects – to use these old proposals as helpful models. The advantage of the specific knowledge compared with abstract guidelines provided by e.g. methods is that they normally are much more elaborate and detailed. The characteristics of the three knowledge elements are summarized in Table 9.1.

	Experience	Methods	Cases
Description	Accumulated experience from practice	General description of a sequence of activities in the change process	Documents produced in projects, e.g. process maps and proposals
Position in the typology of knowledge	Tacit Individual Varying levels of abstraction	Articulate Organizational Abstract	Articulate Organizational Specific
Characteristics in the knowledge system	Guides action; hard to transfer; transfer requires extended face-to-face interaction	Widely applicable; easily transferable; seldom guide action in a specific case	Limited general applicability, but valuable as models, when similar cases are found; easily transferable

Table 9.1. The characteristics of the three knowledge elements founding the knowledge system

These three elements of the knowledge system show similarities with the three kinds of knowledge identified by Göranson (1988) (chapter three), which partly supports the comprehensiveness of the elements of the knowledge system. Göranson’s three kinds of knowledge are practical knowledge, which is obtained from experience, knowledge of familiarity, which is based on the study of examples and finally propositional knowledge, which is the kind of knowledge expressed in general theories, rules and methods. Experience in the consulting company thus corresponds to practical knowledge, cases to knowledge of familiarity and methods to propositional knowledge.

Having identified these three elements of the knowledge system, I will now increase the level of generality by testing their applicability in the case of E&Y MC more generally of the three elements in International and ABB-MAC.

The knowledge system in E&Y MC

In describing the alpha project in terms of knowledge sources in the planning activities, a sketchy picture of the knowledge system in E&Y MC was provided. Documentation of cases, individual consultants' experience, and methods were identified as the elements constituting the knowledge system. In this section, I will turn to the knowledge system in E&Y MC more generally, in order to increase the understanding of it and test the validity of the knowledge elements identified in the alpha project. I will start by describing the knowledge element "documentation of cases" and then turn to the element "experience". Lastly, I will look at the methods of E&Y MC and their role in the knowledge system. The characteristics of the knowledge system are summarized in Table 9.2, p. 287, following the description of the knowledge systems in two other consultancies, International and ABB-MAC.

Documentation of cases

Examples from previous cases played an important role in inspiring the actions of the consultants in the alpha project. In the initial planning of the project, project plans for similar projects were collected and in the realization of the project, inspiration was obtained from other projects' agendas. Solutions to how the new processes within the client company could look in the future were also sought from other cases. The access to this knowledge was facilitated by E&Y MC's computerized knowledge database, that gave access to information about both national and international projects.

The knowledge database is divided into three parts. The first is the total database, containing documentation of a large number of cases. A second part contains a condensation of projects, presenting only the best. The third part of the database contains the best of the best, structured into so called "power packs", that exist for different industries (e.g. finance, aerospace) and processes (e.g. procurement process). These power packs, which are the most widely used part of the knowledge database, contain information especially adapted to the different themes:

They contain for example different presentations and different agendas for different meetings... They contain adaptations of the method to the requirements of specific processes. You still have to have the method, but when the method says "produce an agenda for the visioning seminar including the following ten items" you can consult the power packs and find ten projects

concerning the accounting process and the agendas used in these projects. (Henrik, coordinator of method development in E&Y MC)

There are power packs – stories of completed projects. These describe how the project went, which results were produced, which activities were pursued, etc. These exist for a large number of industries and are very valuable. (Philip)

Power packs thus provide an extension of the method in the sense, that they illustrate its application in specific cases. Examples of issues covered in power packs are process models, marketing support, educational material, benchmarks, etc. The structure of the material and the language used in describing the different projects follows the language of the international Fusion method. In addition to examples from different cases, power packs also include more general information, such as articles published about the industry in question and information about persons involved in the expertise network linked to each power pack.

The cases referred to in the power packs are mainly American (mainly due to language reasons). Swedish cases are documented in another knowledge database. This contains the entire documentation around each project. The documentation is structured in a standardized way, following keywords in the method:

We try to link as much as possible to the structure of the method. Our project databases should be structured according to the method, making it possible to obtain extracts from the projects according to keywords in the method, such as solution models, benchmarking, best practices, process models, specific adaptations of the method, parameter matrices, etc. It should be possible to report those separately, so that we can, for example, search for the handling of credits in the banking industry and find process models, parameter matrices and solution models³⁰. (Henrik)

Even the documentation of the Swedish cases is structured in a standardized way, following the structure of the method. Again, the method's role as a structuring device becomes apparent.

Even if the content of the databases normally gives a quite detailed picture of the projects from which they emerged, a search in the database often leads to a personal contact with someone involved in the project:

You often obtain a more detailed picture after having read a report by calling the person responsible and posing more specific questions. But it depends on the use of the reports. If you want an overview, it may be sufficient to glance

³⁰ At the time of the study, this system was under implementation. The projects were available through the network, but the structure and a common search engine within this structure was still to be implemented.

through ten reports of similar projects all over the world, and then call someone, or you find what is needed in the report. (Philip)

Often you can't use the information in the case exactly as it is. You then have to talk to XX in order to get more information. The database of cases should be viewed as knowledge accumulation, and a search motor. You see what is interesting and what is not worth investigating further. (Henrik)

This indicates that the knowledge database in E&Y MC has at the least a dual function, where the first is the direct transfer of knowledge between different projects and the second the establishment of contacts for a more personal transfer of experience in relation to specific projects. The latter point, based on the claimed insufficiency of the documentation from projects, supports the assertion that a large portion of the valuable knowledge in management consulting is of a tacit kind, which leads me to the second knowledge element in E&Y MC – Individual consultants' experience.

Individual consultants' experience

In the brief description of the sources of knowledge in the alpha case, the consultants' experience – a mostly tacit knowledge – was identified as central in the planning process. This is illustrated by the observation that a large portion of the decisions made was described as intuitive (the consultant just “knows what to do”). Another indicator of the importance of experience within the consultancy was Philip's reference to Andrew's wider experience as a main source of knowledge in the planning process.

The individual consultant's experience is by the consultants described as a success factor in consulting. This knowledge element is what enables the consultant to become successful in his practice and cannot be (according to the consultants) substituted by methods:

The method serves as a structure, not as a replacement of knowledge. You can't give a method to an inexperienced consultant and expect that he can run a project. (Henrik)

As indicated, by for example the intuitive character of the planning process, “experience” is to a large extent tacit. Large amounts of the knowledge in E&Y MC thus exist in a more or less tacit form in the minds of the individual consultants. An example of this tacit knowledge is knowledge of a specific client company's culture, or the knowledge required to choose the right depth in the mapping phase:

[When choosing the level of detail in the mapping of the organization] experience is again important. There I have had good help from Andrew. Being new, there is a risk of being too ambitious, of producing a too detailed mapping, wanting to know all the details. But if you have done it before, you usually stop on a lesser level of detail. This is experience. (Philip)

This knowledge is described as “experience-based” and hard to formalize. Given the mainly tacit character of the knowledge element “experience”, the organizational usage of it, and its transfer requires direct interaction around specific projects. Philip’s description of how one gains information about a client company’s culture illustrates this point:

An important source of knowledge of the culture in a client company is the personal network. You can also use the knowledge database to contact people, who have experience from different industries and companies, in order to get their advice on what to think about in a specific situation. (Philip)

This illustrates the point made above, that the knowledge database is often used in order to identify the right people. It also makes the point that some knowledge, particularly the often tacit knowledge termed “experience”, is best transferred through direct contact with an experienced person, with whom a specific case can be discussed.

In E&Y MC, several arenas can be observed, where the individual consultants’ experience is made available and transferred to other consultants, and where the individual knowledge, through sharing and transfer, is made organizational through discussions about concrete cases.

The most obvious arena (and possibly the most important) is the project. In projects, consultants with different backgrounds and levels of experience meet around a common task. The interaction between Philip and Andrew in the above-described planning process is a good example of how a senior consultant’s experience is made available and transferred to a junior consultant. Through structuring the project hierarchically according to experience, a high utilization of the experienced consultant’s knowledge is also ensured. In this case, the more experienced consultant’s knowledge is utilized and made available to two consultants in two sub-projects.

In addition to the direct involvement in projects, a number of other both formal and informal arenas are available for the sharing of experiential knowledge generated in the different ongoing projects. One such arena is the monthly project leader meeting, in which the project leaders meet in order to discuss their respective projects. This again is a way of making the experience of the individual consultants organizationally available:

The project leader meetings provide a feedback mechanism. At these meetings, information about the ongoing projects is exchanged. When I e.g. see that someone in another project does something in a successful way, it often happens that my project leader comes the day after and suggests that we may try this in our project. There is a coordination mechanism there. (Philip)

Besides the formalized arenas, a large amount of the experience exchange takes place on more informal arenas, such as meetings in the corridor or over a cup of

coffee. Philip describes the ongoing sharing of knowledge regarding the visioning seminar – a central activity according to the method – in the following way:

There is a lot of talk in the corridor. Everyone knows when the visioning seminar is held in the different projects. You ask “did you use this? Did you try that approach? What were the effects? etc. (Philip)

The experiences gained by individuals in their practice are thus shared as stories about concrete cases among colleagues. The experience of the other consultants in the company is also tapped on a need driven basis. As the culture with regard to knowledge in E&Y MC is described as building on own responsibility – every consultant has a wide-ranging responsibility to obtain the knowledge she needs – consultants often actively seek information from their colleagues. The identification of the “experts” in a certain area is supported by the knowledge database.

An important facilitator of the face-to-face transfer of knowledge between consultants is a common language and a shared perception of the change process. As will be shown below, the method of E&Y MC plays an important role in providing this.

Methods

Even if the description of the knowledge sources in the alpha project revealed the method to be a secondary source of knowledge in the planning process of the day-to-day activities – experience was seen as considerably more important – methods were described as a central element in the overall knowledge system. Both Philip and Henrik, the coordinator of method development, describe them as “the backbone of the knowledge system”.

E&Y MC has a tradition of working with and developing methods. All the consultants are expected to know and apply the methods in projects, where they are applicable. But a closer look at the planning process in the alpha project revealed that the actions of the consultants are not directly based on a close study of the method, but rather on an internalized picture of the method. Philip describes his use of the method in the following way:

There are firm requirements that you know the method. Consequently I have it in my head. It sits there quite firmly. So even if I don’t directly consult the method binders, I think in terms of the method. If I don’t remember or if I am unsure, I have a look in the method binders.

When thinking of the method, you mainly think of the overall working steps, rather than the detailed list of activities. I see the method more as a thought model, with certain recurring steps and basic building blocks one can learn. Once learned, you can build more freely with them.

It [the method] is like a conceptual backbone. We certainly follow the method, but we are also continuously involved in discussions about the suitability of different steps. Sometimes we have to skip activities. I perceive the method as a framework, which we fill in on the way with what we find suitable. We do not sit with all the steps written out in front of us and then skip over some of them. Rather we take the 150 steps that work. The others are not included. (Philip)

These citations confirm the conclusions in the previous chapter. Action is to a large extent intuitive, i.e. not based on a mechanical application of the method, but it is still influenced by the method, via the mental models of the consultants, into which the method is internalized. Philip explicitly describes the method as a “thought model”, and claims that he “thinks in terms of the method”.

However, some references are also made to a more direct use of the method. This can be the case in situations of uncertainty, where the consultant has forgotten how to carry out a certain activity or wants to ensure that he hasn’t forgotten anything. The direct use of the method could also be observed in connection with the launching of a new method version. Such a release was normally carefully studied by the consultants, in order to learn the novelties:

When I began, a new version of the method had recently been released. When the method is new, it is thoroughly followed. Before each new step, the method is consulted. Then it was much more current and the binders were much more present. Now I have learned it. You learn it in the beginning. It is required that everybody knows the method. You can’t say that you don’t know or have forgotten a step. (Philip)

In a similar way, the method was also regarded as more important for newcomers in the organization. Methods were regarded as a fast way of learning the basics. But as the above citation indicates, it seems as if the method is quite rapidly internalized. This is well understandable as this procedure greatly economizes on the consultants’ cognitive capacity (Hedlund, 1994).

The direct use of the method was also said to be more widespread in the initial phase of the project, when the overall structure of the process is laid out. In this phase, the method provides a first model of the change process, which can be compared with the internalized change model, in order to validate it, and to ensure that one has thought of everything. This role of the method, that of being a contrast against which to validate one’s own mental models, was also observed in later stages of the project:

But sometimes the detailed method is brilliant, when you don’t really know how to proceed. To have the possibility to study the detailed steps is of great help. It can help resolve hang-ups in you own thinking, or when you have spent too much time with the client, starting to take on his perspective. In these cases, a look at the method, what exactly is included in the next step, can be of great help. (Philip)

In this case, the method's representation of the change process was a way for the consultant to distance himself from the situation in order to get some new ideas and a more "neutral" perspective.

A common denominator for all these uses of the method in E&Y MC is the method's ability to provide an abstract and generally applicable structure to the change process, defining a number of steps and their sequence. This shared structure to the change process is an important leverage in the overall knowledge system as it facilitates the sharing of knowledge in the organization.

In E&Y MC, the language provided by the method in terms of phases, activities, measures, forms, etc. is described as facilitating the communication between consultants:

Another important function of the method is to create a common language, so that when I say process model, everybody knows what I mean. This is always important when you want to rapidly exchange information within or between projects. In these cases it is very important that everybody talks the same language. (Henrik)

The method also has an important communicative function. It provides a number of words, which designate specific objects. The words provide a communicative basis. If, for example, Andrew says "visioning seminar" I know exactly what is meant. The language supports the creation of a common view. To outsiders, the language might sound as "mumbo-jumbo", but internally it is important for communication. If you have the language as a basis and combine it with tools and experience, it is a very powerful combination. (Philip)

The method thus supports the establishment not only of a common language, but also of a shared view of the change process, that, according to the E&Y MC consultants, greatly facilitates the exchange of experience between them. This is important, as a majority of knowledge exchange within the organization takes place through direct interaction between consultants.

An example of "language creation" based on the method could be observed in a planning meeting between "computer experts" and "visioning experts" in the alpha project. The "computer experts" had a limited experience of the BPR-Norden method. The theme for the meeting was the integration of the visioning phase and the IT system implementation prototyping phase. As the short dialog below illustrates, the method was used directly in this communication.

Andrew: "How do the scenario descriptions enter the SAP process?"

Computer Consultants: "It depends on what you mean by scenarios. It can mean a lot of different things."

Andrew explains: "In principle we mean business events."

Philip, shows a page in the BPR-Norden binder depicting a table: "Is this what we are talking about? Should we describe these verbally too?"

Andrew: “Yes, we have to. Organization, which persons, information requirements...”

Philip shows another page in the method binder: “Thus something like this...”

This situation illustrates the use of the method’s notions as a communication device common for those who know the method. For outsiders, on the other hand, the method’s notions are not at all as clear. In such cases of uncertainty, the method is used in order to “define” the disputed notion.

The structuring role of methods in E&Y MC not only concerns the change process and the communication about it, but also the knowledge system more generally. The method structure determines the storage of completed cases in the company’s knowledge database and the organization of the more formalized knowledge creation activities. These activities are organized into groups responsible for the development of different aspects of the method.

Finally, one can also find examples within E&Y MC, where the method is used in order to profile a consultant in terms of competence. In the following example of a discussion concerning the exchange of consultants, the chapters of the methods are used in order to define competence requirements:

“We need someone who is good at chapter five in Fusion. Can we get someone from the US? Or Philip, he knows chapter three. He may be a good person for this New York project.” (Philip)

This indicates that the working of E&Y MC as a truly international consultancy, using consultants on an international basis, is dependent on the existence of a shared method:

A basic requirement of competence for our consultants is that they know the Fusion method in order to be internationally usable. If we want to be a part of the international organization we have to ensure that they can easily participate in international projects. (Henrik)

An important contribution of methods to the knowledge system is thus their provision of a common language and a set of notions that facilitate cooperation and communication.

Broadening the picture – the knowledge system in International and ABB-MAC

In the above section, the knowledge system in E&Y MC was described in terms of the identified three elements of the knowledge system – documentation of old cases, individual consultants’ experience and methods. These knowledge elements were found to produce a meaningful and comprehensive view of the knowledge system within E&Y MC. But how about other consultancies? Are the identified knowledge elements valid also in those cases and are their characteristics comparable to those identified in the E&Y MC case?

In order to shed some light on these questions, I will in this section broaden the view by presenting two complementary case studies (see Table 9.2 at the end of this section for a summary of all three case studies). The companies in the two additional case studies, ABB-MAC and International were presented earlier in connection with the simulations presented in the previous chapter. They represent suitable complements to the case of E&Y MC on the scale of size and handling of methods. In both these respects, E&Y MC represents an intermediate position, with ABB-MAC and International being extremes on the scale. ABB-MAC, with its forty consultants in total and ten consultants in the focused group, represents the small consultancy and International with its 300 consultants in Sweden the large consultancy. E&Y MC with about ninety consultants in Sweden lies in-between. When it comes to the handling of methods, ABB-MAC represents a case with almost no own method development, whereas International has a truly global method development. E&Y MC again has an intermediate position with an intensive own local development of methods.³¹

The below case studies are based on data collected in the interviews carried out in connection with the simulations. The main focus of these interviews was the knowledge sources in the proposal writing phase, but as shall be seen, the observed knowledge sources, constituting the elements of the knowledge system, as well as their characteristics, to a large extent overlap with those found in E&Y MC for the whole consulting process. Consequently, I argue that the below cases have some generality beyond proposal writing. For a more thorough description of the methodological aspects, see the section on data collection in the beginning of this chapter, page 254, and Appendix A.

I will begin this exploration of the knowledge systems in the two other consultancies with International, a worldwide consultancy based in the USA working mainly with large clients, and then turn to the smaller Swedish consultancy ABB-MAC which mainly works as an internal consultant in the Swedish ABB combine.

A large international consultancy (International)

International is a large, international consultancy based in the USA and involved in many different types of change processes. The structure of the company is hierarchical, and recruitment focused on young MBA's directly from university. In describing the knowledge system in International, the three

³¹ Even if E&Y MC has an intense global method development, the consultants in Sweden only to a limited extent directly participate in this.

elements of the knowledge system identified above will be applied as a basic structure.

An important input to the consultants' work with designing a project proposal is the *Documentation of old cases*. When producing a project proposal, old proposals and documentation from similar projects are a main source of information according to the consultants. The search for this documentation from similar projects is facilitated by the organization's worldwide knowledge database:

All proposals are stored in the database. Normally, you check existing proposals in similar areas, and talk to people who have worked on these projects, follow up, how much time it took etc..... Old proposals are reused in quite a few cases, mostly concerning presentation and logic and to ensure quality. (I3)

In the old proposals, consultants thus search for logical designs of the process, possible suggestions for solutions of the client's problem and estimates of the times needed for different steps in the process. In later phases of the project, consultants describe the documentation from these old cases as a valuable source of ideas for solutions of different kinds.

But the level of detail in the stored proposals and documents produced in and describing the project is seldom sufficient. Therefore, this information is most often complemented by personal conversations with people involved in the project.

When writing a proposal, you can find a suitable structure in the knowledge database. This can also lead to a conversation with somebody. (I1)

This leads over to the second element in International's knowledge system, namely *the individual consultant's experience*. A large amount of the knowledge available in International is not articulate and exists only in the heads of the individual consultants. The transfer of this knowledge to other consultants requires interaction. The main part of this interaction takes place in the project group (International's projects are normally large involving several consultants). Consequently, International puts some effort into the composition of the project groups. Given the specific problems to be solved, a group of consultants with a suitable mix of expertise is put together. In the selection of consultants both expert knowledge and accumulated experience are taken into account. Especially the latter – mixing senior and junior consultants – is described as the junior consultants' main source of learning.

But naturally, all relevant knowledge can never be included in person in a project group. This creates demands on information exchange within the whole company. This information exchange is facilitated by a clear organization in terms of competence. In order to make it easy to find the right person for

answering a specific question, there exist a number of expert networks responsible for the accumulation and dissemination of expertise in different areas. Within all these specified areas, there is always someone able to answer the consultants' questions. In order to increase the accessibility of these "experts", voice- and e-mail systems are in use. (For an interesting description of the implementation and working of such a system of experts in another consulting organization, McKinsey, see Peters, 1992).

Even if large amounts of knowledge in consulting organizations will always remain tacit, International puts large efforts into the process of articulation. The networks of experts mentioned above play an important role in collecting different individual consultants' experiences and articulating them into formal methods.

Methods in International exist for a large number of areas and problems and on many different levels of detail. Like the previously described elements in the knowledge system they are stored in the overall knowledge database. Methods are, by a consultant, described as a complement to the old cases. Methods transmit what is new in the company's way of working. By the means of this articulate, abstract, organizational knowledge, the state-of-the-art knowledge, which updates the personal experience is transferred.

When looking at the actions of the consultants in connection with the writing of a project proposal, none described their approach as directly steered by a method. Rather they described their approach as "at their fingertips" and steered by an overall perspective.

What method did you use in order to produce the project proposal?
(Interviewer)

It is a structure I know exists more or less. It is the way to structure a proposal, but I haven't touched a handbook. It is transferred from generation to generation. I know that these things should be included in a project proposal....

I don't sit down and get the "method for project proposals", but it is there in any case in some way. The first time you participate in the writing of a project proposal you learn 'this is the way it is, this is the overall structure...' and then you remember it. This is very much what exists in your mind (I1)

The way of working and the structure is ingrained, it is like riding a bicycle.
(I1)

This confirms the point made previously, that the actions of a consultant to a large degree are steered by knowledge with a mainly tacit character, which is influenced by the method. It seems that the consultants rapidly internalize the articulate knowledge represented by methods.

Even if the above indicates that methods are of less importance in the International consultants' proposal writing, they are attributed a more important

role in the analysis phase of the project where they are seen as valuable aids – but not without adaptation to the specific situation. The process of application in which this adaptation takes place is by the consultants described as crucial for success:

The method is for us mainly a reference object, but you can't put the method in the hands of an inexperienced consultant, and thereby achieve a successful project. But it is a way of making the consultant more professional and learn faster than they would without anything. But you should not become a slave to the method. (I3)

The process of application is to a large extent guided by tacit knowledge. General rules for how to apply the method and its activities to a specific situation with all its idiosyncrasies are very hard to specify and something that is described as learned through experience. (See also Stolterman (1991) and Fristedt (1995) who showed a similar pattern among IT consultants).

A small Swedish internal consultancy (ABB-MAC)

ABB-MAC is a considerably smaller consulting organization than both E&Y MC and International. The group within ABB-MAC focused on in this study works with process improvement projects and comprises of about ten consultants all located in the same office space. The organization is flat, with no formal distinction between junior and senior consultants. Recruitment is focused on persons with some business experience. ABB-MAC also differs from E&Y MC and International in terms of its primary market, which mainly consists of the subsidiaries of the ABB combine it is a part of. ABB-MAC is an autonomous company and the relation to the rest of the combine is of a consultant - client character rather than a staff - line character. The knowledge system in ABB-MAC is considerably less formalized than that of E&Y MC and International. It shows the same elements but their use, relative importance and elaboration differ.

Documentation of old cases. Generally all proposals as well as documentation such as process charts from the projects are saved. The access to these proposals has recently been facilitated by a database, but its use has been described as limited due to a lack of discipline of use and maintenance. The database is mainly used as a vehicle for finding the right people. In connection with the first contact with a potential client, the consultant checks whether the company has run any projects there before. This check is mainly carried out through personal contacts. In some cases, the project database is consulted. Regardless of the search method, the search normally ends in a personal contact with a consultant.

Like in the case of International, old proposals are an important source of knowledge in the proposal writing phase, especially concerning time plans and

special adaptations of the method to specific cases. But unlike International, the consultants seldom use others' proposals as templates, as different consultants have developed their own templates. Consequently, consultants mainly go back to their own proposals.

You go back to you own time plans. You don't search generally whether someone has done something similar, and how he or she did it. This is instead done on the basis of experience – 'I think X did something like this', so I ask him and then he tells me. (M4)

One consultant also identified a general problem with using old cases as models, in that they become "old" very fast. The reuse of ideas is said to be limited due to the products' (concepts and approaches) limited life span. The use of old projects as a source of knowledge in the ABB-MAC consultants' work is thus less widespread than in International. The main difference between the cases is that the cases as a knowledge element never seem to become "organizational" but stay on an individual level of knowledge. Instead of searching for old cases and getting information from these, knowledge transfer seems to be mainly interpersonal, which leads me to the next knowledge element.

Individual consultants' experience. Large amounts of the knowledge in ABB-MAC are stored on an individual level and transferred through articulation on an individual level. This knowledge is referred to as "experience" and described as tacit knowledge:

Apart from methods, an important type of knowledge is experience. You have seen what has been wrong in projects, what has been difficult, what the client didn't want to accept, when you had good plans that didn't lead anywhere. How to make things happen is very much a question of experience. I would like to have a recipe for how to transfer this knowledge to new consultants. Now it is very much a question of trust between a new and an experienced consultant in order to drain knowledge from the experienced to the new consultant. (M2)

Thus, face-to-face contacts between consultants in different situations are the main vehicle for competence transfer. The main source of learning stated by the consultants in ABB-MAC is the collaboration with colleagues in projects. A problem in this context is that ABB-MAC's projects do not always have the size to allow this.

Competence transfer between consultants on different projects is ensured through informal contacts and different kinds of meetings. Informal contacts in order to get feedback on ideas or receive new ideas for solving a specific problem are normal. The consultants know who the experts on different questions are. Naturally much of the information flow goes from more senior consultants to more junior (although there exists no formal hierarchy within

ABB-MAC. All consultants are formally equal). The following statement gives the answer to the question of how the consultant knew how to write a project proposal:

Trial and error and discussion with my colleagues. I often ask someone else to read through the proposal before sending it to the client, at least with large proposals. (M1)

Apart from these informal contacts ABB-MAC has a number of more formalized procedures for competence exchange. Every five to six weeks the group of consultants working with process improvement meets formally to exchange experiences about the use of methods in ongoing projects. Roughly half-yearly, the entire company meets for a day or two in order to discuss common topics. Attempts have also been made to formalize a procedure where consultants audit each other's projects, but this has not yet been routinized. Much experience exchange between consultants is thus highly specific, linked to concrete, ongoing or recently completed projects.

An important facilitator of the above-described communication about specific projects is, according to the consultants, the terminology provided by their common method. Through its different project phases, checklists, forms etc. it provides an effective structure within which communication can take place. In particular the different project phases were a means of structuring the knowledge exchange in connection with a specific project.

The main part of knowledge is consequently spread through direct contacts between consultants. But the consultants do not see the distribution of knowledge as unproblematic. Sharing knowledge with colleagues, the consultants said, was not a natural trait of consultants. Starbuck (1992) points at the generality of this pattern. Therefore ABB-MAC has actively tried to establish a culture fostering a "giver mentality".

Methods. The main method of the studied group working with process improvement is a method licensed from an American consultancy. This is complemented by other externally-acquired methods learned in different courses and seminars. ABB-MAC only to a very limited degree develops its own methods. Instead some effort is put into the adaptation of the external methods to ABB-MAC's and its clients' needs, but these adaptations only seldom lead to a physical updating of the method documentation (except for the in-house developed methods). It is instead transmitted verbally from consultant to consultant.

The reason for not incorporating the lessons learned in the method is said to be a lack of resources and a high visibility of the costs of such activities in a small organization like ABB-MAC. This is, according to Starbuck (1992) a general pattern in knowledge intensive firms, whose employees are often led by the

hour. Reflection and “learning” are often set aside in favor of maximizing billable time. The reason why I didn’t observe a similar pattern in E&Y MC or International is probably that there was a clear structure supporting the reflective activities as well as larger benefits of these activities based on the company’s larger size. (See also Peters (1992) for a description of these problems and their solution in McKinsey).

Methods in ABB-MAC are described as valuable sources of knowledge. They are especially valuable for newcomers, who quickly want to enter a new field of knowledge.

Methods are a perfect way of quickly entering a new field of knowledge without a lot of experimentation and reinventing the wheel. They work like recipes. The first time you follow them, then you improvise. (M1)

But also more experienced consultants claim the usefulness of methods. They refresh the memory of the educational activities connected to them and provide a checklist, which ensures that no important activities are forgotten. Again the need for application, i.e. the adaptation of the method to the specific situation, is underlined. The knowledge needed in order to do this is described in terms of experience.

The consultants in ABB-MAC have an articulate “toolbox” approach to methods. Different projects are seen as requiring different combinations of tools. This highlights the importance of the process of choosing tools to fit the situation.

[Interviewer: How do you choose tools?]

I have difficulties explaining this. It doesn’t feel like a technique. It is something happening in here [points at her head]. A connection between experience and knowledge about how to use different tools. It is difficult to articulate how I think. I think it is the ability to choose tools and the depth of analysis to fit the situation, which is the consultant’s core competence. (M2)

Choosing the right tools is thus one of the consultant’s core competencies, that has the character of tacit knowledge and probably can only be learned through the gaining of experience in action. Even the use of the method demands this tacit knowledge as indicated in the following citation:

[Interviewer: What would happen if a client was left with the method without consultant support? Would the process be successful?]

No. It would fail depending on things we have not yet been able to write textbooks about. For example – we have a method for group interviews – how to handle a group for the best possible result. We have to demonstrate this to the client, and have discussions about what happened. It is one thing to say “encourage those who are quiet and hold back those who talk a lot”, but what this means in practice is hard to tell. It has to be demonstrated. (M4)

To conclude, methods in ABB-MAC seem to play both a more important and less important role than in E&Y MC and International (see Table 9.2). In ABB-MAC, few efforts are made to articulate lessons learned in practice into the abstract form presented by methods. On the other hand, ABB-MAC consultants refer more often to the use of methods than both the E&Y MC and International consultants do, implying that the ABB-MAC consultants have not internalized the method as deeply as the E&Y MC and International consultants. There thus seem to be some differences between the knowledge systems in the larger consultancies E&Y MC and International and the smaller organization ABB-MAC. I will come back to this at the end of this chapter, where the importance of size in regard to the knowledge system is discussed.

Summary – the knowledge system in three consultancies

The above analysis of the knowledge systems in International and ABB-MAC concludes the first step of analysis aiming at identifying the elements of the knowledge system. Based on an investigation into the knowledge sources in a large consulting project, the alpha project, three elements of the knowledge system were identified. These three elements were then validated against the cases of E&Y MC, International and ABB-MAC. In all these cases, the identified elements of the knowledge system were found to provide a meaningful description of the knowledge available in the consulting organizations. The characteristics of the knowledge elements in the knowledge systems of E&Y MC, International and ABB-MAC are summarized in Table 9.2.

The three elements of the knowledge system identified above – cases, experience and methods were found to represent knowledge with quite different characteristics (see Table 9.1). These three elements of the knowledge system are well in line with elements of the organizational memory identified in other studies, e.g. Starbuck (1992). Starbuck identifies three types of organizational property – physical capital, routines and organizational culture. Methods and documentation of cases here represent physical capital and to some extent routines. The mass of consultants' accumulated experience represents cultural capital. But even if knowledge elements similar to the above have been previously identified, little research has treated the functional relations between the different elements of the organizational knowledge system. These relations have been indicated in the presentations of the three knowledge systems and will be more fully elaborated on in the following, the second step of analysis.

	E&Y MC (Medium sized, international organization with strong local ties)	International (Large, international, hierarchical organization)	ABB-MAC (Small, Swedish, flat organization)
Cases	Source of ideas about proposal design, resource requirements and solution ideas Access via database to all proposals Documented and structured in terms of the international method Trigger personal contacts	Source of ideas about proposal design, resource requirements and solution ideas Access to all the organization's proposals via database Trigger personal contacts	Source for ideas about proposal design, resource requirements and solution ideas Only own proposals are consulted Value of others' cases is reduced as they often are too old
Experience	Central source of knowledge Exchanged through personal contacts in relation to specific cases Made available through interaction in projects as well as in formal and informal meetings	Central source of knowledge Exchanged through personal contacts Made available through project composition (e.g. mixing of expertise and seniority) and "knowledge based" structure (expert networks).	Central source of knowledge Exchanged through personal contacts Made available through personal networks and collaboration in projects Exchange facilitated by the common language provided by the method
Methods	Local, in-house developed method inspired by the global method Backbone of the knowledge system Seldom used explicitly. Most often applied in an "internalized" form Provides a common language, that facilitates communication Structures the knowledge system	Global, in-house developed methods Source of "new" information Not used explicitly, but in an "internalized" form Application requires experience	External methods In house development of methods is deemed too costly Praised as knowledge source for newcomers, but also explicitly used by experienced consultants Application requires experience

Table 9.2. A summary of the knowledge system in three consultancies

The knowledge system at work – investigating the relations

In the above analysis of the knowledge systems in three consulting organizations, the knowledge elements cases, experience and methods were found to be recurring. The existence of functional relations between these elements was also repeatedly indicated (c.f. Table 9.2). In this second step of

the analysis, these relations will be the focus. Figure 9.3 gives a first overview of the different functional relations between the identified knowledge elements. These relations are represented in the figure by the arrows and the labels describe the nature of the relation. The relation between methods and cases should be read as “Methods provide a language to articulate cases” and “Cases specify and exemplify methods”. These functional relations between the different knowledge elements, having different characteristics in terms of the knowledge framework, should not be confused with the processes of transformation between different kinds of knowledge described above (Figure 9.1). The functional relations between the knowledge elements focus on the consultant’s use of knowledge in a specific situation, which involves a majority of the transformation processes described above.

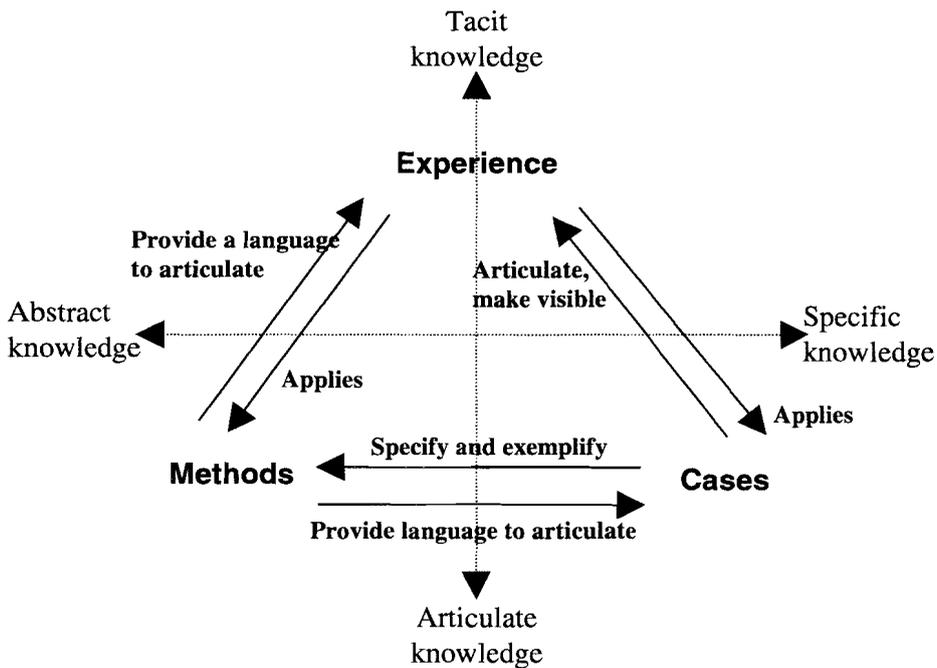


Figure 9.3. Three basic elements in the knowledge system and their interrelations

Experience applies methods, tools and cases

As illustrated by the case descriptions, the consulting process, from a knowledge perspective, is an ongoing interaction between articulate knowledge in the form of documented cases and methods, and tacit knowledge represented by experience. The nature of these interactions is illustrated in Figure 9.3.

One central aspect of this interaction is the application of the abstract methods to the specific situation the consultant currently is working in. This process was repeatedly observed in the cases and described as a success factor by the consultants. But the need for application processes was not only observed in relation to the abstract knowledge “methods” but also with regard to the specific cases, which, according to Lillrank’s (1995) framework, should not require an application process, but should be able to be transferred directly through copying.

This is not what was observed in the cases studied here. Rather, cases go through a process in which their applicability to a specific situation is judged and the proposed solution is adapted to the specific situation. This discrepancy with Lillrank’s framework is understandable given the high “organizational”, i.e. “soft” content of the cases in focus here, whereas Lillrank’s cases to a large extent concerned technological innovations. According to Lillrank, organizational knowledge is hard to copy, thus creating a need for application processes even in the cases of the transfer of specific knowledge. Furthermore, the need for application processes in relation to both methods and documented cases can be understood, as management consulting projects often are quite complex and unique, which makes the direct transfer of solutions, in the form of either methods or old cases, difficult (Weick, 1994).

Rather than being a mechanical application of methods or cases, action in the consulting projects was described as both adapted to the specific situation, as well as intuitive, i.e. based on the consultant’s experience. But it was also shown, (c.f. chapter three and eight) that methods provided a basis for the consultant’s action. This basis was, especially in the cases of E&Y MC and International, described as an internalized version of the method.

The process of laying out a change process studied above thus entails an application process, in which the knowledge available to the consultant (both external and internalized) is adapted to fit a specific situation (or the situation adapted to fit the method, depending on the chosen perspective). This creation of an approach to change adapted to the specific situation was by all consultants identified as a key success factor for change. In this process of application, experience is described as central. Experience helps the consultant to choose the right activities and tools from the overall procedure, to strike the right balance between speed and depth in connection with process mapping, to choose a suitable solution from a set of old cases etc. It is this knowledge, which in ABB-MAC is described as the consultant’s core competence.

Even if the vocabulary above may indicate that the process of producing an approach for a specific situation is an analytical process, it most often is not. Rather this process is intuitive and “experience-based”. Consequently, the

knowledge element “individual consultants’ experience” is to a large extent tacit, and can only be shared with others through the direct interaction in concrete projects. In the above cases, a number of arenas for this transfer were observed, the most important being the consulting project.

The relationship between the consultant’s experience and the other knowledge elements (especially methods) was also described as partly substitutable by the consultants. The more experience a consultant had the less important methods were said to be. Increased experience also allowed larger deviations from the method. Only when the method was really mastered, could it be departed from. Still, action based on only the method was not regarded as enabling successful practice. This is consistent with the tendency of consultants to internalize methods, making possible a more flexible use of them (Hedlund, 1994).

Methods provide language

Methods provide an abstract, organizational, articulate knowledge that by means of its characteristics, is both broadly applicable and easily communicable. Methods thus function as a common language providing a common interface to the change process. The existence of such a shared language is important for knowledge transfer, as has been shown in the above cases (see also Snyder, 1997).

This was illustrated in E&Y MC and ABB-MAC when the consultants explicitly stated that the terminology provided by the method (different activities, templates, process phases, etc.) provided an important framework in terms of which the interchange of experience from the consultants’ different projects took place. A consultant in E&Y MC even called the method, in its role of providing a shared structure to the change process, “the backbone of the knowledge system”.

This common language provided by methods is not only important in order to facilitate the exchange of experience in face-to-face interaction, but also for structuring the documentation of past cases, i.e. supporting the articulation and extension of knowledge. Projects carried out according to a specific method will generate an easily recognizable and comparable documentation for the consultants familiar with the method. The use of elements of the method as a structuring device for the documentation of completed cases also facilitates access to the information and helps specify the method. This could be seen in E&Y MC, where the goal was to document the cases in a database in a way that made it possible to access them as illustrations of different aspects of the method. A consultant looking for an example of the exact layout of a certain project activity in a specific industry should be able to easily find this in the organization’s knowledge database.

The method's role of structuring the knowledge system could further be observed in respect of the organizational structure in International, and the competence profiling of consultants in E&Y MC. In International, competence groups responsible for the articulation and formalization of knowledge existed around certain methods or certain aspects of these. In E&Y MC, the international exchange of consultants was described as based on their expertise of certain parts of the method.

Given the rapid internalization of the method that was observed in the cases, the method is mainly viewed as helpful for newcomers to the organization, as well as for communicating changes in the state-of-the-art-practices within the consultancy. In E&Y MC, it was an explicit requirement to know the method, and in International and in ABB-MAC, the internalization of the method was clearly observable. Hereby the method supports the creation of shared understanding of organizations and the change process among consultants.

As an easily accessible documentation of the change process as perceived by the consulting organization, the methods are also a reference manual consulted in cases of doubt or uncertainty. By providing an overall model of the change process, they have a role as validating or questioning the consultant's mental models, which can be important in order to support the consultant's distancing themselves from the specific case in order to see new solutions.

Cases articulate experience and specify and exemplify methods

Cases represent the specific of the articulate knowledge in the consulting organization. Specific cases, i.e. examples, are often seen as an alternative to abstract methods in relation to knowledge storage and transfer (Stolterman, 1991:45ff). Knowledge, it is argued, is abstracted into methods or transferred through the use of examples. This picture of the knowledge system questions the view of methods and cases being competing knowledge elements, but suggests that the relation between the two may actually be complementary. Cases as an element in the knowledge system are above shown to be an important complement to both experience and methods.

The main problem identified with the use of methods in specific situations is their application to the specific situation. This has been shown to be dependent on an experience-based knowledge, which is very hard to transfer. Cases can here be helpful in order to transfer this mostly tacit knowledge.

As cases are descriptions of specific projects, without ambitions of formulating general rules or relations, they make it possible to transmit tacit knowledge (or at least the results of it), supporting the extension of this knowledge. Even if it is hard for a senior consultant to articulate in what cases which process design is the most appropriate, one can get a grasp of this knowledge by studying a

couple of her process designs in different situations and from those infer the tacit knowledge (Boland and Tenkasi, 1995). Consequently, the collection of a number of project plans as a background to the planning activities becomes understandable as a way of profiting of other consultants' tacit knowledge. Cases are thus a way to make visible and thereby communicable the so central knowledge underlying the process of application.

In all the cases studied, mechanisms for the easy identification of cases were found in the form of searchable databases. In some cases, the system of documenting cases was quite elaborate, linking the information in the cases closely to the method by documenting them in terms of the method's terminology. This easy accessibility and direct relation to the method makes the cases even more efficient as a way of transferring the tacit knowledge required in the application process. Still, the cases were seldom sufficient as information sources, and were often complemented by personal conversations, which are the main vehicle for sharing experience. This gives cases an additional role of facilitating the identification of relevant individuals in the organization.

Experience – the leading element in the knowledge system

Experience, methods and cases are tightly interlinked, creating a knowledge system, which exploits the advantages of consultants working together in companies. The leading element in this system is the consultant's experience, which plays a central role in the application process. Methods and cases are only of limited help to a person lacking the necessary experience for their application. This establishes the more "tacit" aspects of the organization members' knowledge, i.e. their skills and experience, as a key in organizational competence:

Even in the most bureaucratic organizations, despite the preponderance of written SOPs [standard operating procedures] and established protocols, there is much more about the firm that is unsaid and unwritten... The intangible and often invisible assets of an organization reside in individual mental models. The shared mental models are what make the rest of the organizational memory usable... (Kim, 1993:45)

Göranzon (1988) further supports this view of the complementarity of knowledge of a tacit character and knowledge of an explicit character. He claims that propositional knowledge (methods) without knowledge of familiarity (cases) and practical knowledge (experience) is "empty knowledge". Without an interpretation of the propositional knowledge using practical knowledge and knowledge of familiarity, the activity in which this knowledge is involved will "move towards chaos – disorder – death..." (Göranzon, 1988:17) (see also chapter three).

The mostly tacit element of the knowledge system, which was called “experience”, thus provides a leverage to the productive use of the more articulate knowledge elements. Even if methods and cases can be easily spread, being of an articulate character, their successful use is dependent on knowledge of a tacit and therefore often more individual character. This makes the management of experience in the consulting company an important quality issue, as “good” consulting depends on efficient application processes. Thus, a major challenge for organizations aiming at building a shared knowledge system is the handling of the tacit elements of the consultants’ experience.

Looking at the cases described above, two aspects of handling these issues emerge. The first concerns the efficient use of the scarce resource “experience”. The second aspect focuses on the reduction of the scarcity of this resource by extending it from the individual to the organization.

Organizing for experience utilization

Maximizing the use of the experienced consultant’s tacit knowledge is mainly an organizational issue, and was most clearly observed in the larger consultancies E&Y MC and International. Both these companies have a clear organizational hierarchy based on experience, ranging from junior consultant to partner. This hierarchy is the basis for division of labor aiming at the efficient use of experience. Taking the planning process in E&Y MC as an example, this was shown to take place in several steps involving different consultants with different amounts of experience. The overall boundaries were set by an experienced partner in the organization, the meeting structure on the next level was set by the project leader, who had intermediate experience, and finally the detailed planning of the seminars was carried out by a junior consultant in collaboration with the project leader. This division of work indicates, that the overall design of the project requires the longest experience, and that the more detailed the design gets, the less experience is needed.

A second example of maximizing the utilization of the scarce resource experience through a hierarchical organization is the proposal process in International, which is organized in the following way. A client relation is always owned by a senior consultant. He has the initial contact with a client. But this senior consultant is only to a limited degree involved in the actual work of writing a proposal. The responsibility for this is transferred to a consultant with intermediate experience, who works together with junior consultants. The junior consultant describes the process of proposal writing in the following way:

Generally somebody who has had a client contact comes and describes the situation to me. I then start to put together a proposal according to a standard

structure. When I have a draft, I check it with people with more experience, who have worked longer. (I1)

The actual work is thus done by junior consultants, who check their work with consultants on an intermediate level. Finally, before the proposal is sent to the client, it is approved and commented on by the partner owning the client relation. The main job of the more senior consultants is the design of a process adapted to the specific situation. A more senior consultant describes the process as:

It's [design of a proposal] only a question of experience. I think the result [project proposal in a specific case] would look very similar for different consultants, because, when we talk about a solution of this kind, there are very experienced project managers and partners who approve it. At the Stockholm office it is a question of perhaps twenty to thirty persons. They adapt the approach to the specific company. Therefore, there are limits for how different projects can become. ... When people have worked in the company for twenty to thirty years, they have a history and the similarities between their solutions are quite large. (I3)

Similar patterns of a hierarchical division of labor in adapting the abstract method to a specific situation have also been observed in other companies and other stages of the change process in both my studies and other's studies (e.g. Peters, 1992)

In the foregoing, this process of dividing labor vertically has been described as a way of using the scarce resource of experience needed for the application of methods and cases more efficiently. But in terms of the typology of knowledge, the division of labor between more senior and more junior consultants can also be seen as a way of transferring tacit knowledge through internalization, thus leading to a reduction of the scarcity of this knowledge. This represents the second aspect of handling the critical resource "experience" and will be treated below in connection with an analysis of the dynamics of the knowledge system.

The dynamics of the knowledge system or learning in consultancies

Having treated the first two research questions formulated for this chapter – the identification of the elements of the knowledge system as well as their relations – I will now turn to the third question concerning the dynamics of the knowledge system, i.e. its development over time.

The workings of the knowledge system in producing action are an interplay of individual (experience) and organizational (methods, cases) elements of the knowledge system. This interplay is also what generates the dynamics of the system i.e. its change over time. Organizational knowledge and individual knowledge not only support each other at a specific point in time, but they also

drive each other's development over time. Two processes were in the knowledge framework identified as mediating the movements of knowledge along the individual – organizational dimension. The process of extension is concerned with the transformation of individual knowledge to organizational knowledge, and the process of appropriation captures the reverse movement (c.f. Figure 9.1).

In the following, these two processes will be described in more detail. It will be argued that methods are the result of an articulation of experience, and experience represents an enactment of methods. The cases are the artifacts of this development. Organizational learning in consultancies, defined as the dynamics of the knowledge system over time, is thus a question of both making individuals' learning in projects organizational as well as making individuals appropriate the generated organizational knowledge.

The appropriation of knowledge – from organizational to individual knowledge

The knowledge system within consultancies can be described in terms of three knowledge elements having different characteristics. These characteristics have consequences for the accessibility of the elements. One way of illuminating the appropriation of organizational knowledge is to take a closer look at how individual learning takes place in the studied consultancies, especially in the case of newcomers entering the organization.

The case of E&Y MC

Here I return to the case of E&Y MC. I will begin the analysis of the learning processes as perceived by the consultants in E&Y MC by taking a closer look at the mechanisms for introducing newcomers into the organization. The case of Philip is an example of the introduction of a newly graduated consultant.

Philip joined E&Y MC after his graduation from university. The normal procedure for a newly graduated person would have been to start by participating in a course about the method, but this was skipped, as Philip had some previous experience from BPR projects gathered during the last terms of his studies. From day one, Philip thus participated in projects, having the role of a documenter, i.e. following a more experienced consultant and supporting him with documentation during the project. The first projects are described in the following way:

The first two projects were two parallel projects – time being equally split between them – in which I had a role as documenter. This role gave the possibility to see how things work in real life, how the experienced consultants act and to acquire the style, the way of doing things. At the same time you learn to use the tools. (Philip)

Following these two projects, Philip gradually received more responsibility for increasing parts of projects, but most often with a more senior project leader behind the scenes, until the alpha project, where he received the responsibility for a sub-project. Even here, a more senior project leader supported Philip. This support is highly valued by Philip, who appreciates Andrew's greater experience. The relative lack of formal educational programs within E&Y MC is characteristic of E&Y MC's culture, that is described as encouraging consultants to seek the knowledge they need in each situation.

Even if the work in projects and the support from more experienced consultants seems to be the major source of learning, the methods are also regarded as important. The consultants are expected to know them:

Even if I didn't take a course in the method when I started, there are still clear requirements, that you know it. I have it in the back of my mind. (Philip)

A basic requirement of competence for all our consultants is that they know the Fusion method. (Henrik)

But, as indicated above, the method is viewed as a complement and facilitator for the transfer of the more tacit knowledge that has been emphasized in the description of Philip's learning:

You never let junior consultants run a project on their own, they always work together with a senior. In order to reduce the non value adding dialogue between junior and senior consultant, they can communicate via the method. "We are going to work with these parts now. You can start preparing the interview schedules that support these activities. Then we can have a look at them". By using the method you can avoid explaining everything from the beginning each time. The method is to a large extent about supporting internal communication. (Henrik)

This indicates that the main vehicle for training a new consultant is the experience in projects, and the mentoring by more experienced colleagues. Methods and cases support this process, but they are no substitute for it.

The learning of the more senior consultants follows a similar pattern to that of inexperienced consultants, with a focus on competence transfer through interaction. Most of this knowledge transfer takes place in formal and informal meetings, not least, as there is a need for knowledge exchange between the formal releases of new method versions.

We must have a continuous dialogue concerning practices. There are a lot of informal networks, and the project leaders meet once a week and exchange experience. Experience exchange between the revisions of the method takes place in this way. In these discussions good ideas and interesting experiments often crop up. Somebody might say that he has a video film, which is inspiring, etc. (Henrik)

A number of arenas exist for the exchange of information among consultants. These arenas, which have been described in some detail above, range from informal, such as accidental meetings at the coffee machine to formal, such as the monthly meeting of project leaders, where the projects are discussed. How methods support the direct learning of the consultants is regarded as being their ability to easily communicate what is new in E&Y MC's approach to the change process. A new method version is today introduced in terms of

...this is what's new, these are the changes, think of this, etc. (Henrik)

But this was different, when the first version of the method was introduced, all consultants participated in a two-day seminar. But the main vehicle of spreading the method in the organization was through a cascade approach, where the consultants acquired the skills of applying the method in a concrete project together with a more experienced consultant. The consultants trained in this way would then become responsible for their own projects, in which they worked together with other consultants, and so on. Again, an important vehicle for the consultants' learning is the participation in concrete projects.

The cases of International and ABB-MAC

In broadening the view to International and ABB-MAC, the basic pattern observed in E&Y MC, with a focus on learning from experience in projects and from interaction with (more experienced) colleagues is very much confirmed. In both International and ABB-MAC, a distinction is made between formalized learning in courses, teaching for example the method, and learning in projects and from colleagues.

In *International* the main vehicle for learning is the consulting project. Even if the importance of courses and more formalized education is acknowledged, and there is a large amount of these in International, it is the project that is regarded as the main source of learning. Courses give a necessary background knowledge, but the real professionalism cannot be gained through these. This instead requires a more hands-on type of learning.

Of course we have courses which we attend. But an important part of the professional development is what you learn in projects from those who have more experience – both clients and people who have worked in our company for a long time. From them, you can learn a great deal and learn very fast. And then, of course, you also learn from your own experiences in projects. (I1)

I still believe the best professional development is provided in practice, in projects where you learn from more experienced actors. (I2)

Like in all consulting companies, there is a formal part in terms of an extensive educational program, which is important. But the professional development to a large extent still takes place in the projects. It is in these situations you are confronted with the tricky issues. How do things work in reality rather than in

the schoolbook? In these situations experience is gained which eventually makes it possible for you to sell your own project. The competence cannot be acquired just during a course.

[Interviewer: Learning is thus to a large extent about learning from the more experienced?]

Yes, precisely, this is very much the way it works. But if you act as a project leader this also requires the use of your informal and formal network. (I3)

Learning in projects, according to the citations above, thus takes several forms. One way is the experiential learning generated from testing different actions within the projects and learning about the consequences. A second way is the interaction with colleagues, triggered by issues arising in the specific project. The third, and possibly most important way (at least for the more junior consultants I1 and I2) is learning from the more experienced consultants in the project. This learning is supported by the staffing of projects in International. This staffing follows a strict, experience-based hierarchy, ranging from junior consultants to partners.

In *ABB-MAC*, the main learning is also linked to projects, even if more formal courses are also mentioned here. But unlike in International, it is not so much the learning from more experienced consultants within the project that dominates, but rather the experiential learning within the projects, supported by reflective discussions with colleagues in other projects:

[Interviewer: Which are your most important sources for professional development?]

I have a basis of some method training, but the experience exchange with my colleagues, as well as what I learn in the projects and the experiences I gain there are also important. My professional development is not only about learning from my own experiences, but also about the possibility to discuss these experiences with colleagues working with similar things. (M2)

I mainly get my knowledge from my colleagues. Concerning the specific RBG method, we meet in a competence group once a month. In these meetings we discuss both successes and failures. (M1)

What I learn from my clients in the projects is probably the most important source of knowledge for me. But beyond that there are also courses and training, in which I participate periodically. (M3)

... I want to add to that. The work together with other consultants teaches me a lot – in the rare cases I have had the opportunity to work together with others. (M4)

The focus in *ABB-MAC* on learning between projects rather than within projects is understandable given that *ABB-MAC* lacks a formal hierarchy like the one in International. In *ABB-MAC* all consultants, regardless of experience, have the same position. Another explanatory factor is that projects in *ABB-*

MAC often are too small to motivate the involvement of more than one consultant.

An important vehicle for the transfer of understandings of the change process was both informal and formal discussions with colleagues. As described above, the consultants often discussed aspects of projects with each other on an ad-hoc basis, which was facilitated by them sharing the same office space. A number of formalized arenas for these discussions were also identified above.

Learning as the creation of shared mental models

In order to understand the dynamics of the knowledge system over time, the preceding section has focused on the process of appropriation, i.e. the process in which knowledge available on an organizational level is transferred to an individual level. "Knowledge on an organizational level" in this case comprises the total of the knowledge elements identified above. Individual consultants' experience is thus in this case regarded as a potentially organizational knowledge. Realizing this potential is a question of making this knowledge available and sharing it with the other consultants, which is very much linked to the question of how individual learning in the organization is organized.

The study of the three cases in this respect revealed that the consultants distinguish between two arenas for learning. The first is the traditional course, where mainly articulate knowledge is spread. The second is the day-to-day work with client projects. All the consultants mentioned formal courses as a source of learning. In several cases the purpose of the courses was to acquire the company's methods. A thorough knowledge of these is regarded as a basic requirement for the work in the consultancies. Methods were also used as a way of formalizing the "state-of-the-art approach to change" of E&Y MC.

But the learning of this articulate knowledge in connection with the courses, was by the consultants, regarded as secondary. The really important learning was described as taking place in the day-to-day work and comprised the more tacit knowledge that was termed "experience" in the knowledge system. This learning was in some cases described as experiential, but in most cases the learning was induced through the transfer of experience from one consultant to another in connection with a project. In order to transfer this tacit knowledge from one person to another, interaction leading to shared experience is imperative. Without this, people are not able to share each other's thinking processes (Brown and Duguid, 1994; Nonaka, 1994; Snyder, 1997). Earlier in this chapter I also identified the importance of a common language, supported by the method, as a central facilitator of this interaction. This is confirmed by Turner (1988), who argues that the most useful knowledge in consultancies is developed from experience in client projects. This development of knowledge

is, as shown above, supported by the existence of a common language in the consulting company:

...consulting groups need a set of general concepts to use as a language in discussing their own observations of client organizational behaviour and procedures which facilitate learning from current client experiences how other organizations also are likely to function and adapt to change. (Turner 1988:11)

Several ways were mentioned for sharing experiences in the day-to-day work, the most important being working together with (more experienced) colleagues in projects. The hierarchical organization of projects in the larger consultancies International and E&Y MC show examples of institutionalizing this form of learning. As the cases show, this vehicle for learning was not confined to new consultants, but involved consultants quite a way up the hierarchy. Methods were in this context seen as a support for making the exchange of experience in the projects more effective (E&Y MC case). In the smaller consultancy, ABB-MAC, working together in projects was also emphasized as a main source of learning, even if some problems in the realization of this were mentioned. Projects in ABB-MAC were often too small, and the budget too limited to allow for the involvement of several consultants in the same project.

The main focus of the system for knowledge transfer thus seems to be the exchange of the individual consultants' experience, or more precisely, the transfer of the more experienced consultants' mental models to less experienced consultants. Hereby, a shared set of mental models is created. This indicates that the individual consultant's experience may well be more than individual, namely shared within the organization representing "encultured knowledge", i.e. shared meaning systems (Blackler, 1995). This is partly supported by Philip's description of his introductory period as "documenter" in projects. He described the purpose of this period as "see how things work in real life, how the experienced consultants act, *acquire the style, the way of doing things*" (my italics). This focus on a consulting style and a special "way of doing things", indicates that parts of the knowledge in the organization have a tacit and organizational character.

The extension of knowledge – from individual to organizational knowledge

After a closer look at the appropriation of knowledge, i.e. its transfer from an organizational level to the individual level, I will now turn to the opposite process, the process of extending knowledge from the individual to the organization.

As far as the knowledge of a more tacit character is concerned, the process of extension is to a large extent overlapping with the process of appropriation. As the mechanisms of learning illustrate, it seems to be difficult to transfer the

majority of knowledge needed for consulting through other means than direct interaction within projects or in connection with these. In the case of the transfer of tacit knowledge in interaction, the process of appropriation and extension of knowledge coincide. I thus regard this type of knowledge transfer as sufficiently covered in the previous section.

In the following, I will focus on the extension of knowledge by more articulate means, i.e. methods as well as cases. Methods provide an important enabler for the extension of the more tacit elements of the knowledge system. I will therefore turn to the question of how these methods are created and updated.

The case of E&Y MC

The first version of the BPR-Norden method, which was used in the alpha project, was released in 1995. Since then, the method has continuously been updated, with a new release every eight to nine months. The responsibility for the method development is carried by a method group consisting of five experienced consultants. One individual – Henrik – is responsible for coordinating the development work. The actual work with the release of a new version of the method is described as consisting of two steps. Firstly, the needs for improvement are identified, and secondly, the solutions are designed.

The core triggers for the development of the method emerge from the ongoing projects within E&Y MC as well as among the clients applying the method on a licensee basis. Based on such triggers, the method team begins its work with a new method version by formulating a list of what they perceive as necessary improvements of the method. This list is then circulated among the E&Y MC consultants applying the method in order to generate further ideas.

Two examples of issues for method development at the time of the study were the problems perceived by clients in adapting the method to their specific situations, as well as internal problems with the formulation of business events in the redesign phase. The first problem was actualized during an experience exchange meeting with the licensees of the method:

At this meeting we got a confirmation of our feeling that the adaptation of the method to the specific situation was a problem. We had seen a number of examples of the abuse of the method, where it was used from A to Z. These uses were often conscious, as the client wanted to test the whole method, but we also received a number of questions such as “how should you know which track to choose?” There were a lot of questions of this character, which showed that we had not been clear enough concerning these aspects of the method. (Henrik)

The second problem concerning the choice of business events to consider when modeling the new processes was something, which consultants at E&Y MC had been struggling with repeatedly. Henrik had recently participated in a project

where a new technique for identifying these events was tested, and as this proved successful, a decision was made to make this issue an object for improvement in the next method version. These initially identified improvement areas are mainly based on the consultants' own experiences in projects, as well as information gathered in conversations with other consultants.

Having generated a list of suggested improvements of the method, work groups are then identified, who are responsible for different improvement areas. The input to these groups' search for improvements of the method in the identified areas is to a large extent focused on the projects carried out within the organization. E-mail is sent to all consultants, asking them for comments and examples of how they tackled the issue in their previous projects. Hereby interesting projects are identified. The documentation of these projects is then studied, and a closer conversation with the project leader is arranged. Andrew, not being one of the key persons in the method development process, describes the process as follows:

...there is a constant stream of E-mails posing questions and asking for documents – “how did you do this? How did you design the communication strategy in this project? Please attach all relevant documents, etc.” The answers and documents are evaluated by those working with the method and incorporated into the method. (Andrew)

But even if this broad scanning of the practice in the consulting company is important, the main source of improvement ideas is still the conversation with people who tested new ideas in their projects:

The most important thing is to talk to people, to be involved in projects, to discuss specific issues raised by the consultants. If you have worked a lot with a certain issue in a project, and you want to develop this further, it is important to discuss this with others. (Henrik)

The innovations in individual projects are thus a main source for new ideas. Taking the above-identified development area of business events as an example, its solution was found in a project, in which Henrik participated. In this project, a notion of process domains was introduced, that required the identification of process dimensions prior to the definition of the important business events. This notion was taken from the international method Fusion.

The experimentation within projects is thus, besides the perceived problems, an important driver of the method development. Another concrete example illustrating this is the pre-visioning seminar, which is meant as a preparation to the visioning seminar in order to make the visioning process more effective. This seminar was at the time of the study not included in the method, but used in an increasing number of projects, and it was seen to be included in the next version of the method:

The “pre-visioning seminar” is an addition to the process that has emerged and is used in an increasing number of projects. It will probably be included in the next version of the method. (Philip)

It is also through the innovations within individual projects, that impulses from the outside are brought into the method. In the case of the handling of business events, the Fusion method was such an “external” source. Other sources include the consultant’s reading, as well as impulses from clients and other consulting companies:

Ideas from the outside enter in a number of different ways. One way is by the members of the project group responsible for method development, who bring new ideas with them. But this limits the input of ideas to those of five persons. The most important ideas get in via the projects, in which new things are tested and adaptations made. This can be the result of stealing with pride from the client. They often have very interesting ideas. You can also come across other consultants and get ideas from them or read something. We also get a lot of ideas from our international organization. (Philip)

The development of methods is thus to a large extent a document over the best practice in the consulting organization, as most of the ideas for change reflect the practice in some recent project. But, as has been concluded above, the method is only seldom consulted by others than very junior consultants as a document of best practice. A partial reason for this is that the practice develops continuously, and is spread via more direct mechanisms for knowledge exchange. The method is thus more a historical documentation and articulation of this knowledge, having a character that makes it easy to distribute, supporting the building of a common language and understanding.

The case of International and ABB-MAC

Widening the perspective from E&Y MC to International and ABB-MAC partly confirms the pattern observed in E&Y MC, but also gives some new insights. International and ABB-MAC can in terms of the handling of methods be seen as two extremes, where the E&Y MC case represents a middle position that combines characteristics of both. Whereas International puts large efforts into in-house development of methods on a global basis, ABB-MAC has almost no formalized own method development. E&Y MC here takes an intermediate position with the existence of an overall international method (Fusion) and the local development of a Swedish method (BPR-Norden). In spite of these differences, the extension of knowledge from an individual to an organizational level to a large extent takes place via non-formalized media. The focus of the next section, like in the case of E&Y MC, is on the mechanisms underlying the development of formalized methods.

International in terms of methods differs from the E&Y MC case, as their method development is truly global. No formalized local methods, like the

BPR-Norden method, are mentioned. On this global level, there are large efforts to articulate and formalize the learning taking place in all the client projects. The knowledge in International, to a large extent, exists in articulate form at an organizational level. Large efforts are put into the formulation of methods and the documentation of completed cases. The procedures supporting this articulation of knowledge on an organizational level are quite formalized. Competence groups (worldwide networks of consultants) are the core in the process of method development. These groups are created around interesting issues, and are responsible for the development and continuous update of methods and method elements. The trigger for the creation of such competence groups can be both perceived problems – “in this area we need more knowledge” as well as successful experiments:

If some office works with something interesting, or has started a development project, this can become a center of competence and a coordinator of the future development of this area of expertise. (I3)

The competence networks periodically gather people active in the area in order to collect the best practice cases, as well as learn from those. Methods are not the only way to present these lessons learned, but an important vehicle for the gathering and development of organizational knowledge are “solution centers” focusing on certain industries or processes. These present the best practice of doing business within different settings.

ABB-MAC represents the other extreme on the scale of formalization of method development. In *ABB-MAC*, where practically no formalized in-house method development takes place, the knowledge system is less articulate on an organizational level than in International. Others' cases are only seldom used as sources of knowledge and methods are not updated in order to reflect experiences made when using them. The reasons given for not formalizing the knowledge are the high costs of this activity in relation to its benefits in a small organization. A related reason is the limited number of projects carried out, which makes it hard to accumulate a broad set of current cases. Often a case would become outdated, before a similar case appeared, in which the knowledge could have been applied. But, as has been described above, knowledge transfer is by no means non-existent. In *ABB-MAC* most knowledge transfer leading to a common understanding of the change process in the organization takes place on an individual level. Individual consultants' experiences are spread in formal and informal meetings, where experiences are articulated in discussions about specific cases. Here the main role of the method is to provide a common language. It is in these kinds of interaction, that an organizational stock of tacit knowledge is created in *ABB-MAC*. Compared with International, the knowledge transfer in *ABB-MAC* is thus also linked to a more specific knowledge. This quite informal procedure of knowledge transfer

is made possible through the organization's small size as compared with International. I will come back to the issue of size in the conclusion to this chapter.

Method development as the creation of shared artifacts

The focus of this section has been the process of extending knowledge from the individual to an organizational level. A large portion of the extension processes, especially in ABB-MAC, was earlier seen as taking place through the direct exchange of knowledge between individuals. These processes were discussed in detail in a previous section. The current section has thus focused on the remaining process of extension, involving the articulation of knowledge, mainly in the form of methods.

Such activities of developing methods could be observed in the two larger consultancies E&Y MC and International. ABB-MAC had only very limited activities in the area of method development due to higher perceived costs in relation to benefits. Method development in E&Y MC and International was carried out in quite similar ways in the two organizations, even if the activities in International were somewhat more formalized and on a larger scale than in E&Y MC (global as opposed to local).

A common characteristic in the method development process in both E&Y MC and International was its basis in the consultancies' current practice. The main activity in method development was the study of completed cases in order to find successful innovations – either as solutions to perceived problems, or because they were better than previous practices. Such innovations were widespread in the projects, and the task of method development was to identify the most successful ones.

The process of method development is thus to some extent a process of articulating knowledge, that previously has been tacit (such as the knowledge needed in order to adapt the approach to change to the specific situation), or has been available only to a limited set of persons (like the improved technique for choosing business events that had been successfully introduced in a project). Hereby the method development process is also an institutionalized reflection process in which different solutions to problems are collected and evaluated. The method development process is thus as an evolutionary and cumulative learning process, where the method is continuously tested in practice and the experiences from practice are used to update the method. Methods, against this background, can be seen as a representation of the state-of-the-art knowledge available in the consultancy.

In order for methods to achieve this status, an important prerequisite is that the methods are followed in the consultants' practice, in order to ensure the same

problems are solved in the different projects, and the different solutions are compatible with the overall practices of the consulting company. In the above cases this requirement was fulfilled, as the consultants' actions were found to be largely congruent with the method.

Through this link between method development and current practice within the organization, methods, as well as cases, can be viewed as the artifacts of the shared mental models found important when studying the consultant's learning. These artifacts play an important role in the reproduction of the knowledge system.

Conclusions – Learning in a knowledge system

In the third step of the analysis in this chapter, the dynamics of the knowledge system were in focus. This analysis was carried out in two parts. The first part departed from the perspective of the individual consultant, asking the question of how knowledge is transferred from the organization (i.e. other consultants' experience, methods and cases) to the individual's experience (appropriation). The second part, labeled "extension", departed from the perspective of the organization, focusing on the extension of the individual's experiences to the organization at large. This separation of the dynamics of the knowledge system into two sub-processes is a merely analytical division. In practice the two processes have a dialectical relation.

The closer study of the process of *appropriation* revealed that it mainly involved the knowledge element "experience". The most important source of the individual consultants' knowledge was said to be other consultants' experiences, transferred in connection with consulting projects (c.f. Sarvary, 1999). The process of appropriation was thus involved in the establishment of a set of shared mental models, which was especially obvious with regard to the introduction of junior consultants into the organization. These explicitly talked about "acquiring the style" through working together with more senior consultants. But also for more senior consultants, a number of arenas for interaction around projects could be observed, where shared mental models were created and maintained. The small consultancy, ABB-MAC, somewhat differed from the above pattern, as projects often were smaller involving just one consultant. This made the arenas outside projects central for the appropriation processes in ABB-MAC. A facilitator in both the creation as well as the maintenance of the shared mental models in all the companies was identified to be the method, through its provision of a common language.

The development of this method was identified to be an important part of the *extension* process in the larger consultancies E&Y MC and International. In ABB-MAC, only very limited method development was carried out in-house,

due to larger perceived costs in relation to benefits. Rather than involving an articulation of the knowledge into methods, it was transferred in conversations among individuals in processes resembling the appropriation processes described above.

In the process of extension in the larger consultancies, the articulate elements of the knowledge system, methods and cases, were produced based on the ongoing practice in the consultancy. These articulate elements of the knowledge system could thus be seen as artifacts produced by, as well as reproducing, the shared mental models among the consultants. The artifacts were a temporary reflection of what was regarded as right and wrong in connection with organizational change at a given point in time and an important facilitator of the appropriation process.

The processes of appropriation and extension are thus linked in a dialectical relation. The shared mental models created in the process of appropriation are the basis of the method created in the extension process. But this method is at the same time influential in creating the shared mental models in the process of appropriation. Similar interrelations between knowledge of a more tacit and individual character and knowledge of a more articulate and organizational character were identified by Orlikowski (1988), who studied the emergence of software tools in an IT consulting organization (see also chapter two for a brief summary of her findings).

This dialectical process can look like a closed loop, leading to an endless, and flawless reproduction of a specific set of mental models and actions. But, as has been shown in chapter eight, the link between the method, the mental models, or constants as they were called there, and action is quite loose, allowing for considerable variation in the specific situation. These variations provided important input to the method development process. But it was also shown in the case studies in the current chapter that the practice in projects was not the only input into the method development process. Even other influences from, for example literature, other methods and seminars could be observed.

Still, the above-described dynamics set limits to the process of developing the consultancy's practices. In the analysis of the link between the method and consultants' actions in the previous chapter, I identified the influence of methods on the aim, purpose and design of the change process. Against this background the use of a given method limits the range of actions taken and thereby the experiences made (see also Orlikowski, 1988; Robertson and Swan, 1998). The concepts and notions, i.e. the language, provided by the method also limit the experiences made, as they steer perception and interpretation of these experiences (Alvesson, 1992; Kim, 1993). This limits the further development of methods, as these are the result of an articulation of consultants' experiences.

A cultural perspective on learning in consultancies

The interplay of the two above-described dialectical processes simultaneously leading to the development of the three elements of the knowledge system are what I regard as constituting organizational learning in consultancies. The characterization of this process above underlines its social character i.e. its taking place in a collective of people. The central concepts of shared mental models (the result of the appropriation process) and shared artifacts (the result of the extension process) are both collective concepts in line with a cultural perspective on organizations (c.f. Schein, 1985).

A cultural perspective on organizational learning is according to Cook and Yanov (1996) a largely neglected but potentially very rewarding one. According to the authors, most of the theories on organizational learning have their roots in a cognitive perspective. But these theories to a large extent fail to capture the interplay between an organizational and individual level of knowledge that was seen to be so central in the above conceptualization of learning in consultancies.

As an alternative to the cognitive perspective, Cook and Yanov introduce a cultural perspective on organizational learning, based on an interpretive approach to the development of social systems (e.g. Berger and Luckman, 1966). Organizational knowledge, it is argued, is not possible to reduce to the individual knowledge of the members of the organization, but resides in the collective of the organization's members. The knowledge to make "the best flutes", following the empirical example of Cook and Yanov, is not resident in the single individual craftsman, but rather in the collective of employees. This point of view is compelling when a craft company such as a flute maker is concerned, where the product in the production process goes through the hands of a number of skilled and specialized craftsmen. But how about consulting companies and their "products", in what sense are they "organizational" if they are organizational at all?

Based on the insights into the practices of the larger consulting companies studied above, I claim that even if the actual work in the consultancies is carried out by a limited number of individuals, their actions have a large collective component through the identified link between individual and collective knowledge. Viewing organizational learning from a cultural perspective according to Cook and Yanov (1996) builds on the following premises:

Human action includes the ability to act in groups. Over time and in the course of joint action or practice, a group of people creates a set of intersubjective meanings that are expressed in and through their artifacts (objects, language and acts). Such artifacts include the symbols, metaphors, ceremonies, myths, and so forth with which organizations and groups transmit their values, beliefs, and feelings to new and existing members, as well as in part to strangers. As new members join the group, each acquires a sense of these meanings through

the everyday practices in which the organization's artifacts are engaged. Through such "artifactual interactions", shared meanings are continually maintained or modified; these are acts that create, sustain, or modify the organization's culture. (p. 440)

These premises fit well with the above-identified process of learning in management consultancies viewed as the development of the knowledge system. It both accommodates the social character of the process, i.e. the development of the knowledge elements through interaction and shared practice between people, as well as the dialectic process between the often tacit individual knowledge and the explicit artifacts of it. Against this background, the cultural perspective on learning thus accurately captures the dynamics of the knowledge system identified in consultancies.

Linking back to the conclusions from the previous chapter, the model of the individual consultant's action sketched out in chapter eight can now be embedded in the overall knowledge system (Figure 9.4).

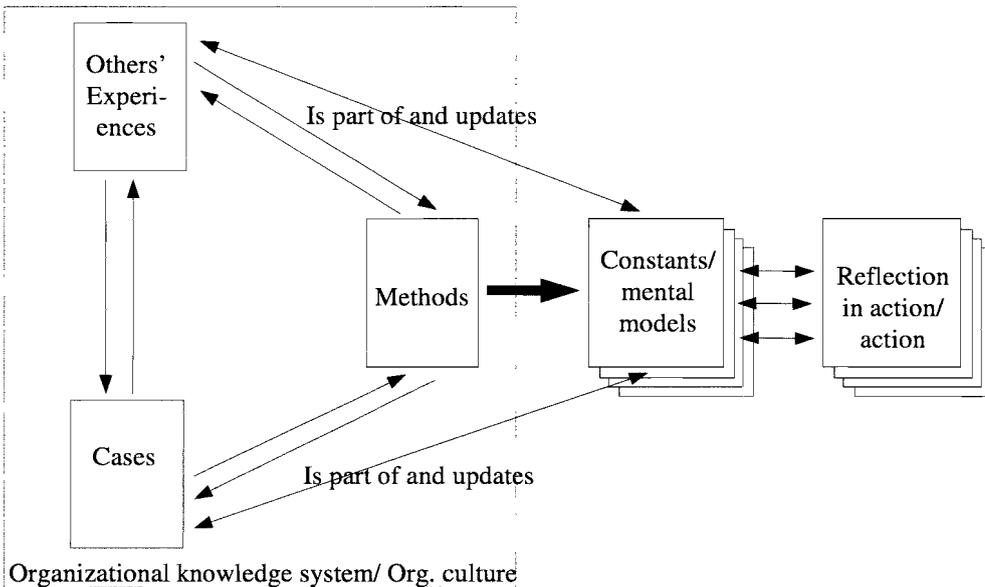


Figure 9.4. The individual consultant in the overall knowledge system. Integrating the findings of chapter eight and nine

The individual actions in the consulting company can be said to be, to a large extent, based on an organizational kind of knowledge reflected by the organization's culture, as represented by both the shared mental models (called constants in chapter eight) and its artifacts in terms of methods and cases. The

individual consultant's mental models thus interact with the organizational knowledge system, being part of this as well as updating it (see Figure 9.4).

Consequently, there is reason to talk about an organizational knowledge in consulting companies. This organizational knowledge is neither about the formalized elements of the knowledge system nor about the sum of the consultants' experiences, but rather about the two *in interaction*. Methods and cases without experienced users are quite worthless. Experienced consultants without a common language provided by methods have difficulties in learning from each other, as well as capitalizing on their own expertise by spreading it to others and organizing hierarchical projects, where more experienced consultants focus on the more experience-requiring activities.

The central leverage in this system is the communality of the consultants' mental models, i.e. their constants, that were shown to be both a prerequisite as well as a consequence of the development of methods and cases. But the establishment of these common mental models was not an easy task. As described by the consultants in ABB-MAC, consultants are often individualists with little interest in sharing their most valuable asset – their knowledge and experience. In the studied consultancies, several mechanisms could be observed, especially in the larger consultancies, supporting the establishment of these common ways of thinking. The mentor system for introducing consultants was observed in both E&Y MC and International. These companies also had a history of hiring young, inexperienced individuals that were willing to learn the respective consultancy's way of doing things. Promotion according to an "up or out" policy observed in some of the consultancies further supported the enforcement of shared mental models, leaving little room for people not fitting into the culture.

This indicates that an effective knowledge system in a consulting company requires formal structures, as was seen in the cases of E&Y MC and International, as well as a culture that fosters information exchange. In building this culture, the promotional, and the remuneration systems, are important. Peters (1992) illustrates this vividly based on an analysis of McKinsey. In order to make consultants share their knowledge, the contribution of the consultant to the organizational stock of knowledge was made an important criteria for promotion.

Does size matter?

The above analysis of the knowledge system's structure and dynamics indicates a large potential for establishing a truly organizational knowledge within consultancies. This creates the prerequisites for economies of scale based on knowledge within the management consulting business, as such a system makes

it possible for the larger consultancy to exploit its larger experience base derived from a larger number of ongoing projects. Only with an effective system for the extension of knowledge can the larger consultancy capitalize on its larger accumulated experience as compared with the smaller firm. But with these mechanisms in place, the larger firm may be at an advantage (c.f. Sarvary, 1999).

The analysis of the three knowledge systems in E&Y MC, International and ABB-MAC showed some size-related differences (see Table 9.2 above). These differences have been repeatedly pointed at in the discussion of the dynamics in the knowledge system and will only be summarized here. Whereas E&Y MC and International to some degree followed the same patterns in relation to the appropriation and extension of knowledge, the processes in ABB-MAC differed somewhat by being less formalized and not involving the development of methods and cases. This may partly be understood against the background of the company's smaller size making the observed informal face-to-face interaction sufficient for knowledge transfer. But there were also other motives for not engaging in a more formalized process producing methods and cases. These were related to the perceived cost/benefit relations of these activities in the small consultancy. The experience base in terms of the number of projects was too small to motivate the more general documentation of cases, as cases became old, before a similar case was encountered. Similarly, the internal development of methods was deemed too costly in relation to its potential benefits in the small ABB-MAC.

But the differences between the small consultancy ABB-MAC and the larger consultancies International and E&Y MC not only concerned the formalization of the process and the development of methods and cases. Also when looking at the extension of knowledge through face-to-face interaction, differences between the large companies on the one hand and the small ABB-MAC on the other hand could be observed. In all the companies the interaction with colleagues in projects was seen as the central arena for these processes of experience exchange, but in ABB-MAC the opportunities for this were limited due to the limited size of the company's projects. This, finally, also made a hierarchical organization of projects difficult, which was seen as a source of leveraging the knowledge of experienced consultants in the larger consultancies. The above thus hints at the existence of economies of scale linked to knowledge in management consulting. The existence of a knowledge system like the one identified in E&Y MC and International provides the large consulting company with a potential of making use of its larger experience base,

thus giving it an advantage over smaller consultancies competing on the same market.³²

Overall summary – the method in the knowledge system

This chapter has focused on the third and last domain of method use identified for this thesis, namely the method's role in management consulting companies' knowledge systems. The investigation into this domain was divided into three analysis steps, which were carried out consecutively, each focusing on one of the three research questions formulated for this chapter.

The first question concerned the identification of the elements of the knowledge system. Based on the study of the claimed sources of knowledge in a large consulting project as well as three consulting organizations, three elements of the knowledge system were identified – methods, individual consultants' experience and cases. These three knowledge elements were found to exist in all the studied companies and to have quite different characteristics.

Having identified the elements of the knowledge system, the second research question was focused on, which concerned the interrelations between the different knowledge elements. In this analysis, the knowledge elements were found to be complementing, constituting a closely interlinked system, in which the different knowledge elements were found to support each other. The main role of the method in this system was its provision of language that supported the articulation of both experience and cases. The method in its turn was enabled by experience, supporting the application of methods and cases specifying and exemplifying the method (see Figure 9.3).

The investigation of the third research question concerning the dynamics of the knowledge system, concluded this chapter. Two processes were identified as central for the development of the knowledge system, i.e. organizational learning. In the process of appropriation, knowledge on an organizational level was transferred to the individual. In the process of extension, the individual consultant's experience was made available to the organization. In both these processes the method played an important role. In the process of appropriation, it provided a common language that supported communication. In the process of extension it was central, as this process focused on the development of the method. The method was here seen as a main vehicle for making individual knowledge available to the organization at large.

³² The above argument is based on the type of consulting carried out by the companies studied above, i.e. relatively standardized processes not involving a large amount of creativity. For consultancies involved in more creative and problem-solving intensive consulting, the above system may not be a viable one (c.f. Hansen, Nohria & Tierney, 1999)

The investigation into the dynamics of the knowledge system also led to the conclusion, that learning in a knowledge system is well captured by a cultural perspective on organizational learning. This highlights the concurrent development of the individual's mental models, the collective mental models as well as the artifacts of these mental models – the method and cases. In this perspective, methods become artifacts of the shared mental models of the organization being both the prerequisites as well as the results of these. Consequently, methods were identified to have a central role in enabling, maintaining and developing the knowledge system within consultancies.

Chapter Ten

Conclusions: The roles of methods in the work of management consultants

In this chapter, the findings reported in the previous empirical chapters six through nine are summarized in order to give an overall picture of the issue, which has driven this research endeavor. Seven roles for methods are identified in answer to the question posed initially which focused on “the role of methods in the work of management consultants in large “one firm concept” consulting organizations working with BPR”.

Of the identified roles, only a small minority depict the method as technical knowledge, which was the main view of methods presented in the practically-oriented literature reviewed in chapter two. Instead, most of the roles found depict methods as something, which structures a complex world in order to make it understandable and actable. Against this background a need for reframing methods is identified. It is suggested that methods should be viewed as language rather than technical knowledge. Based on a conceptualization of the role of language in everyday life, the identified roles of methods are revisited, and a set of basic characteristics of methods is identified. It is concluded that methods do not represent technical knowledge *per se*, as assumed in much of the practically-oriented consulting literature, but rather are important in facilitating the creation, storage and dissemination of knowledge.

Following this reframing of methods, and concluding this chapter, is a general discussion of the results of this study. First, the generalization of the results is discussed. Then, attention is turned to the mainly positive picture of methods painted in this thesis. A number of potential downsides are pointed to as suggestions for further research.

A summary of the findings

In this thesis, the role of methods in management consulting has been studied in three different domains – in the consultant’s project work with the client, in the consultant’s problem solving and in the consulting company’s knowledge system. In this section I will briefly summarize the roles found as well as the prerequisites for their realization.

The method in the project work with the client

Based on the conviction, that the consulting project should be understood as an interaction between method, consultant and client, a case study of a consultant-driven change process was carried out, focusing on these three elements and their interaction. The analysis of the method - consultant - client interaction in the change process focused on the different roles of these elements in carrying out key activities in the change process. In all these activities, the method was seen to have important roles. But it was also observed, that the enactment of these roles required specific contributions from both the consultant and the client (see chapters six and seven).

Analyzing the roles of the method in the different key activities in the change process, three recurring underlying roles of the method emerged in the consultant's project work with the client. These, partly overlapping roles described the method as (1) providing language for reality construction, (2) providing a structure for action and (3) providing a discursive framework for communication. In the following I will describe these roles, as well as the required complementary roles of consultant and client members in more detail.

Role 1: Providing language for reality construction

In describing and analyzing both the current situation of the organization as well as the desired future situation, concepts provided by the method were important resources. The use of these concepts provided by the method led to a partial redefinition of the client's view of the organization. Mapping this in terms of, for example, active times provided new insights into the workings of the organization. But the application of the concepts provided by the method was also observed to have some frustrating elements linked to the use of the general concepts in a specific situation. This required the active role of the consultant.

The successful enactment of the method's role as language provider required the contribution of the consultant as a "translator", supporting the project group in their use of concepts by explaining, exemplifying and directing. But this is not possible without the project group members' contribution to the process. Only if they accept both the authority of the method and the consultant can the concepts provided by the method successfully influence the reality construction in the consulting project. The method as such was found to contribute to the client's confidence in both the method and the consultant, which will be elaborated on in connection with the second role.

Role 2: Providing structure for action

The method was repeatedly observed to provide a structure for the change process both at an overall level, providing the structure for the entire change process, as well as structuring a specific meeting. This structure was seen to reduce uncertainty and thereby enable action of both the consultant and the client. It was repeatedly observed, that the structure provided by the method gave the project group members knowledge of and confidence in the process that both enabled and motivated their actions. In a similar way, the method was also observed to provide a source of uncertainty reduction to the consultant supporting his confident action.

But, as mentioned in relation to the first role, the structure provided by the method was of limited use to the project group members without the consultant's support in its application. No matter how detailed the structure is, it always has gaps when it comes to guiding action in a complex reality. These gaps had to be filled in by the consultant, who was observed to play an active role in leading the change process as well as adapting the generic procedure to the specific situation.

Again, the realization of this role required the client's acceptance of the consultant's and the method's authority. This was facilitated by the existence of the method, which was regarded as an assurance of professionalism by the project group members. But in some instances the consultant's steering of the process was perceived as too strong, which generated a fear among project group members, that they were about to lose their influence on the process. This too strict guidance was partly attributed to the existence of the method, which thus emerges as a double-edged sword in its role of structuring the change process.

Role 3: Providing a discursive framework for communication

In its third role in the change process, the method was observed to provide a discursive framework legitimizing the change as well as the change process. In providing a chain of arguments from the problems in today's organizations, via a change process to a desirable situation for tomorrow, the method provided a resource for persuasion. This logic was repeatedly used as a basis for presentations by the consultants. The message thus conveyed was very well accepted by the project group members, who were observed to adapt and reinterpret it in order to serve their purposes. For several project group members it became a resource in their own argumentation for ideas, which were said to have existed in the organization for some time.

Based on the observed roles of the method and the complementary roles of consultant and client in enabling these, the consultant emerged as a key actor in

the change process. Through its above-described roles, the method was observed to contribute to creating this central position of the consultant. By providing language and structure, the method created the need for the consultant's adaptation of the method to the specific situation, which gave the consultant a privilege of interpretation. But the method also supported the consultant in successfully enacting this central role, which required the client's acceptance of the consultant. Through its structure and discursive framework, the method provided the consultant with legitimacy in the client's eyes.

These findings on the method's role in the consultant's work with a client, add to the understanding of methods provided in both the practically-oriented consulting literature as well as the literature on methods in systems development. As summarized in chapter two, these sources mainly picture methods as a guide for action for the consultant. The method's relation to the client is mainly neglected with the exception of the IT systems development literature, in which methods are described as supporting the client's participation. This role is captured in the role "providing structure for action". The other two roles – "providing language for reality construction" and "providing a discursive framework for communication" are not accounted for in this literature.

The method in the consultant's problem solving

In analyzing the roles of methods in the consultant's work in a client project, it was repeatedly emphasized that the consultant was an important enabler of the method's roles towards the client. Consequently, the second area of study concerned the relation between the method and the consultant. The underlying interest concerned whether and in what way the method influenced the actions of the consultant. This was studied through simulations of seven consultants' proposal writing processes (see chapter eight).

The study of the process of proposal writing revealed that the methods did not directly determine action in the sense that they were used as blueprints for the consultant's actions. Rather, action seemed to take place intuitively without any direct references to the method. This was very much in line with the results reported in other studies as summarized in chapter two and three, and thus not very surprising. But in spite of this, methods were found to have some influence on the consultants' actions, although this influence was more indirect.

The comparison of different consultants' approaches to proposal writing revealed that they differed in terms of the consultants' view of the company (internal-external), the view of the nature of the client personnel (normative-rational) and the view of the consultants' role in the change process (degree of questioning). These differences could be referred back to differences in the

consultants' systems of constants for reflection in action – i.e. role frame, appreciative system, media and language and overarching theory. Finally, the consultants' constants to a large extent overlapped with the method, thus leading to the conclusion, that the method influences the consultant's problem solving, not directly, but rather via the constants, based on which intuitive action takes place (see Figure 10.1). These constants are not only formed by the method, but also by the accumulated experience of the consultant. The method should thus not be seen as determining consultant action, but rather as providing building blocks for the consultant's construction of his constants, based on which the consultant's intuitive action takes place.

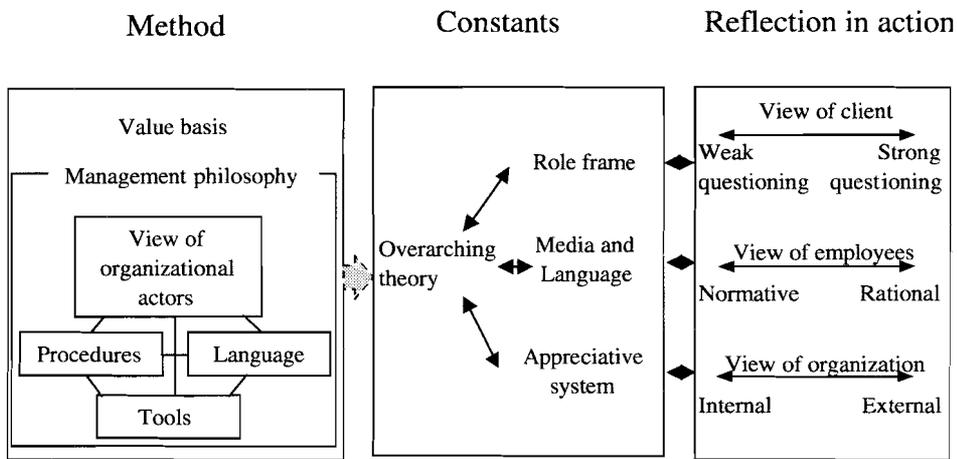


Figure 10.1. The link between the method and consultant action

This implies that the consultant internalizes the method, and that consultant action is to a large extent intuitive, which confirms the findings of the studies of consultants' actions and the use of formalized knowledge in practical action as described in the chapters two and three. But this study adds to this knowledge as it spells out a link between formalized knowledge and practical action, that makes possible the method's influence without implying a direct determination. It thus also confirms the frame of reference concerning the link between formalized knowledge and consultant action as has been spelt out in chapter three.

The above also sheds some new light on the role of consultants in supporting the enactment of the method's roles in the change process. Here an important role of the consultant was reported to be the "adaptation of the method to the specific situation". Given the findings of this study, this metaphor of "adapting" the method, which was also frequently used by the consultants in chapter four, seems to be somewhat misleading, as it implies a conscious and

analytical process. Such a process could not be observed in this study. The findings thus highlight the role of methods not as guides for action, but rather as resources in the construction and change of the consultant's constants underlying their actions.

The method in the knowledge system of management consulting companies

Against the background of the identified link between the individual consultant's actions and the method, indicating a role for methods in the overall knowledge system of consulting companies, a third and final study was carried out focusing on the knowledge system in consulting companies. The aim of this study was defined as identifying the elements of the knowledge system, their interrelations and dynamics. This study was empirically based on the internal aspects of a large consulting project, as well as complementary interviews from other projects and companies (see chapter nine).

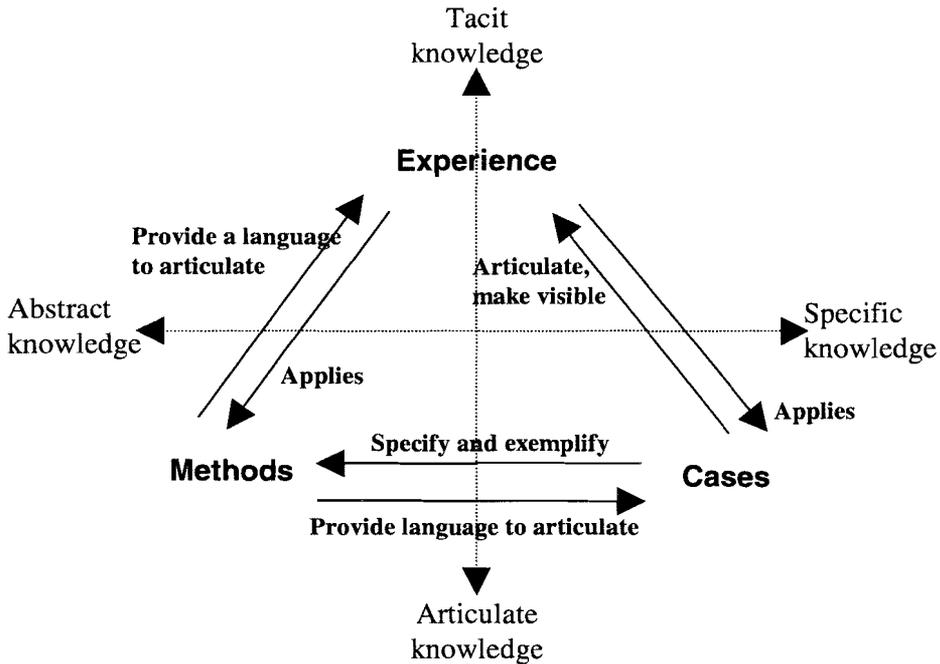


Figure 10.2. The method's role in the consulting company's knowledge system

The study of the knowledge system within consulting companies revealed an important role for methods. Three elements of the knowledge system were identified, with the method being one of them, contributing to the system by providing a language in order to structure and articulate the other two elements of the knowledge system – the individual consultant's experience and documentation of completed cases (see Figure 10.2). However, in providing a

language and structure for the knowledge system, the method also limited the development of the system by limiting the consultant's actions and thereby the experiences made within it.

In line with the findings in the previous study, describing consultant action mainly as intuitive and based on a tacit kind of knowledge, the leading element in the knowledge system is the individual consultant's experience. The development of the knowledge system, i.e. organizational learning, is thus to a large extent about making this individual knowledge available to the larger community of consultants, which involves the processes of extension (making individual knowledge organizational) and appropriation (making organizational knowledge individual). Methods are supportive in both these processes.

In the process of extension, methods are created. The individual consultants' experiences are formalized into methods, which can then be easily communicated to the other consultants in the consulting company. In the process of appropriation, knowledge available on an organizational level is transferred to an individual level. Two ways of accomplishing this were identified. The first concerned traditional teaching, the second on-the-job learning in collaboration with colleagues. Needless to say, methods were an important object for traditional teaching. Also in on-the-job learning, methods were important because the common language provided by them supported the collective action as well as the communication between the consultants involved in the learning situation.

The above thus makes methods an important artifact in the consulting company's knowledge system. The method is both an artifact of the organizational knowledge as well as a prerequisite for it. Methods are created as a result of experiences made when applying the method. This indicates a conserving role of the method, but as concluded in relation to the link between method and consultant action, there is some room for creativity and innovation in the consultants' application of methods.

These findings elaborate on the results of Alvesson's (1992) and Orlikowski's (1988) studies concerning the knowledge system in consulting companies, by focusing specifically on the role of methods. Alvesson and Orlikowski conclude that organizational control within consulting companies is about controlling culture or climate (i.e. shared understandings and thus knowledge). The role of methods in achieving this has been indicated by both studies, but is spelled out in detail in this study.

Conclusions – the roles of methods in management consulting

In all the three studied domains of management consulting – the work with the client, the individual consultant's problem solving and within the consulting

company – methods were found to play a role. The following roles of methods in the work of management consultants can be identified:

1. *A structure for action:* Methods provided a road map for the consulting process, identifying the central activities to be carried out and their order. This roadmap could be consulted by both consultants and client members in order to decide on subsequent action.
2. *A language for reality construction:* Methods contained a set of concepts for mapping and diagnosing the organization. These concepts were an important resource in arriving at a diagnosis of the organization and a solution to the organization's problems.
3. *A discursive framework for communication:* Methods, through their "philosophy", provide a coherent set of arguments for the need for change. Methods also sketch out the solution to the organization's problems, resolving the need for change. These sets of arguments are a resource for both consultant and client personnel in their persuasive efforts.
4. *A resource for constructing constants – a frame of reference for consulting:* Methods were seen to provide a resource in the consultant's construction of the constants guiding reflection in the consulting process. Concepts as well as logic from the method were reflected in the consultant's constants.
5. *A language for knowledge exchange between consultants:* Methods were observed to be shared within consulting companies. Hereby, they provided a shared language and frame of reference, that facilitated the consultants' communication and exchange of experiences.
6. *A structure for knowledge storage:* The structure of the consulting process provided by methods also facilitated the structuring of knowledge within the consulting organization in a way that made it more easily accessible to the organization's members.
7. *A repository of knowledge:* Besides supporting the structuring and exchange of knowledge methods were also observed to *per se* contain knowledge of the consulting process – its main activities and their sequence. This knowledge was easily transferable.

These seven roles, representing a high-level abstraction of the findings presented in this study, can be viewed as representing two underlying views of the character of methods. Roles one and seven depict methods as technical knowledge directly usable in practice. The remaining roles, on the other hand, view knowledge as something, which structures a complex world in order to make it understandable and actable.

As argued in chapter two, the implicit view of methods represented in most of the practically-oriented literature on consulting depicts methods as technical knowledge. But based on the conclusions of this study, I will below argue that this conception of methods fails to account for a large number of the roles identified above. A reframing of methods is therefore justified in order to gain a more representative conception of “what methods are”.

Reframing methods – from technical knowledge to language

Methods are an important phenomenon in both the theory and practice of management consulting. Methods are ever present in many aspects of consultants’ practice. Their maintenance and development consumes large resources, and the practically-oriented literature on management consulting is full of different kinds of methods.

This popularity of methods is to a large extent based on a theoretical tradition of knowledge in which methods are viewed as technical knowledge, i.e. knowledge that can be directly realized in practice and supports the solving of problems. The more rigorously the methods are followed, the better the results will be. This view of methods is manifested in the roles of methods as guides for actions and a repository of knowledge as identified in this study.

Given the conceptualization of methods as technical knowledge, a depressing picture emerges. The empirical evidence of methods fulfilling these roles of directly guiding action and storing knowledge, easily realizable in practice, is very limited. This study, as well as others’ studies reviewed in chapter two, clearly reveal that actions – whether that of systems developers or management consultants – are seldom directly guided by formalized methods. Rather, most successful action is described as the result of factors embodied in the actor, such as experience and intuition.

This reveals two conflicting views of methods and their potential contributions. On the one hand methods are claimed to be able to guide successful action. On the other hand this ability of methods is denied based on a conceptualization of the consultant’s problem solving processes as experience-based and intuitive. This forms the paradox that has been restated repeatedly in the introduction to this thesis, and which to a large extent has driven it. The approach chosen to resolve this paradox was to assume that the belief in the method’s positive effects is justified, but that the conceptualization of methods as technical knowledge is incomplete, obscuring a number of characteristics of methods, that could help to better understand the roles of methods in management consulting.

Against this background, the basic theoretical framework for this investigation was built up based on an alternative to the theoretical tradition of knowledge,

namely the practical tradition of knowledge. This alternative tradition fitted well with the descriptions of the consulting process as an experience-based, intuitive process, but unfortunately it revealed little as to what the roles of methods may be when viewed from such a perspective.

Switching perspectives in this way opened up the search for additional roles of methods, which would help to complement our understanding of the use of methods in practice. As summarized above, a number of such roles were found. Methods were seen to contribute language for reality construction and knowledge exchange, provide a discursive framework for communication and provide a frame of reference for consulting as well as a structure for knowledge storage. These roles are qualitatively different from those emerging from a theoretical tradition of knowledge depicting methods as guides for action. The link between methods and action, according to the latter roles, is an ambiguous and complex one.

Given the roles of methods found and the problems of capturing the majority of these roles in the view of methods as technical knowledge, I will in the following suggest a reframing of methods in order to find a metaphor for methods, that better captures the roles and characteristics of methods found in this study. Based on a brief elaboration of the practical tradition of knowledge and its underlying constructivist ontology, a view of methods as language is proposed as a more meaningful conception of methods. After a short investigation into the concept of language, I will then revisit the roles of methods found in this study and discuss them in the light of the metaphor “methods as language”.

Methods – a language structuring change

Viewing the roles of methods in consultants’ actions from a practical tradition of knowledge, questions the method’s ability to provide technical knowledge for action. Instead other roles for methods emerge.

A central assumption underlying the practical tradition of knowledge is that reality is socially constructed. No a priori order exists in reality, but the observed orders are human creations, orders, which are intersubjectively “agreed upon” by the actors in a specific field. These orders are created and reproduced through actions within a “messy” reality. Language, as symbols having a shared meaning among a number of individuals, is an important vehicle for the reality creation and reproduction process (Berger and Luckman 1966; Weick, 1995).

Consulting projects of a BPR type often take place in a very messy reality. They are cross-functional, involving a relatively large number of people, etc. In these processes, as in all human activity, there exist large pressures to structure these

processes as well as the environments in which they take place. These pressures are both of an institutional nature and of a practical nature. The institutional pressures originate from the rationality norm requiring practices to appear to be rational, which requires an orderly division of, for example, means and ends (Brunsson and Olsen, 1993). The practical pressures originate from desires to control the process, efforts towards common action, etc. Also the act of problem solving requires the imposition of order onto the complex reality. This has to be framed or “prestructured” in order for problem solving to become possible (see chapter three).

Reframing the consulting process from a constructivist perspective highlights the imposition of order onto a complex and inherently unstructured reality as a key activity. From this perspective, the important aspect of methods is no longer their “knowledge content” but rather their ability to support the structuring of a complex world. The method mainly supports this by providing a language for describing organizations and consulting processes. In the following I will elaborate on this metaphor of “methods as language” as well as discuss some of its implications. I will begin this with a brief elaboration of the concept of “language” and its characteristics. This will be followed by a discussion revisiting the roles of methods identified above in the light of the reconceptualization of methods as language

Some notes on the concept of “language”

The concept of language plays an important role in a theory of knowledge, as language and knowledge are tightly linked. Departing from the practical tradition of knowledge, based on a constructivist ontology, language obtains a central role in creating and maintaining reality. As argued in chapter three, there exist few clear-cut, well-defined problems. Rather problems have to be created (framed according to Schön, 1983) in a “messy” reality. Analogically, from a constructivist perspective, reality as such is seen as inherently unordered. All order is imposed, and language is an important resource in creating this order as well as problems:

... language objectifies the world, transforming the *panta rhei* of experience into a cohesive order. In the establishment of order, language realizes a world, in the double sense of apprehending and producing it. (Berger and Luckman, 1966:173)

Following on from the above, language is a collective concept. Berger and Luckman (1966:49) describe language as a central vehicle for “objectivation”, i.e. for producing “products of human activity that are available both to their producers and to other men as elements of a common world”. Hereby, language has the possibility to detach meanings from the “here and now” of individual experiences and make them more widely available:

Language provides me with a ready-made possibility for the ongoing objectification of my unfolding experience. Put differently, language is pliantly expansive so as to allow me to objectify a great variety of experience coming my way in the course of my life. Language also typifies experiences, allowing me to subsume them under broad categories in terms of which they have meaning not only to me but also to my fellowmen. (Berger and Luckman, 1966:53)

Language is thus “objective” in the sense that it is encountered as an objective facticity to be followed by the individual. Learning language, against this background, is about acquiring an entire structure of meanings. Socialization and the acquisition of language are two concepts closely related. Berger and Luckman describe the acquisition of role-specific vocabularies (c.f. methods) as an important aspect of secondary socialization:

Secondary socialisation requires the acquisition of role-specific vocabularies, which means, for one thing, the internalization of semantic fields, structuring routine interpretations and conduct within an institutional area. At the same time, ‘tacit understandings’, evaluations and affective colorations of these semantic fields are also acquired. (Berger and Luckman, 1966:158)

This indicates that language is more than a number of words and a set of grammatical rules for putting them together. With language follows a set of “tacit understandings” that make it possible to understand and “use” language. Consequently, also language, which must be regarded as an “articulate” kind of knowledge, includes tacit elements. Even if language is thus by Berger and Luckman described as a sign system characterized by its detachability “from here and now”, this detachment is not complete. Language is deeply anchored in everyday life and especially face-to-face interaction.

Language is thus anchored in practice. This is vividly illustrated by Josefson’s (1991) comments on the possibilities of creating a shared language between experienced practitioners and novices for the transfer of tacit knowledge:

To find a language that is common to the experienced tutor and the young student I think is impossible. The language linked to the tradition of nursing is so infused by the practice in which it has been created. It is filled with experiences of the practice from which it has emerged. The young student normally lacks these experiences. She will acquire this language, when she is introduced to the practice. If she does not, she will probably not remain in the nursing profession; she will not become a participant in the language of this community. In order to find a point of departure for bridging the gap between the experienced tutor and the student, examples that talk to the student are needed, that eventually, with increasing experience, fill her language with meaning. (Josefson 1991:36, translated from Swedish)

The above can be summarized into three characteristics of language:

1. Language is constructive and objectifying – it is a key resource in reality creation

2. Language is collective – its strength lies in its being “objective”, i.e. shared with others and taken for granted
3. Language is anchored in practice and therefore partly tacit.

The roles of methods revisited

The metaphor of language was suggested as an alternative to viewing methods as technical knowledge. This metaphor was argued to better capture the roles and characteristics of methods found in the present study of the use of methods in the work of management consultants. Having briefly described my perspective and view of language and its characteristics, I will now revisit the roles of methods identified, in order to discuss them in this light.

From a language perspective, the roles of methods can be condensed into three aspects of methods as language. Underlying most of the seven roles above is a view of methods as providing structure to a complex reality, thus “creating” this. This is most obvious in roles two and four (“a language for reality construction” and “a resource for constructing constants”), but also in the roles related to action (role one, “a structure for action”), communication (role three, “a discursive framework for communication”) and knowledge exchange (roles five to seven, “a language for knowledge exchange”, “a structure for knowledge storage” and “a repository of knowledge”), the method’s ability to create and structure reality is important. A first aspect of methods as language to be discussed is thus their ability to support reality creation.

The realities created by the method were not just any realities as, as indicated by the method’s role of providing a “discursive framework for communication” (role three), but had legitimating and persuading effects. Especially in the consultant – client relation, the discursive framework provided by the method supported communication and persuasion. A second aspect of methods as language thus concerns its ability to support communication and persuasion.

Thirdly, methods were found to play several roles in the exchange of knowledge in the consulting process as well as the consulting company (roles one and five to seven). These roles were tightly coupled to the method’s ability to provide a set of concepts, a language, through which experiences could be structured, stored and exchanged.

Consequently, summarizing the seven roles of methods from a language perspective generates three partly overlapping aspects of methods as language – methods as language for reality creation, methods as language for persuasion and legitimization and methods as language for knowledge exchange. These aspects of methods as language will be discussed in more detail in the following.

Methods as language for reality creation

In the empirical studies, “reality creation” was a recurring activity in the work of consultants. The consultant had to create his view of the current situation, the desired future situation, the consulting process and its progress, risks etc. Sometimes these processes took place individually, but often they were collective involving the client members and consultant colleagues. Methods were found to be a resource in these processes, affecting their content and outcomes. The concepts provided by the method were the resources with which reality was structured, and the value system attached to these concepts guided the attention of the consultants.

For the individual consultant, methods were claimed to be a resource in the construction of their constants for reflection in action and thus their view of reality and role in it (c.f. chapter eight). Key concepts in the method were reflected in the consultants’ framing of the problem. If the method included concepts for the environment of the organization, this would be attended to in the diagnosis. If these concepts were missing, the diagnosis would neglect the external aspects. Furthermore, the meaning of concepts such as “consultant”, “project leader”, or “client” in the method was reflected in the consultants’ perception of their own role and their conceptualization of the nature of the consulting assignment at large. Was this about managing human processes or designing organizational solutions?

Even if reality creation in the simulation study in chapter eight was studied mainly as an individual activity, it is as much a collective activity as described in the case study on the method’s role in the consultant – client interaction (chapters six and seven). Much effort in the reengineering project was put into creating a shared picture of the current reality as well as the desired future reality. This shared picture was to a large extent created using the language provided by the method. In particular the different measures of times in the process and the process mapping techniques provided the basis for the project group members’ mapping of their organization. In a similar way, the method also provided the language (key concepts) for constructing the problem, and its solution in terms of a revised organization.

The project group members’ use of the for them previously unknown method as a language for describing the current as well as the future organization, implies that these processes also involved the learning of a foreign language by the project group members. Given the characterization of language as partly tacit, the problems observed in the client members’ use of the method’s concepts becomes both understandable and unavoidable. Methods as language are anchored in practice and cannot be entirely detached from this practice. Learning methods as language requires action together with a person

knowledgeable in the language, i.e. the consultant. This explains the observed role of the consultant as supporting the client's use of the abstract concepts provided by the method.

Methods as language for persuasion and legitimization

Methods are not just any language, but rather a language with a strong persuasive and legitimating power. This is derived from their reflection of what in chapter three was described as a "technical rationality", characterized by a division of means and ends, of knowing and doing as well as of research and practice. Viewing the method as a language and thereby resource for reality construction thus indicates that the realities created by methods reflect this technical rationality. This is an important characteristic, as it explains the role of the method as a resource for persuasion and legitimization, which was observed in the consultant's work in a client project and summarized in the method's role of providing a "discursive framework for communication".

As argued above, language and its associated meaning structures are objective. They are taken for granted and under normal circumstances not questioned. Cohering with an established language and its associated meaning structures thus provides pictures of reality that are regarded as both "true" and legitimate. An important ingredient in the meaning structure linked to language in western society at large, but especially in modern business life, is the technical rationality (Schön 1983; Strang and Meyer, 1994; Brunsson and Olsen, 1993).

The link between the adherence to a technical rationality and the production of legitimate "solutions" is well described by Meyer and Rowan (1991:44)

In modern societies, the myths generating formal organizational structure have two key properties. First they are rationalized and impersonal prescriptions that identify various social purposes as technical ones and specify in a rulelike way the appropriate means to pursue these technical purposes rationally... Second, they are highly institutionalized and thus in some measure beyond the discretion of any individual participant or organization. They must therefore be taken for granted as legitimate, apart from evaluations of their impact on work outcomes. (Meyer and Rowan 1991:44)

Methods, such as BPR are clear examples of what Meyer and Rowan above describe as "myths generating formal organizational structure". As has been argued in various places in this study, methods and the discursive framework they provide to a large extent share the characteristics of the "myths", which helps to explain why they were perceived as legitimate by the actors involved in the consulting process. As argued in chapter three, methods have an important potential in providing actors with arguments to justify their activities in an "understandable and acceptable way" i.e. in accordance with technical rationality.

The perceived objectivity of the concepts as well as the underlying meaning structure of methods, originating from their roots in technical rationality, was observed to be a resource for persuasion and legitimization for both the consultant and the project group members.

For the consultant, the concepts and meaning structure provided by the method served as a source of legitimacy throughout the entire project. In the beginning of the process, it was an important resource in the sales process towards the Scandtel managers. Later on in the project it was recurrently used in order to depict the consulting process as well as its sub-activities as a planned and thought through process, which according to the project group members was an important factor for their acceptance of the consultant's authority.

For the project group members, the method's ability to depict both the consulting process as well as the organization and its need for change in a manner compatible with a technical rationality was important in two ways. Firstly, the rational picture of the consulting process provided by the method induced hopes that this process, after a number of failures, would finally lead to some real changes in the organization. This picture of a rational process also provided the sometimes tedious and frustrating data gathering efforts in the mapping phase with meaning, that motivated their pursuance. The basic steps of the method were repeatedly used by the consultant in order to describe the consulting process and thereby give meaning and legitimacy to the individual activities to be carried out by the project team. Through the use of the method's concepts, the potentially complex process of understanding the organization, defining its problem and finding a solution to it, was presented in an orderly fashion, consisting of a number of well-defined phases with clearly described sub-activities – all in line with a technical rationality.

Secondly, the method's depiction of the traditional organization and the consequential need for change, (the methods "discursive framework") was regarded as not only a source for own motivation but also as a resource in motivating other members of the organization towards a change in line with the perceived characteristics of BPR. The qualifier "perceived" is important here, as it was shown in chapter six and seven that the meaning of the concept of BPR differed between individuals. It had been adapted to the preferences of each individual.

Methods as a language for knowledge exchange

An important role of methods identified in several of the empirical studies was the facilitation of knowledge transfer. This role was most obvious in the discussion of the method's role in the consulting company (chapter nine), but also in the interaction with the project group, the method was seen to transfer

knowledge of concepts and structures for action to the project group members (chapter seven).

From the viewpoint of a theoretical tradition of knowledge, this role of methods is an unproblematic one, but in the discussion of the method's role in the consulting company's knowledge system, the method was found to be just one element in a complex system, fulfilling a number of different roles. Firstly, methods are regarded to be a repository of knowledge with the characteristic of being easily transferred from one person to another. This role was mainly important in relation to new consultants entering the knowledge system. The first step in a new consultant's training was the acquisition of the concepts provided by the method. But the method not only worked as knowledge *per se* but also as an important facilitator of knowledge storage and transfer.

Secondly, the method, by providing a language conceptualizing the consulting process, facilitated the structuring of different kinds of knowledge (both cases and experience) as well as the generation of knowledge through communication between individuals and collective action. The common language for describing the consulting process was frequently used in communication about projects and made possible collective action, which was argued to be the most important vehicle for knowledge transfer between individuals within consultancies.

These roles reflect the characteristics of language sketched out above. Methods in the consulting company can be viewed as providing a language that structures the collective understanding of the consulting process. It supports the creation of a shared reality. Shared understandings among method users are supported, that enable a collective accumulation of knowledge through the addition and elaboration of concepts and meanings within the overall framework of the language provided by the method.

This development of the method as language takes place in practice through actions and interactions in "everyday life". It is through the use of the method's concepts in the day-to-day practice of the consultants, that the concepts and meanings comprising the method are created, maintained and developed. Professional language, which is an important ingredient in all professional knowledge, is thus always part of a tradition comprised by a community of practitioners. This thus parallels the assertion that language is both a collective concept and deeply anchored in an ongoing practice.

Against this background, entering a new practice, is to a large extent, about learning a new language, which can be described as constituting part of the collective competence in a practice (Molander, 1993; Sandberg and Targama, 1998). The objective character of language forces members entering a new domain to learn its specific language, if they want to participate in it. The partial tacitness of methods implies that this learning has to take place in practice,

through the use of language. In this process of entering a new profession, which Berger and Luckman (1966) describe as secondary socialization, language is thus both a means and an end. The language is what is to be learned, but it is simultaneously an important vehicle for learning. Based on Molander (1993) it was claimed in chapter three, that the concepts and meanings of a language are essential for the novices' first efforts within a practice as well as the continuous learning of this through communication with others.

Summary

Above, I have argued for a reframing of methods, from viewing them as technical knowledge aimed primarily at guiding action to viewing them as language for structuring a complex world to be changed. Against the background of this change of metaphor for viewing methods, the roles identified were revisited. By viewing methods from a language perspective these roles could be summarized into three aspects of language: as a language for reality creation, as a language for legitimization and persuasion and as a language for knowledge exchange.

Through this reframing, the character of methods changes somewhat. As argued in chapter three, the view of methods as technical knowledge assumes that:

1. There exist well-formed problems, which can be tackled by structured methods.
2. Methods represent knowledge that is independent of a certain actor and thus can be easily transferred from one actor to another.

The analogy of methods as “language” instead identifies and underlines a set of quite different characteristics, which were found to capture the roles found in the empirical studies in this thesis quite well. Based on the characteristics of language, it can thus be claimed that:

1. Methods provide a basis for creating sensible and “well formed” realities.
2. Methods are collective phenomena – they are anchored in a tradition of method users.
3. Methods are partly tacit – they are the artifacts of a collective of method users.

This alternative characterization of methods as language helps resolve some of the contradictions between a view of methods as knowledge for more effective consultant action on the one hand and the view of consultant action being mainly intuitive and “experience based”, not leaving much space for an influence of methods, on the other. This contradiction was repeatedly observed in different forms in both the literature and in interviews with consultants.

The concept of methods as language incorporates and partly modifies both these positions. The method is seen to provide knowledge, that affects action, but the link between methods and action is not as direct as assumed by a theoretical tradition of knowledge. Rather, this link is indirect, mediated through the method's influence on the consultants' understandings, or, in Aristotle's terms, her phronesis. Rather than directly influencing action, the methods influence perception, through their provision of concepts and meanings.

The consultant's action is seen to be intuitive, but, as has been shown above, this does not mean that it is based on purely "individual" experience or is separate from the method. Rather, the method was argued to be collective in its character, providing a language common to a collective sharing a practice. Through these means, the method has important roles in the storage and exchange of knowledge. But again, this does not exclude the necessity of experience. The method's anchoring in practice and partial tacitness makes it intertwined with practice.

To summarize, it can be claimed that methods do not contain knowledge in the sense of the technical rationality. By providing language, methods instead function as resources, as well as facilitators of knowledge creation, storage and dissemination. *Methods are a potential for knowledge rather than knowledge per se.*

Discussion and suggestions for further research

The present study has ranged over a wide area. My focus on following the empirical phenomenon of methods in the work of management consultants has taken me to a number of empirical as well as theoretical domains and uncovered a variety of different issues ranging from the consultant's legitimacy to learning in consulting organizations. Against this background, I see the main contribution of this thesis as the reasonably holistic and empirically-grounded treatment of the role of methods in management consulting, leading to a reframing of methods from technical knowledge to language. My hope is that this thesis has provided the reader with a more nuanced understanding of the contributions and risks of methods, independently of whether her view before starting to read this thesis was positive or skeptical towards methods.

But following an empirical phenomenon rather than a theoretically-derived question also has its risks. These risks are linked to the issue of delimitation. How far should the phenomenon and the search for its consequences be followed? This question has to be answered by the researcher in the research process, and I have chosen to follow the phenomenon quite far, into three different domains, rather than concentrating on one. This choice has naturally had its consequences for this study. One such consequence is that this breadth

of the study as a whole has partly been traded against empirical breadth in each of the partial studies. Consequently, the results obtained in my study should be regarded as indications, requiring further research for validation and elaboration. Hopefully this study, with its broad focus, can provide a framework for integrating future more focused studies of methods in management consulting.

This study has mainly been driven by a desire to understand a relatively narrow empirical phenomenon. But the conclusions drawn from the study of this narrow phenomenon might contribute to the understanding of other fields. Given the empirical focus, two neighboring fields can be identified. Firstly, some of the conclusions might be generalized to management consulting in general, i.e. even consultants that do not follow an explicit method and work with other approaches than BPR. This mainly concerns the conclusions about the consultant's roles in the consulting process, as well as the efforts to understand the nature and basis of consultants' actions.

A second field to which a generalization of the findings in this study may contribute, is the general question of the roles of formalized methods in practice. Formalized methods are a phenomenon not only in management consulting but also in several other empirical fields, such as systems development (see chapter two) and project management (Engwall, 1995). A comparison of the findings in this study with those related to methods in systems development indicates that the conclusions concerning the roles of methods might be valid also in other domains than management consulting, although such generalizations need to be justified and discussed in each case.

The above thus indicates that the phenomenon of methods in the work of management consultants, and also more generally, has not yet received the interest from research, that its practical importance justifies. Besides these overall needs for validating and elaborating research on the role of methods in the work of management consultants as well as other practitioners, a number of more specific issues for further research can be derived from this study.

A positive bias?

The picture of methods in the work of management consultants painted in this thesis has mainly been a positive one. Methods are found to support the consultants in the different domains studied. But is this a representative picture? As argued in chapter two based on e.g. Fitzgerald (1997) and Wastell (1996) there exists some empirical evidence, that the direct use of methods might actually be harmful to effective action. Has this study become a victim of the positive bias towards methods in much of the literature on methods as well as in practice pointed out by, for example, Fitzgerald (1997)?

A first explanation for the positive picture in this study may be, that the use of methods in management consulting is different than in systems development, where the critique against methods has been worded. Most of the critique against the use of methods found in other studies (e.g. Wastell, 1996; Fitzgerald, 1996) is based on the assumption or observation of a rigid following of methods. It is this inflexible use of methods, that is identified as a potential risk by Fitzgerald, and which Wastell finds to be detrimental to successful action in his study. In the above empirical studies no such inflexible or rigid use of methods could be observed. Rather “adaptation” and intuitive action were found to be a recurring theme very much in line with the picture of management consulting painted in the literature aiming at understanding consultant’s actions (chapter two).

This gives a partial explanation of the positive character of the found roles, but it also opens up for new questions – is the use of methods found in my studies representative of management consultants as delimited in chapter one? And is it valid? Is there a positive bias in the selection of companies or interview persons? Is the picture conveyed to me by the interview persons valid or is this just a reproduction of the positive “common sense” view of methods?

Concerning the selection of companies and interview persons in the study, I believe that this is representative for the organizations in focus here. Five different management consulting companies have in different ways been studied in the four reported studies. In all these companies, the flexible use of methods was a recurring theme. Furthermore, the flexible use of methods in management consulting also fits well with the research results on the character of management consulting reported in chapter two.

Concerning the question of the validity of the findings, there is of course a risk that the picture conveyed to me in interviews is a reproduction of the positive “common sense” view of the advantages of methods, without much coupling to the consultants’ practice. In order to reduce this risk, interview data in all the three major studies is complemented with data from observations of the consultants’ actions (see also chapter five). The conclusions are in all cases supported by observations of actions.

Finally, the perceivably positive picture of methods might also be understood based on my research approach, aiming at understanding the roles of methods in the work of consultants rather than judging the effectiveness of these roles. My primary focus has been on understanding the use of methods by the consultants rather than focusing on the consequences of this use, as well as whether these consequences are good or bad. Still, the studies give some indications as to the potential risks of the use of methods. In the following I will turn my attention to these in order to point at observed as well as potential risks with the use of

methods in the way identified above. These risks are identified based on both empirical as well as theoretical evidence, and generally do not have the same solid empirical foundation as the identified roles. Against this background, the risks identified below represent suggestions for further research towards a deeper understanding of the consequences of method use.

Methods restrain participation and client influence

The study of the use of methods in the consulting process (chapters six and seven) revealed that the method was a support to the project group members' participation in the change process, by providing positive expectations of its viability and outcomes as well as providing a basic structure for action. But, it was also observed, that the consultant had a powerful position in the project to a large extent limiting the project group members' participation to the boundaries set by the consultant.

In his position as project leader, the consultant was observed to guide both the process and the content of the consulting project. He not only provided the concepts, which guided the client members' description of the problem situation, but was also important in interpreting these concepts in the concrete case, as well as judging the results of the mapping process. In some instances, the project group members saw this central position of the consultant as a threat to their possibilities to influence and truly participate in the process.

The structured method significantly contributed to this strong power position of the consultant. Firstly it provided legitimacy to the consultant, by ensuring the project group members' acceptance of the consultant's guidance. The project group members repeatedly claimed that the existence of the structured methods was an important basis for their trust in the consultant.

Secondly, the concepts provided by the method, guiding the diagnosis as well as the construction of the solution, further established the consultant as a central figure in the process. Without the consultant's help, the client members were unable to pursue the process, as they needed the consultant's help to apply the concepts to the specific situation. But this barrier created by the difficulty of applying the general concepts to the specific situation can be assumed to be a barrier, not only by enforcing the consultant's power and thus reducing the client's power, but also in its own right. In this study, the organizational members not part of the project group were excluded from the investigation, but it can be argued, that the use of the complex concepts provided by the method made their participation more difficult. The observed creation of a common language within the project group thus also had a potential downside in alienating and excluding other organizational members not part of this group and thereby not knowledgeable of the language of the change process.

This thus calls for further and deeper studies of the consequences of consultant involvement as well as method use on the client's perceptions of the change process. What is the relation between different consultant roles and the client's perceptions of participation and ownership? In which cases and in relation to which groups does the use of methods enable a feeling of participation and in which does it restrict it? How may the method as language become universally shared and collectively developed?

Methods evoke frustration and defense

In the case reported in chapters six and seven, the method was regarded in positive terms within the client organization. It legitimated the consultant and provided both consultant and project group members with a "discursive framework", which could be used for persuasive purposes. But this can not be taken for granted. Fuelled by the rapid development of management concepts, and an increasing knowledge level among consultant buyers a skepticism against formalized methods is emerging within practice. The number of critical articles on "management fads" in the business press is increasing, and employees in organizations are increasingly tired of change processes driven by ready made management concepts (Watson, 1994).

Against this background, it can be argued that the positive symbolic power of methods might gradually be replaced by more negative connotations. In this case, overtly using a method would thus demotivate and induce resistance among organizational members rather than motivating them to participation and legitimizing the consultant. In such a case, the overt use of a method in relation to the client becomes questionable. The legitimacy of methods might not be as self-evident as in the above studied case.

In this context a number of interesting questions for further research emerge, again requiring a deeper understanding of the client's perception and use of methods: Is the "selling power" of methods decreasing? Are there emerging alternative devices for structuring the change process? As methods will lose several of the above-identified roles when they lose their legitimacy, are new roles for methods emerging or are methods a fading phenomenon?

Methods bias perception

Methods were found to play an important role in structuring the messy reality. They provide a language for reality construction in the consulting project, they are a resource for creating the consultant's framework of the consulting process and they provide a structure for action in the consulting process. Methods thus focus the consultant's as well as the client members' perceptions and actions.

As argued at length in chapter three, a choice of focus, i.e. framing, of reality is necessary in order to make this possible to handle. But in this process of framing, central decisions are also made as to the character of the problem to be solved, as well as the solution to it. The choice of a certain method to a large extent implies which problems will be identified and which solutions are thought of (see chapter eight). The choice of the initial framing of the problem is thus an important one.

The main potential downsides of methods in this context are linked to the way in which methods are chosen as well as to the way in which they are applied. In the ideal situation, the choice of methods is a well thought-through decision, guided by the characteristics of the client organization. But this might not always be the case. A risk with the use of methods emerges, when the choice of methods is guided by the consultants' knowledge of methods rather than by the needs of the client organization. Based on the observations in the simulation study (chapter eight) there were some indications, that the consultants sold what they had (in terms of a method) rather than what the client wanted. In this case, the client was interested in BPR as an approach. In all but one case this request was not questioned. What the consultants actually delivered was very much their standard approach, focusing on processes but which beyond that did not have many similarities with BPR. Based on similar reasoning, it can be argued that methods can become a risk, if they are followed rigidly rather than applied to the specific characteristics of each situation.

Against this background, it would be interesting to look deeper into the solutions emerging from consulting assignments in order to more generally assess their level of adaptation to the specific situation. Consultants are often attributed an important role in the transfer of organizational innovations (see e.g. Lillrank, 1995; Sahlin-Andersson, 1996), but to what extent do they adapt these innovations, often packaged as methods, to the specific situations and to what extent do they sell "standard solutions" neglecting the specifics of the client organization?

Related to this issue of the consultant's conscious choice and adaptation of methods and solutions to the specific situation is the issue of the consultant's ability to actually switch between different methods. As concluded in chapter eight, methods are deeply internalized, thus making it hard for the consultant to distance himself from the method or even switch to another method. This problem area is especially interesting against the background of the rapid and constantly increasing speed of development in the field of management methods and concepts (Rigby, 1994; Roscale, 1990). A closer and longitudinal study of how consultants develop their concepts and practices over time would provide

some insights into this area. The time frame of this study has been too narrow to capture these patterns.

Methods limit learning

In the consulting company, methods were found to play an important role in the generation, storage and dissemination of knowledge of the consulting process. In this context, the method was found to provide a language for knowledge exchange, as well as a structure for knowledge storage. The method was also in itself found to be a repository of knowledge, which in cases of uncertainty could be consulted as an inspiration for action.

Through these roles, the method was claimed to play a central role in the basic processes underlying the development of the knowledge system – namely the process of extension in which individual knowledge was made available to the organization through method development and the process of appropriation, in which the organizational knowledge was turned to individual knowledge by using methods or exchanging experiences and cases. Through involvement in these two processes, methods both formed the practice within the consulting company at the same time as being the result of this practice, thus creating a potentially closed loop for reproduction of the current knowledge.

Even if the findings, especially from the simulation study (chapter eight), suggest that this reproduction is never flawless, it was nevertheless shown that there is a link between method content and consulting practice. The existing methods limit the experiences made by the consultants and thereby the further development of the method. Similarly, it can be argued that the language provided by the methods also restricts the kind of knowledge that is communicated directly between consultants.

It could thus be argued that the kind of knowledge system found in the studied consulting companies, with methods as central enablers, supports single loop learning, i.e. learning within the boundaries of the existing system of values and norms, whereas it might hinder double loop learning, i.e. a change of the values and norms underlying the system (Argyris, 1982; Argyris and Schön, 1996). In terms of the framework developed in chapter eight, the above can be rephrased, claiming that methods support learning within the boundaries of a set of constants, whereas they might hinder a change of the constants, for example a switch from an expert to a process consulting role frame.

However, the limiting of actions and thereby the experiences gained is not the only way in which methods might limit learning. In the case of the rigid following of methods, these might provide a feeling of false security, that might hamper reflection. When the method is regarded as a secure guide for action, the consultant might be less sensitive to signals from practice, that could trigger

reflection, lead to adaptations of actions and thus learning. Although no examples of such a rigid following of methods were observed in the empirical studies in this thesis, these risks have been found in studies of systems developers (see Fitzgerald, 1997; Wastell, 1996).

This thus indicates an intricate dilemma concerning the use of methods in relation to learning in consultancies. This dilemma is between a none-use of methods on the one extreme and the rigid following of methods on the other, or, more generally formulated between structure on the one hand and flexibility/chaos on the other (Weick and Westley, 1996). Learning in consultancies is, as argued above, to a large extent the result of experimentation in practical action. This experimentation is best supported by a very flexible approach not following any methods. However, in the absence of methods, the knowledge created in these experiments will be of little value to the organization at large, as it is hard to accumulate and disseminate without some kind of structure. At the same time, a rigid following of methods will ensure an effective use of the organization's collective knowledge, but will not support its development. The role of methods in relation to learning within consultancies is thus a question of finding a use of methods, that balances structure with flexibility.

A closer study of the mechanisms underlying this balance between structure and flexibility is thus a final area for potential future research. Understanding the dynamics in this area is especially important against the background of the current trends in the consulting industry. During recent years, the size of the large consulting companies has increased – through growth as well as a number of mergers. This trend indicates a move towards an increasing “industrialization” of management consulting. For these companies, as well as their clients' wellbeing, the handling of the balance between structure (the following of methods) and flexibility/chaos (neglecting the method) is a central issue, that is currently not very well understood.

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Appendix A

The simulation approach

This appendix focuses on the methodological aspects of the study of the method's use in the individual consultant's problem solving reported in chapter eight. This study is the methodologically most complex of the studies presented in this thesis, applying a simulation approach, generating a variety of different data as well as involving a multi-step analysis. Against this background, the methodological aspects of this study are treated in detail in this appendix.

I will begin this investigation into the methodological aspects related to the simulation approach with a discussion of the study of thought processes. Following this, a review of methodologically similar studies is provided as a background to the detailed presentation of the design of the simulations carried out in this thesis. The design of this study is discussed in terms of the choices concerned with the simulation situation, the choice of test persons, the collection of complementary information as well as the approach to analysis. I conclude this appendix with some reflections on the validity of the simulations.

Studying thought processes through verbal protocols

The focus of the study of the method in the individual consultant's problem solving was, based on the framework derived from Schön (1983), the consultants' reflection in action processes. Studying thought processes such as the reflection in action process is not a task without problems. A widely applied approach to the study of thought processes is to let the test persons verbalize their thoughts, either during their problem solving activities or shortly thereafter, which generates verbal protocols. The study of verbal protocols as a way of learning about cognitive processes is widespread, but it has most often been applied to the study of relatively standardized and narrow problems (see e.g. Ericsson and Simon, 1984).

Ericsson and Simon (1984) distinguish between two types of verbal protocols – “concurrent verbal reports”, which are produced at the same time as the cognitive process of interest takes place (think aloud, talk aloud) and “retrospective verbal reports”, which are produced after the process of interest has taken place. In the study reported in chapter eight concurrent verbal protocols are generated. These reports are generally regarded as more reliable, as they directly report what passes through short-term memory. In the case of retrospective verbal reports a number of mediating processes are required – one

has to remember what happened – which makes these reports less reliable than the concurrent verbal reports.

Concurrent verbal protocols are produced by asking the consultant to think aloud during his problem solving process. Two issues are often raised as critique against the validity of verbal protocols. The first concerns whether these can be regarded as comprehensive reports of the information that is consciously taken into account during the process, the second concerns the question whether the verbalization of thoughts changes the problem solving process under study. These two issues will be briefly discussed in the following.

How complete is verbalization?

Underlying Ericsson and Simons's (1984) approach to verbal protocols is an information processing view of human thinking. Information is viewed as stored in different memories – the long-term memory and the short-term memory – that have different characteristics. The short-term memory contains the most recently applied information.

In order to be verbalized, information must be present in the short-term memory. Ericsson and Simon show, based on a large review of studies, that the information that passes the short-term memory during a mental process is accurately verbalized. Information that does not pass by the short-term memory remains hidden. Certain aspects of the mental process are thus not accessible by verbalization. Examples of such aspects are processes of recognition, in which the results are transferred to the short-term memory, but the actual process of recognition remains hidden.

Another type of mental processes in which the information passing short-term memory is limited and which therefore are only verbalizable to a limited degree are automated processes, which are no longer subject to cognitive control. Such automation is the result of extended experience and might indicate, that more experienced consultants produce less complete verbal protocols than less experienced ones.

Does verbalization influence the problem solving process?

Verbal protocols are also criticized based on the argument that the verbalization of a test person's thoughts influences the cognitive processes under study. The reports thus generated, it is argued, have little to do with the processes taking place in a real-life situation. Ericsson and Simon (1984) argue based on both their own and others' empirical studies, that this critique is unjustified in cases where the test persons are asked to verbalize what goes through their minds (think aloud). Alterations of the cognitive processes are found only in

situations, where the test persons are asked for e.g. explanations during the process, or asked to make a selection of data to report in the process.

The possibility to obtain a valid account of the reflection in action process is dependent on the test persons' ability to express their thoughts verbally (Schön, 1983). The test persons in this study, consultants, must be expected to have a good ability to verbally express their thoughts (Brulin, 1987). They always have to be prepared to justify their thinking in front of both the client and their colleagues. Reflection is also an important aspect of and sometimes even formalized part of the consultants' work. This takes place e.g. in the discussion with colleagues, the evaluation of projects, the writing of reports for the client, etc. This recurring reflection should also facilitate the consultants' verbalization of their thoughts.

Methodologically similar studies

After having discussed some general methodological problems related to the study of thought processes, I will now turn to a discussion of the detailed methodological approach chosen for this study. As a background to this discussion, I will in the following briefly review the methodological approaches in two studies similar to the present study (Rhenman, 1968; Karlsson, 1975).

The purpose of *Rhenman's* (1968) study is to:

Through a study of experienced organizational designers' problem solving try to contribute to the understanding of the problem solving, which generates a recommendation of an organizational structure for an organization. (Rhenman, 1968:16, translated from Swedish)

In order to fulfill this purpose, simulations were conducted with three experienced organization designers. Each designer was given a different case. The input to the simulations was a short description of the problem and a statement of the task. This was to produce an organization structure three levels down the hierarchy for a new organization. In order to solve the problem, the consultants could request any information about the company from a company representative. Only requests for advice in structural issues and comments on specific solutions were not allowed. During the problem solving process, the consultant was asked to think aloud.

The consultants' verbalized thoughts were tape-recorded and an observer registered their use of written material. The observer was also to register other additional data, such as the consultants' behavior, facial expressions, etc, although few such observations were made. Directly after the simulations, a post interview was conducted, inquiring into the consultants' perception of the simulation situation and in which way they found this to deviate from a "real" assignment. The main critique against the simulation situation was, that the

consultant did not have the possibility to visit and experience the organization, whose problem they were to solve. Apart from this, the situation was perceived as realistic. Within a week after the simulations, a second interview was carried out in order to go through the transcripts of the consultants' thoughts during the problem solving process in order to obtain clarifications.

In a critical discussion of his approach, Rhenman suggests an increase in the number of simulations, varying one variable at the time. Instead of having three consultants solve three different problems the same consultant should solve several problems or the same problem should be solved by several consultants. The time constraints in a simulation situation are also mentioned as a possible problem reducing the realism of a simulation study.

The transmission of information to the test persons is by Rhenman identified as the central decision for future studies. Oral transmission of stimuli was in Rhenman's study revealed to be problematic, as this obscured the test person's initiative. The protocols from the simulations revealed, that often the company representative rather than the consultant made the choice of information transmitted to the consultant. The company representative also to a large extent influenced the formation of concepts and the structure of the process. Another aspect of this way of transmitting information was that the social interaction between consultant and company representative influenced the process in a way that the consultant e.g. avoided asking tricky or politically sensitive questions.

Karlsson's (1975) study aims at "identifying important components in the analysis and judgement of suggestions for organizational structures" (p. 5, translated from Swedish). The actual process of judgement and design of solutions is explicitly excluded from Karlsson's study, which approaches the identified issue by an approach where four experienced consultants are asked to solve four organizational problems.

The stimuli for problem solving in Karlsson's study was primarily written material consisting of a structured, brief description of the business (three pages) as well as a brief discussion of the problem (three pages), which in all the cases concerned the design of organizational structures on different levels. In addition to the above material the consultants were given background material comprising between forty and 125 pages. This contained e.g. organizational charts, annual reports, etc. Especially valued by the consultants was the information on the organizational climate and relations between individuals in the organization. The consultants could also obtain complementary oral information from the researchers. This possibility was made use of about five times per case, and mainly concerned technical details.

Based on the available information, the consultants were to produce a written report, presenting a suggestion for a new organization structure for the client

organizations. A motivation of the different parts of the proposal was also required. The proposed solution and the motivations for it should also be presented to a simulated critical client. During this presentation, the researchers could ask clarifying and elaborating questions. The problem solving activities, the presentations and the transmission of information between researcher and consultant was videotaped. The consultants' notes were collected and showed to be important documents revealing the sequence of steps in the problem solving process. Pre interviews and post interviews were also carried out in order to collect information on the test persons' backgrounds and perceptions of the simulation.

The evaluations of the applied method were very positive. The use of written cases with the possibility to request complementary information from the researchers was evaluated as successful. The simulations were by the consultants perceived as mainly realistic. However, the approach was deemed as more suitable for experienced consultants, as less experienced consultants could be disturbed by the relatively limited information as well as the limited time available for carrying out the task

Design of the current study

Against the background of the methodological approaches of Rhenman (1968) and Karlsson (1975) I will in the following present and discuss the approach to simulations chosen in the present study. I will begin by discussing the stimuli and its transmission and then turn to the capturing of data during the simulations. Next, the choice of test persons is discussed, followed by a discussion of the need for and collection of complementary information. Finally, the approach to analysis is presented.

Stimuli and its provisioning

The design and quality of the stimuli used in the simulations is central for their success (see e.g. Rhenman, 1968 and Karlsson, 1975). The stimuli determine the realism of the simulations and thereby also the test person's motivation to exhibit a realistic behavior, which is important especially in studies like the present aiming at developing theory (Weick, 1965). In addition to the content of the stimuli, the way of transmitting this influences the perceived realism as well as the possibilities of studying the problem solving process. Four questions were taken into account when designing the present study. These concerned:

1. What situation to simulate.
2. What case to choose.
3. How large and detailed the background material should be.

4. How to transmit the stimuli to the consultants.

The reflections as well as answers related to these questions will be presented in turn below.

The situation to simulate

The consulting process as a whole is so spread in time and so multifaceted that it can not possibly be captured in a delimited simulation. A selection of a part of the consulting process thus had to be made for this study. The focus of this study was above identified as the reflection in action process. According to Schön (1983) this is most clearly observable in situations, that are “non routine” to the practitioner. Especially in situations that deviate from familiar patterns, that create surprises, are processes of reflection in action triggered. However, to design the simulations based on such a situation is difficult, as what is perceived as a surprise differs from consultant to consultant. Cases differing too much from the experience base of the consultants can also be perceived as unrealistic. Instead, I argue for choosing a situation that is perceived as important by the consultant, and to which they can be expected to devote some thought.

A situation fulfilling these requirements is the design of a first project plan with a statement of the problem, a delimitation and a proposed approach. This is often produced in connection with the writing of a proposal for a project. These activities were by the consultant in chapter six, and several of the other interviewed consultants identified as one of the most important activities in the project requiring a decent effort involving for example the adaptation of the method to the specific situation. The case in chapter six also revealed that the project plan was actually guiding for the activities in the process. This is an important observation, as there otherwise would be a risk of the consultants proposing their standard solution irrespective of the specific situation, thus involving no or only very limited problem solving.

The choice of the proposal writing process as the focus for the simulations is further motivated by the following:

1. The proposal writing phase is relatively neutral, allowing the consultants to apply their approaches of choice. In situations later on in a change process the consultants' choices would be severely limited by the choices made earlier in the process.
2. Interviews with consultants have indicated that the work on a proposal is important. Here the general method of the organization is adapted to the specifics of a concrete case. The mechanisms underlying this adaptation are of great interest here.

3. The proposal writing process illustrates the fundamental activity of framing a complex and messy situation in order to identify its key aspects.

Finally, the design of a realistic simulation should be facilitated by the fact, that the consultant in the early phases of the project normally has relatively limited information about the organization and its problems. Against this background, limitations in the volume and richness of data in the simulation situation should have only limited effects on its perceived realism. The task and instructions given in writing to the consultants as a background to the simulation are displayed in Figure A.1

Instructions

In the following you will meet the surveying authority in the Västmanland county which has problems with its handling times.

Imagine that this is your first meeting with the chief surveyor Gustavsson. The purpose of the meeting is to collect sufficient information in order to suggest a project design. The project design should include at least:

- Your definition of the problem.
- A delimitation for the project.
- A time schedule.
- Some preliminary thoughts about the project's results..
- An analysis of the threats against the change project.

Write the project proposal in this program, by jumping to the card "write project proposal" available on the menu below.

The information which the chief surveyor can give you, is distributed on a number of "cards". You can move between the cards in several different ways:

- via the link buttons on the cards
- by clicking on *italic* and **bold** text
- by choosing a new information category from the menu at the bottom of each card.

Should you miss any vital information, you can also plan a complementary meeting for data collection. What information would you collect at this meeting and from whom?

Try to think aloud during the process. Tell me what goes through your mind during the process, also what you read. The purpose of this simulation is not to identify more or less successful approaches but rather to gain an understanding for the process as such.

Figure A.1. The instructions for the simulation given to the consultants (translated from Swedish)

The task formulated for the simulations (Figure A.1) is relatively well delimited, which was identified as important by Karlsson (1975). Having used a very general question in his simulation – “carry out a first general analysis of

the problem situation” – Karlsson concludes that a more limited task, such as producing a first project proposal, would have contributed to a higher realism of the simulations.

As described above, previous simulation studies of management consultants have focused on producing a solution to a general and broad problem. In the present study, I have consciously avoided this design, as it presupposes that the consultant acts as an expert consultant, i.e. produces ready-made solutions. This is seldom the case in BPR projects. Solutions are instead designed in collaboration with the client, with the consultant structuring and driving the process (see chapter six and seven).

As this study is delimited to BPR methods, I also chose a situation for simulation that concerned the internal efficiency of an organization and thus made possible the application of a BPR approach.

Choosing a case

The choice of the case providing the background for the consultants’ proposal writing is critical for the perceived realism of the simulations and thereby their validity. The search for a suitable case was concentrated on existing descriptions of organizations, describing a situation suitable for the application of a BPR approach. This requires that the case should include information on process flows, work procedures, etc.

These requirements were to a large extent met by the documentation from the “speedy county” (snabba länet) projects carried out in the Swedish public sector during the 80s. The most detailed of these was the case of the surveying authority in the Västmanland county, which was chosen as the basis for the simulation case. The available case description was to some extent rewritten and complemented by interviews with the authors of the case, as well as additional information from the surveying authority. The problem situation presented to the consultants is shown in Figure A.2.

The choice of a case from the public sector deserves some comment. The advantage of a public-sector case in this context is that detailed data is more readily available. But there is also a disadvantage based on many consultants’ limited experience from working in the public sector. However, the surveying authority (which is partly financed by money generated externally) is not a typical authority, why this problem might be limited in this case. It could also be that the public-sector case is perceived as a disturbance, supporting a more reflective approach, thus facilitating reflection in action, which would be desirable. The consultant’s reaction to the case revealed no surprises or problems related to the case being from the public sector.

Background

The chief surveyor Gustavsson meets you in the reception of the relatively new but quite dull office building, in which the surveying authority is located. Gustavsson is about forty-five years old and makes a calm and tolerant impression. At the same time, you cannot avoid noticing his tense shoulders.

On your way from the reception to his office you come to talk about the recent management technique BPR. Gustavsson is well informed of the development in the area and repeatedly emphasizes the importance of his subordinate managers learning about these new theories and learning to apply a new leadership style. On your way through the corridor, you meet a number of employees, with which Gustavsson exchanges friendly greetings.

Having arrived at Gustavsson's office, you get to the real problem – the handling times within the surveying authority. In the business plan for the coming year, which Gustavsson shows you, the following is stated:

“The goal for 1988/89 is in the short term to reduce the stock of cases to be handled to a more customer-oriented level, which is a prerequisite for succeeding with our market orientation program. The routines for handling cases, the organization, etc. also have to be adjusted to the changed market in order to keep the cost for handling cases on a reasonable level. Another goal is that the number of cases ranging over more than two years should not exceed 15% of the total number of cases.”

Gustavsson, who has done some thinking on his own, has more concrete goals. His goal is to shorten the handling times for a selection of central categories of cases by 50%. The selected categories of cases are:

1. New parceling of land.
2. Change of the parceling of land.
3. Creation of jointly owned facilities.
4. Handling of rights concerning the placement of high voltage lines.
5. Joining of properties.

The organization has already started with some mapping activities, but before an implementation, Gustavsson feels he needs some new ideas and some well-tested methods.

But Gustavsson also emphasizes that the work with the change process may not interfere with the ongoing work. The workload is high, and the business has to come in the first place.

Figure A.2. The background to the simulation case as presented to the participants (translated from Swedish)

Scope and level of detail of the case

The criterion for choosing the scope and level of detail of the case is that the case should be perceived as reasonably realistic by the test persons. According to Karlsson (1975) this can be achieved with a relatively limited amount of information. A six-page organization and problem description and a thirty-page reference material was deemed sufficient to solve a problem of organizational structure. A more extensive material did not change the approach.

As the task in the present study is the production of a proposal sketch, it is realistic that the available information for this task is rather limited. In a real project, the consultant will probably be able to conduct one or at most a few interviews as well as collect some secondary data before completing the proposal. It is therefore important that the information provided in the cases makes it possible to obtain a holistic and broad picture of the organization and its problem.

But the information provided in the case should preferably be larger than this in order to allow and encourage different data collection strategies and foci. The case should to some extent represent the information overload characterizing reality, thus forcing consultants to choose which information to study, in what way. The richness of the data about the case is a potential problem if information is transmitted in written, as all the consultants' potential questions cannot be foreseen. Therefore, the possibility was stated in the instructions to the case to plan additional and complementary meetings for data collection. Against this background the lack of some information should not influence the problem solving process to a great extent. There is also a risk associated with too rich information. This may make the information material difficult to handle and lead to the consultant getting lost in details, breaking the time constraints of the simulation.

Against this background a relatively rich description of the case was prepared based on the available information of a process improvement project in the surveying authority. This generated about twenty pages of text, which were distributed to forty-six information cards. The information provided included both "hard" data, such as the budget, organizational structure, etc. as well as "softer" aspects of the organization. Figure A.3 below shows the information themes covered by the forty-six cards. In writing down the information about the case, I have tried to be so "ethnographic" as possible in order to convey a feeling for the organization as well as its culture. Still, reality is so much richer in regard to this information, why this information was seen as lacking by the consultants. (See "reflections on the simulation..." below).

Transmitting the case data to the consultant

The way in which data is transmitted to the test persons is important not only for the perceived realism of the situation, and thereby the motivation of the consultant, but also for the ability to follow the problem solving process.

A first choice to make in relation the consultant's access to the case data is if this should be made available all at once or in a way forcing the consultant to actively search for the information she believes she needs. Both these strategies were used in the above-reviewed simulation studies. Karlsson, providing his

test persons with an extensive written material, chose the former approach, whereas Rhenman (1968) chose the latter approach, making the consultants collect data by asking a company representative. Both approaches were described as successful, but it was indicated that the portion-wise provisioning of data used by Rhenman is more suitable, when the problem solving process is the focus of interest. This way of making data available facilitates the following of the problem solving process (Karlsson, 1975). Both these approaches should be perceived as relatively realistic, as the consultant in his practice can meet both.

A second choice in relation to the transmission of information concerns the media by which information is made available. Should the information be provided in written or in oral form through "face-to-face" communication? These two approaches are again represented in the studies by Rhenman (1968) and Karlsson (1975). The advantages attributed to the oral transmission of information is that this is perceived as more realistic and requires less preparation in terms of the writing and testing of cases (Karlsson, 1975). A drawback on the other hand is that the personal interaction between test person and information provider introduces a variable in the problem solving process, that is hard to control (Rhenman, 1968). As one of the advantages of a simulation study is exactly this possibility to control the premises of the process (Weick, 1965), the introduction of variables that are hard to control, should be avoided as far as possible.

A second problem related to the oral transmission of information is that it requires more resources. In order to realize the larger realism which is the main argument for choosing oral transfer of information, a provider of information with deep knowledge about an organization would be needed. Motivating a company representative to participate in several simulations, taking a couple of hours each is problematic. There is also a risk that the presence of a company representative, i.e. a potential client to the consultants, might reduce the test persons' willingness to think aloud and truly present the thoughts going through their minds.

Providing information in written form has the main advantage of supporting standardization across the different consultants' simulations as well as being easy to reuse. The main disadvantage of providing information in written form is its standardization. The amount of information as well as its focus might not answer the consultants' questions, which may influence the problem solving process.

In the approach chosen here, I have applied a step-by-step provisioning of written data facilitated by a computer. The information in the case was divided into small information elements treating a specific theme. The text in Figure

A.2 provides an example of such an information card. These cards were available through a menu at the bottom of each card, as well as hypertext links in the text on the cards.

The cards as well as their hierarchical structure are listed in Figure A.3. The cards on the highest hierarchical level (e.g. "Instructions") were accessible from the menu. The cards on the lower levels were accessible through sub-menus or hypertext links on the former cards.

Instructions	Development of workload/market
Background	Land parceling
The problem	Development of cases in land parceling 84-88
The overall organization structure	Prognosis of number of cases
Organization chart	Commissioned tasks
The tasks of the surveying authority	Development of cases commissioned tasks 84-88
Providing information	Prognosis of number of cases
Surveying authority	The process of handling cases (1-5)
Chief surveying authority	Personnel
Land parceling authorities	Management style/climate
Land parceling	Attitudes to the change process
Organization of the surveying authority in the Västmanland county	IT support
Organization chart Västmanland	Budget
The surveying district's tasks	Budget land parceling Västmanland in total
The surveying district's organization	Budget chief surveying authority
The tasks of the special unit	Budget regional production unit
The chief surveying authority's tasks	Budget special unit
The county administration's surveying department	Budget Sala district
Management systems	Budget Köping district
Determination of fees	The surveying authority's history of change
The TIR-ÄR system	
The products in work value	

Figure A.3. The cards providing the case information and their structure (translated from Swedish)

The motives for choosing this approach of providing information in written facilitated by a computer were the following

- The piece-meal provisioning of data makes it easy to follow the information collection process and thus the problem solving process. Using the computer as a provider of information makes it possible to exactly log the consultants'

movements through the information and exactly measure the time spent on different pieces of information.

- Providing data in written form contributes to the standardization of the situation and limits the resource requirements for the simulation. No persons except the test person (consultant) and the researcher have to be present during the simulations.
- Giving the consultant the possibility to actively search for information contributes to a larger perceived realism than confronting the consultant with a large mass of unstructured text.

The drawbacks of the chosen approach are mainly related to the possibilities to design a case that is perceived as realistic. In hindsight, the consultants to a large extent perceived the simulations as realistic, which is described in more detail in the section “Reflections on the simulation...” below.

The number of cases

The choice of the number of simulations to conduct is about weighing practical concerns against methodological ones. In an ideal situation, the consultants should have worked with at least two cases each in order to isolate the influence of the specific case on the consultant’s problem solving and its results. In practice the additional time required to solve a second case may increase the difficulties to find willing participants for the simulations. The choice of the number of cases is thus a choice between breadth and depth. In an approach in which each consultant works on several cases, deep insights from a few consultants will be obtained, whereas the possibilities to get an overview over several consultants’ problem solving approaches is increased if the consultants are only given one case.

Against this background, an approach was chosen focusing breadth rather than depth, as depth to a large extent is provided in the case studies in this thesis. Karlsson (1975) also shows in his study that consultants’ approaches over a number of similar cases are relatively stable, which reduces the value of making consultants work on several cases.

Testing the approach

In order to ensure that the chosen approach was realistic and generated data of a satisfactory quality, a test simulation was carried out with four colleagues as test persons. In these simulations, all the steps of data collection and analysis were gone through. The evaluation of the test led to some minor changes in the instructions, the information provided and the formulation of the questions asked before and after the simulations.

Data capturing

The approach to data collection is to a large extent a function of the choices described above concerning the situation to simulate, the scope and level of detail of the case, the way of providing case information and the number of cases simulated. This approach delivered the following types of data:

1. The consultants' verbalized thoughts during the simulations and their answers to the questions asked before and after the simulations.
2. Information on the consultants' data collection behavior in terms of what information was looked at, in which order and for how long.
3. The consultants' written proposal sketches produced during the simulations.

Different techniques were used to capture the different kinds of data. The *consultants' verbalized thoughts* were video taped and transcribed *in extenso*. The *consultants' data collection behavior* was automatically logged by the computer. At each switch of information cards, a time code was written to a log file, which then was modified in Excel in order to show exactly how many seconds each card was shown on the screen. The verbal protocols were also synchronized with the information on the consultants' information collection behavior by linking each utterance to the information card the consultant looked at at the time. The consultants' proposal sketches were documented in the computer, as the consultants were asked to write this directly on a blank information card in the program

Test persons

In the approach to simulations applied in this study, the consultants' background is the only parameter that is varied. The test persons are varied both in terms of their company background as well as the length of their consulting experience. The simulation situation and the applied method (BPR) are kept constant.

Given the focus on the use of methods in the current study, a basic requirement for all the test persons is that they have some experience of BPR projects and a method for carrying them out. This is the only general requirement for the choice of test persons. The further criteria for choosing test persons therefore focus more on the production of variety.

The length of the consultants' consulting experience is one parameter that is varied. Methodologically, there are arguments both for the choice of experienced consultants and of inexperienced consultants. The tendency to automate thought processes as a result of experience (Ericsson and Simon, 1984) is an argument against the choice of experienced test persons, as this will make it difficult for them to verbalize their thoughts. However, consultants are

generally rather used to motivating and explaining their thoughts, which should counteract a complete automation.

The risk associated with the choice of less experienced test persons is that they have problems handling the limited amount of information available in simulations (Karlsson, 1975). Experienced consultants can to larger extent use their experience in order to fill in the descriptions. Some tendencies of this sort were observed in the simulations in the current study, in which the inexperienced consultants devoted a considerably larger amount of time to information collection than the more experienced ones.

Besides the test persons' amount of experience, their number and company background is an important choice to make. This decision is again about balancing practical aspects against methodological aspects. Methodologically, consultants from at least two companies should be represented in the simulations, in order to enable isolating their experience of a certain method. At least two consultants with varying amount of experience are also required from each company to isolate the effect of the amount of experience. From a practical perspective, the number of companies and test persons is limited by problems of access to the companies. Another limiting factor is the researcher's resources, as the transcription and analysis of the material generated by the simulations is time consuming.

Against this background, a design was chosen in which two consulting companies were asked to participate in the study. Each company was asked to provide three test persons – one junior consultant, one senior consultant and one on an intermediary level (see chapter eight). The choice of International and ABB-MAC as the companies in the study was guided by accessibility. These were the first two of several companies contacted, that agreed to participate.

Complementary information

Pre and post interviews

There is reason to believe that the consultants' earlier experience and interest are important for understanding their observed approaches. Consequently, an investigation into the consultants' background and experience is important. This was the main focus of a pre interview in which the following questions were discussed:

1. What is your educational background?
2. Describe your career. Where have you worked? What were your tasks? How long did you work there?

3. What experiences have mainly affected your view of organizational change and process improvement? In which way?
4. What methods have you mainly worked with in the company in which you are currently employed?
5. What are your main sources of further education?

After the simulations it is important to check the consultants' perception of these – whether they were perceived as realistic, and in which way they deviated from a “real” situation. This information provided an important basis for the judgment of the validity of the data produced by the simulations. If these are perceived as realistic by the consultants, I assume that the data produced is to a large extent valid. To the extent the simulation situation is not perceived as realistic, an interview after the simulation also gives the possibility to discuss in what way behavior in a real situation would differ from the simulation situation. The following questions were focused during the post interview:

1. What method did you use in the project?
2. How did you learn to use this method?
3. What other knowledge than knowledge of the method did you use?
4. Did you have any previous knowledge of the organization in the case?
5. Do you use the method differently during the proposal phase as compared with later phases in the project?
6. How realistic was the problem and information presented in the case? What were the major gaps in the information provided?
7. How realistic was the simulation situation? How does the way you go about writing a proposal in real life differ from the simulation situation?

The post interviews generated much valuable information concerning the proposal writing process and the sources of knowledge applied in this as well as in the consulting company more generally. This information was also used in the study of the knowledge system within consultancies reported in chapter nine.

Information about the method

As the method is seen as an important variable for understanding similarities and differences between different consultants' reflection in action processes, information on the method was also collected. For confidentiality reasons, no complete information on the method used by the consultants could be obtained. A satisfactory picture of the content of the applied methods has nevertheless been obtained in interviews and from internally and publicly available sources.

Analysis

The simulation approach generated several types of data providing the basis for analysis. These were:

- A pre interview providing information about the consultants' previous experience with organizational change in general and with the company's BPR method in particular.
- Information about the applied method – its design and phases.
- Verbatim transcribed verbal protocols from the simulations.
- Information on the consultants' information collection including exact information of time spent on different information categories.
- A post interview providing information on the perceived realism of the simulations and the extent to which the approach taken during the simulations differed from “real life”.
- A sketch of a proposal for a change project.

The analysis of the data consists of three parts following the model linking the method and the consultants' reflection in action spelt out in chapter three. In a first part, the similarities in the different consultants' problem solving approaches are analyzed. In a second part of the analysis, an effort is made to understand these differences in terms of the respective consultants' constants. In a third part of the analysis, the link between the method and the constants is explored. Below the approach to analysis in each of these steps will be described in more detail.

Analysis part 1: Similarities and differences in reflection in action

The comparison of the consultants' reflection in action processes was carried out in two steps – the first investigated the consultants' information acquisition behavior, the second focused on their reflections on the collected information.

Comparing information acquisition behavior

The first step focused on the consultants' information acquisition behavior in order to find clusters of consultants with similar approaches. The consultants' approaches were compared with regard to what information they looked at for how long during the simulations. The comparisons of the data collection approaches were done both on an impressionistic basis (comparing the different consultants' five most important information categories) and on a statistical basis (through cluster analysis). The conclusions of both these analyses overlapped well.

The comparison of time spent on different types of information was carried out on a level of information categories rather than individual cards. The forty-eight information cards available were aggregated into fourteen information categories in order to decrease the level of complexity of the data and thereby facilitate the finding of patterns. In the formation of categories only cards with very similar thematic content were aggregated, such as the five cards describing the workflow or the cards on the budget in different areas of the organization. This explains the presence of a number of categories, containing only one information card (see Table 8.3, page 208).

The comparison of different consultants' information acquisition approaches was carried out on the basis of relative times spent on different information categories rather than absolute times. In order to eliminate the effects of differences in e.g. reading speed, the number of seconds spent looking at cards within each information category was recalculated into their percentage value of the total data acquisition time. These percentage values were also the basis for the cluster analysis comparing different consultants' approaches.

Comparing the consultants' reflections in action

In the second step of the analysis, the insights into the different consultants' approaches to the problem of designing a proposal were elaborated on by a qualitative analysis of the consultants' reflections made during the simulation. The data underlying this analysis step are the transcribed verbal protocols of the simulation.

The verbal protocols generally have the form of comments on data or questions asked to the data (see appendix B for examples of reflections). These comments and questions were numerous. In order to enable a comparison of the different consultants' comments and questions, they had to be structured in some way. The choice was made to apply an inductive logic, thus sorting reflections on the same topic into the same category. Twelve different categories were created in this way. These are described in appendix B and chapter eight, and include categories such as "culture", "project organization" and "delimitation". The different "reflection categories" were created based on a thematic grouping of the found reflections.

The actual categorization of the consultants' reflections was carried out in the computer program NUDIST, that supports the categorization of data and the easy retrieval of data stored in different categories or combinations of these. The categorization in NUDIST was carried out in two consecutive stages. In a first stage, each consultant's verbal protocol was analyzed and the reflections categorized. New categories were created on a needs basis, i.e. when the reflection to be categorized did not fit the existing categories. In a second stage,

the reflections categorized in each category were read through in order to ensure that they described a common theme. At this stage a number of errors in classification, as well as inconsistencies in the categories' content, were identified and corrected.

The reflections contained in each category were then summarized in short sentences and transferred into a table listing the six consultants in the columns. These summaries, which are reported in appendix B, were the basis for comparing the different consultants' reflections and thus for the formation of clusters. The actual comparison of different consultants' approaches took place based on an aggregation of data, creating a risk of losing touch with the actual data base. However, I believe that these risks were partly avoided through the use of NUDIST, which made it possible to easily check the actual wording of a reflection, as well as backtrack it to its source and context (c.f. Fielding and Lee, 1991; Richards and Richards, 1991; see also chapter five)

Given the inductive approach to the creation of categories for reflection, the categories are to some extent subjective, although in hindsight, they reflect well-established categories and concepts in relation to organizational change processes (c.f. chapter seven where a number of key activities in the change process were identified based on a literature review. These to a large extent overlap with those generated in the current study). Furthermore, the choice of categories within which the different consultants' reflections are compared, is not critical for the conclusions. The conclusions revolve around the clustering of the consultants' approaches and the three dimensions identified as capturing the differences between the different approaches. As these dimensions recur in different categories, they would probably have been found also with a different categorization of reflections.

The validity of the qualitative clustering of approaches is also supported by the statistical cluster analysis that identified similar clusters as the qualitative clustering. The statistical analysis was carried out after the completion of the qualitative analysis. This eliminated the risk that the results of the statistical cluster analysis – consciously or unconsciously – influenced the interpretation of the qualitative data in order to support the cluster analysis.

Analysis part 2: Investigating the constants

The third step in the analysis of the simulation data focused on the investigation of the consultants' constants for reflection in action. According to the framework guiding the analysis, the constants were identified as important determinants of the differences between different consultants' reflection in action. The purpose of this third analysis step was to test the value of the

concept of “constants” in understanding the found differences between consultants.

Schön’s (1983) concept of “constants” is in this context somewhat problematic as the constants are very abstract, and Schön leaves little help for operationalization. In Schön’s work, there is also a lack of systematic applications of the constants in order to understand differences in reflection in action. Schön ends up with identifying the potential of constants to explain differences in reflection in action. This motivates the need for testing their usefulness in understanding the differences in reflection in action in practice.

Given that the constants are seen as influencing the reflection in action process, they are also hard to falsify, as they are derived from the empirical data that they are expected to explain. The problem of a circular reasoning, explaining phenomena with themselves is handled by focusing on the interview data rather than on the data of the reflection in action process, when investigating into the constants. This problem area has to some extent been explored in chapter eight under the heading “discussion of causalities”.

In investigating the constants of the different consultants, NUDIST was again used as a tool. The information available in the interviews and in the reflections of the consultants, was categorized in categories describing the constants. The information stored in these categories was used in the process of clustering consultants according to the constants as well as describing these constants.

Analysis part 3: Introducing the method

In the forth and final step of the analysis, the methods used by the consultants are introduced into the analysis in accordance with the analytical framework underlying the study. Based on the analytical framework, the method was hypothesized to influence the reflection in action process via the constants. In order to verify this hypothesis, I investigated the overlap between, on the one hand, the content and character of the methods used by the consultant and, on the other hand, the consultants’ constants.

In this investigation, I relied on documentation of the method and interviews about the character and content of the method. This was somewhat problematic in the case of International, as the consultants claimed they did not rely on a single method, but rather had an overall approach (the business integration model) with a large number of specific tools. Due to access constraints, I was not able to investigate these specific tools. Still, clear similarities in e.g. the consultants’ role frame were identified among the International consultants, which was interpreted as the result of a common underlying method (c.f. the definition of “method” underlying this study, reported in chapter one).

When investigating the overlap between the method and the constants, the following indicators were used. In the investigation of the overlap between the consultants' role frame and the method, the method's description of the roles in the change process was in focus. When investigating the overlap between the constants with the consultant's media and language, the character of the tools provided by the method was in focus – do they focus on the analysis of “hard” facts or do they support the handling of “softer” interpersonal processes? In investigating the overlap between the method and the identified appreciative systems, the method's main objects of interest were again in focus. The question analyzed was “towards what does the method direct attention?” Finally, in investigating the overarching theory, the combination of the above indicators was in focus.

Again this analysis is necessarily subjective, being based on my interpretation of the method and the constants underlying the consultants' actions. In order to validate the findings of the different steps of the analysis, the steps were presented to the test persons. The main focus of these presentations was the finding of alternative explanations for the found differences in the consultants' approaches. At this occasion, the consultants perceived my descriptions of their approaches as representative. The test persons also perceived the proposed explanation for the found differences in their approach being a result of differences in the method as reasonable.

Reflections on the simulations and their validity

A common criticism against simulations as a research method is that they are unrealistic, thus producing other responses than a real-life situation. This makes it difficult to draw any conclusions about the “real world” from simulations. With this criticism as a background, an important prerequisite for the validity of the conclusions drawn from the simulations is thus that the simulations trigger similar behaviors as in a “real “ situation.

The question of whether the simulations produced similar behavior patterns as in a real situation, is of course hard to answer with certainty without a study of the same process in a real situation. Such a study would have been extremely difficult given the research questions in focus here. On the other hand, there might be indicators of the realism of the simulations more readily available. One such indicator is the test person's perceptions of the realism of the simulation – Did she perceive the simulation and her way of working with it as realistic? These perceptions by the test persons will here be used as the basis for discussing the validity of the simulation processes, i.e. their correspondence with a similar “real life” problem solving process. The perception of realism was divided into two areas. The first concerned the problem and information

presented in the case. The second area concerned the perception of the actual problem solving situation (the simulation) and its coherence with a real-life situation. The test persons' perceptions of realism in both these areas will be described below.

Realism of the case

The perceived realism of the case was discussed in the post interview with the test persons. They were asked about their perceptions of the realism of the case (see above for the exact wording of the questions). In these interviews, it was revealed that the test persons generally perceived the case as realistic. In some instances, it was pointed out that the information was somewhat limited, but this was not viewed as a problem, as this was quite a usual situation in the proposal writing phase. Some citations from the test persons illustrate the perceived high realism:

The situation is not particularly theoretical. It could look like this. If you receive a written request for a proposal, the process would look like this. The situation is thus not unusual at all. But what you do before handing over the proposal is to design a proposal that is considerably more well prepared than this. Quite a large effort is put into the design of the proposal, so you request a meeting with the client before handing over the proposal where this is discussed. (I3)

I think the case felt quite realistic. You normally have a limited amount of information in the proposal phase. You have a certain amount of information, and it might be worth searching for more information. But the question to ask all the time is what the benefit of this additional information is. (I2)

M4: "The problem and the background information are realistic" M3: "Yes they are" M4: "Long handling times and such stuff, this is realistic" M3: "Nothing felt unrealistic. The material was somewhat limited for decision making, but this is what reality is like. It felt like a real case." (M3/M4)

Realism of the problem solving situation

The above indicates, that the problem and information presented in the case was perceived as realistic by the test persons. The problem solving situation and especially the way in which the information was transmitted, on the other hand, was perceived as less realistic. Here, the consultants missed the interaction with the client, and the possibility to stroll around the organization in order to get a feel of it:

I especially missed the interaction with the client, to be able to see how he reacts when you pose certain questions, to be able to dig deeper into certain questions, and to understand him, how he acts as manager. Has he bought into this? Does he have the organization's confidence? (I3)

In the simulation, I missed the feeling of walking around in the organization, of being shown around, talking to people about their reality. There was some information about this in the case, about newly restored offices with people looking tense, but that was it. When I am there, I see much more of this. I get a feeling of how the organization works... You only have to look at the notice board. Are there two square notes in order, or are there notes all over? (M3)

What is difficult in relation to the way information is transmitted and the problem-solving situation in the simulation, is that you can't look at what is written and you can't see expressions on the faces. I miss the feeling of walking around in the organization, of seeing how people scrutinize you, if they look frightened or expectant, such things, which I think I register in a normal case. I can't get this here. But it was anyway quite richly described in the case, so you could get a limited kind of feeling for the organization, and its conservative, traditionalist character. This is of course of importance, but I'm not sure whether it would have looked very different if I had visited a client for about one and a half hours and sketched out something based on this meeting. (M2)

This indicates that the first-hand impression of the client organization is an important source of information for the consultants. An effort was made when writing the case, to include information also of this more subtle kind. This was partly successful, as indicated by the citation by M2. On the other hand, M2 also indicates that this lack of information did not actually change her approach to the problem as compared with a real situation. This is further confirmed later on in the same interview:

[Do you work differently now than in a real case?] No, I don't think so. Some of the things I have said here, I wouldn't say to the client, but this is the way I think. (M2)

This indicates that the simulations, except for the way in which information was transmitted, were perceived as largely realistic. Some of the test persons also explicitly stated that their way of working in the simulation situation did not differ in any major way from a "real" situation. This is congruent with the experiences with simulations stated by both Rhenman (1968) and Karlsson (1975). I thus conclude that the validity of the data generated by the simulations is satisfactory.

Appendix B

Reflections made during the simulation

Understanding the organization

	M1	M2	M3/M4	I3	I2	I1
The client	<p>Does Gustavsson (G) support the climate change?</p> <p>Gustavsson seems to be quite new. Is he accepted by the organization, or is he an outsider?</p>	<p>Reserved style, "may not disturb the business". Do they really want change?</p> <p>They talk about decentralization and wanting more initiative, but they send other signals.</p> <p>Who is the management for Västmanland?</p> <p>Which expectations does the client have?</p>	<p>G is required by his managers to fix the handling times.</p> <p>Is G new or old in the organization? M3 and M4 are initially of different opinion, but conclude that he has a new style.</p> <p>G is conscious about cost being an important factor.</p>	<p>Important to understand G's situation (his boss, time pressure, pressure for change...).</p> <p>G's mindset in relation to change. There are some indications in this case that he has the wrong mindset, which speaks for giving him a role as project manager.</p>	<p>Has G written the objectives himself?</p> <p>What is his view of BPR?</p> <p>Why has he invited me?</p>	<p>What does G expect – a mere process job or does he view it in a larger perspective? Time frame?</p> <p>It is important to see what G sees. "Why does he feel that change is necessary?"</p> <p>Who is the client? How does the procurement process look, experience of consultants, change, etc?</p>
The formal	<p>What is G's location in the organization and in relation to the problem?</p> <p>Are there processes that pass organizational boundaries?</p>	<p>What is the distribution of personnel over organizational units?</p> <p>The position of the unit with the problem in the larger structure?</p>	<p>What is the role of the surveying division in the county administration?</p> <p>G's position in the organizational structure?</p> <p>How are the different types of business distributed in relation to the districts?</p>	<p>Where is G located in the organizational structure?</p> <p>Where is the surveying authority in Västmanland located in the overall structure?</p> <p>Is there a parallel organization?</p> <p>Why so many local units?</p>	<p>The organization structure is a delicate question in such a public organization, where this becomes very political.</p> <p>Where in the organization are different tasks carried out?</p> <p>Competence mapping.</p> <p>Where in the organization is G located?</p>	<p>Interfaces to other parts of the organization?</p>

The Business			<p>Important that there are two lines of business.</p> <p>Pricing of different kinds of tasks?</p> <p>There are no trends in the history over the number of cases. Why do they believe that this will increase?</p> <p>The development of revenues per man-day?</p> <p>Requirements on profit?</p>	<p>Who are the customers – authorities or individuals?</p> <p>Which expectations/ requirements does the market have on handling times, communication, etc.</p> <p>Competitive situation?</p> <p>Interface to clients – what are they expected to do?</p> <p>Demand is cyclical.</p>	<p>Which competing organizations are there?</p>
IT	<p>Haven't looked into IT solutions. This is normally not so important.</p>	<p>Limited focus on IT. This is normally not the problem.</p>	<p>A large project is planned. This might hinder other change projects and consume time.</p>	<p>IT is mainly an enabler, not so important.</p> <p>The IT project is an important reference object in the project.</p> <p>Is the current development based on a business analysis or not?</p> <p>Should the IT project be stopped?</p>	<p>Good that they say that each installation should be unique. This gives possibilities to adapt it.</p> <p>The system shouldn't direct, it should support.</p> <p>When is the system rolled out? Important for the planning of the project.</p>
The culture	<p>Departmentalization, lack of freedom, control of details.</p> <p>They are stuck in an old-fashioned thinking.</p> <p>Fear of change.</p>	<p>Rigid impression.</p> <p>Conservative organization that does not really believe in change.</p>	<p>Unwillingness to change.</p> <p>Departmentalization.</p> <p>Old, tradition-bound organization and procedures.</p> <p>Details/facts important.</p> <p>Bureaucratic culture.</p> <p>Lack of understanding of the whole.</p>	<p>Customer focus new.</p> <p>Inconsistency: desire to take risks vs. requirements of detailed, fact-based background material.</p> <p>Required culture change: more action more business mindedness, more risk taking.</p>	<p>Dress code – you would not go there in a dark suit.</p> <p>Internal communication?</p> <p>Negative experiences with change requires quick hits.</p> <p>Could be a lot of traditionalists in the org.</p> <p>How directive is the management style?</p>

Table B.1. The consultants' reflections in order to understand the organization

Constructing problems and solutions

	M1	M2	M3/M4	I3	I2	I1
Problems / change drivers	<p>Too many parallel cases to handle.</p> <p>Customers demand shorter handling times.</p> <p>Obsolete organization and procedures, rigid management style makes recruitment difficult.</p> <p>The problem has been defined by the client, I have nothing to add.</p> <p>The problem is elaborated on in the executive committee.</p>	<p>Distinguish between the underlying problem and the client's problem definition.</p> <p>The handling of cases is complex with many people involved.</p> <p>A lack of differentiation between simple and complex cases increases waiting times.</p> <p>Lack of contact between districts.</p> <p>Lack of competent personnel impedes delegation and competence development.</p> <p>Underlying problem – crossing boundaries between e.g. departments.</p>	<p>Are the handling times the real problem?</p> <p>Distinguish between problems and means to reach a goal.</p> <p>Symptoms vs. underlying problems?</p> <p>Unclear problem requires a second discussion with G.</p> <p>Point of departure: G's perception of the problem: the process, many parallel cases, clients are encouraged to hand in incomplete applications.</p> <p>Lack of business mindedness and customer orientation as an underlying problem.</p> <p>Is the fee for services set right?</p> <p>Lack of understanding of the whole and the customers.</p> <p>The management system.</p>	<p>Causes and effects mixed among listed problems.</p> <p>The underlying problem according to customers – long handling times. What are these caused by?</p> <p>Underlying problems?</p> <p>Change drivers:</p> <p>Market situation, competitive situation, customer requirements.</p> <p>Important to understand the whole set of requirements including external requirements and requirements from the top management (above G).</p> <p>Problem: long handling times.</p> <p>Causes: employees actions, switching times, fuzzy instructions to client, fuzzy process, not customer focused control system, division of competence.</p> <p>Central vs. local responsibility?</p> <p>Confusion concerning change among personnel.</p> <p>Cyclical demand</p>	<p>Fuzzy division of work increases handling times.</p> <p>Main problem: time.</p> <p>Lack of competence?</p> <p>The personnel's age?</p> <p>Weak management?</p> <p>Need for a new management style?</p> <p>Changes in the "industry"?</p> <p>Cases are handled without complete information available.</p>	<p>The client's definition of the problem is a symptom.</p> <p>Driven by market/customers.</p> <p>Requirements on profitability?</p> <p>Complex process.</p> <p>Lack of input data for handling cases.</p>

Solution ideas	<p>Avoid acceptance of cases with incomplete information.</p> <p>Reduce number of parallel cases.</p> <p>Organize self-managing teams according to client, type of task, or similarly.</p> <p>New management style.</p> <p>New employees.</p>	<p>Clarify work situation.</p> <p>Cross-functional teams.</p> <p>Broadening of competence.</p>	<p>Competitive pricing.</p> <p>Customer focus.</p>	<p>Focus more on controlling cases in the process in order to reduce their number.</p> <p>Possibly link the reward system to this control.</p> <p>Culture change.</p> <p>Changed boundaries between personnel with different competencies.</p> <p>Solution is defined in terms of process, organization and personnel, IT that supports this.</p> <p>The process is seen in a wide sense including how to work, how to relate to customers, etc.</p> <p>The interfaces are important.</p>	<p>Audit at the beginning of the process in order to stop cases with incomplete information.</p> <p>Categorize cases according to their complexity.</p> <p>Improved monthly management reports.</p>
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Table B.2. The consultants' reflections on the construction of the problem

Designing the change process

Project organization

	M1	M2	M3/M4	I3	I2	I1
Project organization, staffing and timing	<p>The project can be stretched out in time if there is a lack of time to be devoted to the process.</p> <p>Involve people from the whole process.</p> <p>About 3 times 3 days are required depending on the process and the client's skill level.</p> <p>G should not be the project leader.</p> <p>Cross-functional project team of 8 persons.</p> <p>20 days in total. Can be stretched out in time, but the time plan must be followed.</p> <p>Do not stretch out too far, or people may lose interest.</p>	<p>Based on the number of employees, we require 3-5 days per process for mapping.</p> <p>The project leader should be the same during the entire project.</p> <p>In the design phase people from other organizational units could be involved.</p> <p>Important that the project leader is committed to the schedule and the project.</p> <p>Project leader should be a surveyor with status, who is trusted and who is a leader.</p>	<p>G shouldn't become project leader.</p> <p>Project group consisting of about 6-8 persons depending on size of the organization.</p> <p>Project group should be cross-functional and include the different professions.</p> <p>New project group is formed for implementation.</p> <p>2 consultants from ABB-MAC.</p>	<p>Time required: ("6 weeks, as this is a fairly small organization").</p> <p>Required personnel depending on the number of employees in the client organization</p> <p>Depending on the relation between employer and union, the union should be included.</p> <p>G's mindset is not the right one. Make him project leader.</p> <p>Formulate tight schedule and resource plan in order to test the client's seriousness.</p> <p>Suggest a quick analysis (implementation may take more time).</p> <p>I3 also provides a number of general motives to why things should be done in the proposed way. Recurring motives: emphasize importance of change, ensure implementation, etc.</p>	<p>Time needed is a question of the number of employees in the client organization.</p> <p>"I think one should be reasonably quick in this case".</p> <p>Qualifications for project group members: ambitious, "up-and-coming", analytical, formal position, experience (not that important in this case).</p>	<p>G might not be so suitable as project leader.</p> <p>Characteristics of project leader: somebody who understands the business and can ensure resources</p>

Project organization, staffing and timing (proposal)	<p>Project members representing the entire process.</p> <p>Steering committee consisting of the entire or parts of the management committee.</p>	<p>Organization:</p> <p>Project group (5 persons representing the different professions) with a project leader in the group, who is involved in the process.</p> <p>Steering committee consisting of G + some others.</p> <p>Project leader should be surveyor, brave, respected, 35-40 years old, competent and have leadership potential.</p>	<p>Project organization until implementation of change:</p> <p>Project leader from the surveying authority, 50% of his time.</p> <p>Six project members representing different professions devoting 30% of their time to the process.</p> <p>Steering committee: The management committee devoting 5% of their time.</p> <p>Responsibilities:</p> <p>Surveying authority: Project leadership, data collection, resource allocation, documentation, do the work.</p> <p>ABB-MAC consultants: support in using the method, project management support, Knowledge and expertise transfer</p>	<p>Project organization:</p> <p>Steering committee = management committee + “the bosses boss”.</p> <p>Reference group = middle managers and 5 persons involved in the process. Possibly also the union.</p> <p>Project group = 2 full-time from surveying authority, two full-time International consultants + 50% project leader from the surveying authority (G or other young, “up-and-coming” person).</p> <p>Reference objects = customers, IT.</p>	<p>Time plan/organization: 2,5 persons.</p>	<p>Project organization: - roles, “requirements” on the client’s involvement.</p>
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Table B.3. Reflections on the project organization, and project organization suggested in the proposal

Approach

	M1	M2	M3/M4	I3	I2
Approach to change (reflections)	<p>Quick solutions? Can the different processes be grouped in order to facilitate diagnosis? What are the differences between them? Is there an acceptance for identifying the critical business issue in the management committee? Depends on what they have done in that direction before, and if they have the resources. I prefer to interview myself, but the decision on the approach is made together with the client. The client has already done some mapping, so he will probably not be so eager to do it again. When time is important, look at each activity in order to find possibilities for savings.</p>	<p>Quick results important due to a negative climate. This requires a focused project. Preferably, the project leader should participate in the introductory mapping interviews in order to ensure ownership. Showing that change is possible and desirable is the most difficult and important issue. Test new procedures in a pilot project. Search for both good and bad in the mapping in order to increase acceptance.</p>	<p>Have to start with a definition of the problem. Could be done in a seminar with the management committee. Project in several phases, e.g. handling times, customer focus, business mindedness. Choice of method (ABC, customer driven, process optimization) based on the problem (cost, time) in 2-3 sub-projects. Collect data in an activity and process analysis. Implementation is the crucial phase. Evaluation important as the history of change is negative.</p>	<p>Understand IT development. Understand the client's requirements. Focus on generating a picture of the problem and a future solution. Important to produce a good definition of the problem, that is accepted by the organization, so that the right medicine can be prescribed. Fact-based rather than journalistic product. Takes time to find data that do not exist when we enter the organization. There should be no question-marks when the work is completed. It should be accepted by the organization. Important to look at the management system, as there are problems with quality. Inform via the reference group. Look at process, organization, and IT to support this.</p>	<p>Important to produce quick hits, that are perceived as positive in order to create a more positive attitude to change. Meeting at a competence center? Might be overkill in this case. Unclear division of work in relation to competence requires competence mapping. Important activity in this case is to structure the existing information. Information flow - what is reported upwards and downwards? Have to be careful so that everything is not perceived as negative.</p>

	M1	M2	M3/M4	I3	I2
Approach to change (proposal)	<p>1. management committee meets 1-2 days in order to produce a problem formulation, identify success factors and discuss history. Processes are identified and the processes to be improved named. Project leader is suggested and possibly project members from the whole process are chosen. Steering committee is formed.</p> <p>2. Project group members are chosen.</p> <p>3. 2-3 days kick off with project group members. Education in the methodology, teambuilding, design of detailed schedule.</p> <p>4. "As-Is" mapping. Preferably through interviews.</p> <p>Project group members + steering committee + possibly customer.</p> <p>5. "As-Is" seminar Verify "As-Is" situation and treat misconnects. (1 day)</p> <p>6. Should-be design criterions, 1 day, quick hits.</p> <p>7. Check with steering committee.</p> <p>Benchmarking.</p> <p>8. "Should be" construction 3 times (2-3) days.</p> <p>This gives us a map over "should be" assumptions, a general implementation plan and a cost/benefit analysis.</p> <p>9. Present to steering committee.</p> <p>10. Design detailed implementation plan</p>	<p>Project definition phase ½ day with cross-functional project group + ½ day methodology education.</p> <p>Interviews. Consultant + project leader interview process members (project group members + some additional). Workflow, good routines, disturbances and evident improvements are inquired.</p> <p>Current situation compiled by project leader + consultant (process map + list of disturbances). 3-5 days/process (project group 20%).</p> <p>Design future situation ½ -1 day. Create new mindset, practices, video, visit someone who has succeeded with change, etc.</p> <p>Process map of "should be" situation, measuring system, which activities are included in the process (describe authority and responsibility) 4-6 days/process. Possibly add a newly recruited person to the project group. (70% project group)</p> <p>Elaborate change proposal, estimate cost and design implementation plan (probably pilot group with client responsibility or special type of case) 3-5 days/process (70% project group).</p> <p>Implementation support in the form of follow up meeting every 2 or 4 weeks.</p>	<p>- Project formulation (2 days)</p> <p>- Information to all employees (1 day)</p> <p>- Activity analysis (5 days)</p> <p>- Process analysis (3 days)</p> <p>- Definition of the "should be" process (7 days)</p> <p>- Generate suggestions for change (3 days)</p> <p>Total calendar time: (6-8 weeks)</p> <p>Set competitive prices – new project.</p> <p>Implement changes.</p> <p>Evaluation.</p>	<p>6-8 weeks</p> <p>3 weeks problem definition</p> <p>3-5 weeks future solution</p> <p>3 checks with the management committee and the "boss' boss" (problem definition, solutions, implementation and cost/benefit analysis).</p> <p>Checks with the reference group (middle management and people working in the process) every second week.</p>	<p>(Pre-study – design – implementation – follow up)</p> <p>The problem calls for a structured approach.</p> <p>AS-IS:</p> <ol style="list-style-type: none"> 1. Strategy <ul style="list-style-type: none"> - understand 2. Process <ul style="list-style-type: none"> - structure documentation - process documentation 3. Organization <ul style="list-style-type: none"> - competence mapping - where in organization are tasks located? 4. IT <ul style="list-style-type: none"> - structured mapping 5. Customer relations? 6. Management processes <ul style="list-style-type: none"> - management style <p>TO-BE:</p> <ul style="list-style-type: none"> - target setting <p>CHANGE IMPLEMENTATION:</p> <ul style="list-style-type: none"> - Implementation Plan - Quick Hits <p>BUSINESS CASE:</p> <ul style="list-style-type: none"> - Cost/benefit analysis - Decision documents <p>Time plan/organization:</p> <ul style="list-style-type: none"> - 2,5 persons - 6 weeks

Table B.4. Reflections upon the project approach and approach suggested in the proposal

Ensuring success

	M1	M2	M3/M4	I3	I2
Barriers to implementation	<p>Does G support the change of climate?</p> <p>They don't have time, this is a usual problem.</p> <p>Check upwards for increased resources.</p> <p>They are stuck in a traditional thinking.</p> <p>Individuals that believe that they cannot change their way of working are a problem.</p> <p>People who have worked for a long time might perceive the change process as critique.</p> <p>Is there anything that is not allowed (e.g. move managers)?</p>	<p>That the change process may not disturb the day-to-day business is a problem. It has to disturb it.</p> <p>Management style/climate gives information on the possibilities of implementation.</p> <p>Conservative organization, that does not really believe in change.</p> <p>Do they really want to change or just do something "up there"?</p> <p>Inconsistency: talk about new leadership (decentralization of decision making), but G sends other signals.</p> <p>Inconsistency: Want broad approach to change, but this may not disturb the business.</p> <p>Negative expectations in the relationship between managers and employees</p>	<p>Problematic that the change process may not disturb the organization. It has to affect it.</p> <p>They are bad at implementation. That is the most difficult task.</p> <p>Threats from the outside?</p> <p>Are there sufficient resources?</p> <p>The departmentalization of work is a large problem.</p> <p>A tradition of failed change efforts.</p> <p>The IT project.</p> <p>Will "customer driven change" work in the public sector?</p>	<p>Has G understood what he has initiated?</p> <p>Important to get the organization's change motor going.</p> <p>Are the prerequisites for change present in terms of personal resources, financial resources and power resources?</p> <p>Determination (mindset). Is G serious?</p>	<p>To change the organization is probably a highly political process in a public organization.</p> <p>Political possibilities for implementation?</p> <p>Potential problems getting people to commit full-time to the process.</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Success factors (reflections)</p>	<p>They have to be prepared to engage themselves. Important to clarify that commitment is required. Ownership Communication down the hierarchy. Have all the individuals accepted the need for change? Important to check during the interviews. Get people to see the change as a possibility. Communicate to the rest of the organization through the project group. Engage management and employees all the way. Discipline in keeping the time plan.</p>	<p>The organization owns the description of the current situation. Ownership. Communication to the rest of the organization by the project group. Important to create a mindset, in which change is possible. Create quick first results in order to send positive signals.</p>	<p>Important that they do the job and feel ownership.</p>	<p>That the client members feel part of the process. Quick analysis process. Project participants engaged full-time. That the project is completed rapidly (if it is important, it should be carried out quickly). Committed and active management focused on implementation. Clear picture of requirements. IT as enabler or success factor? Communication activities, e.g. checking with the reference group, are important for commitment. Communication</p>	<p>Communication</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">(proposal)</p>	<p>Threats: The employees' time. Earlier changes not implemented. Education and motivation of certain employees. Many individuals have worked in the organization a long time. Some tasks may be threatened.</p>	<p>Threats: Necessary resources if it might not disturb the business???????? Wanting to do all at once. The management's and employees' attitudes and expectations on each other. Creation of a change elite.</p>	<p>Threats: - Access to resources. - Departmentalization of the organization. - Earlier results of change efforts. - Other change projects e.g. the IT project.</p>	<p>Success factors: Involving the surveying authority. 100% resources. Quick implementation. Unified management committee. List of requirements. Commitment to implementation.</p>	

Table B.5. Reflections on success factors and barriers to change

Delimitation

	M1	M2	M3/M4	I3	I2	I1
Delimitations (reflections)		<p>Five processes are rather many. Can two be selected? Ask the client about what is most important. Limit the project in order to achieve quick results.</p>	<p>Depending on which units G controls. Include both analysis and implementation in the project.</p>	<p>Lines of business (Information provision, land parceling). Geographically (Västmanland with some plans of widening). The current delimitation to Västmanland is seen as problematic as issues related to the trade union and the IT system are national. The project should be widened. Include customer and IT in the analysis</p>	<p>Scope of the proposal: Pre-study rather than entire solution. "Analysis": include strategy, process, organization, technology. Don't question strategy. Strategy: understand but don't question as this is hard to change and centrally controlled.</p>	<p>Geographic delimitation (Västmanland) is questioned based on G's influence. Organizational delimitation (how about the unit in the county administration?) Delimitation of "Analysis" (selection of processes?) Large organization. Would like to see it in a wider perspective.</p>
(proposal)		<p>Delimitation: Are all the processes equally urgent? Start with two processes, especially as the organization is under pressure and "may not be disturbed". Achieve visible results faster and spread positive signals in the organization</p>	<p>Delimitation: The project comprises the entire surveying authority in Västmanland.</p>	<p>Delimitation: Land parceling process. Västmanland, but coordinate with other counties! Meet customers. Understand the IT project.</p>	<p>Scope of the project: Opportunity Assessment - Pre-study.</p>	<p>Delimitation: * Organizational * Geographic * Define interfaces to neighboring units.</p>

Table B.6. Reflections on delimitation and delimitation suggested in the proposal

Appendix C

The empirical basis of the case study

Observations

Date	Content/reference
14.8.95	Diagnosis and mapping
15.8.95	Benchmarking
8.8.95	Diagnosis and mapping
22.8.95	Client interview
25.8.95	Benchmarking
7.9.95	Preparation visioning seminar
11.9.95-	
12.9.95	Visioning seminar
21.9.95	Distribution of questionnaire concerning resistance to change
3.10.95	Elaboration
6.10.95	Elaboration
10.10.95	Elaboration
24.11.95	Presentation of the final report

Interviews

Date	Interviewee
2.7.95	Bengt
2.8.95	Bengt
23.8.95	Martin
28.8.95	Anders
20.9.95	Anna
27.9.95	Bengt
31.10.95	Bengt
1.11.95	Anders
1.11.95	Martin
3.11.95	Magnus
3.11.95	Erik
5.9.96	Keith

Written Material

Project definition

Process maps

Description of the current situation and working instructions distributed during the visioning seminar

Drafts of the final report

Final report

Appendix D

NUDIST category structures

This appendix lists the categories generated and used for documenting the empirical data generated in the studies reported earlier in this thesis. The categories are partly overlapping, which is no problem, as a single chunk of text can be categorized in many categories.

NUDIST category structure for the case study reported in chapter six

- (1) /Document type
- (1 1) /Document type/Interview
- (1 1 1) /Document type/Interview/Consultant
- (1 1 2) /Document type/Interview/Project group member
- (1 2) /Document type/Observation
- (2) /Consultant
- (2 1) /Consultant/Background
- (2 2) /Consultant/Support provided
- (2 2 1) /Consultant/Support provided/Provides information
- (2 2 2) /Consultant/Support provided/Operationalization
- (2 2 3) /Consultant/Support provided/Authority
- (2 2 4) /Consultant/Support provided/Guides process
- (2 2 5) /Consultant/Support provided/Champions
- (2 2 6) /Consultant/Support provided/Coaches
- (2 2 7) /Consultant/Support provided/Understanding
- (2 2 8) /Consultant/Support provided/Gives context
- (2 2 9) /Consultant/Support provided/Creativity
- (2 2 10) /Consultant/Support provided/Documents
- (2 3) /Consultant/Approach
- (2 4) /Consultant/Surprises and their handling
- (2 5) /Consultant/Success factors
- (2 6) /Consultant/Sources of knowledge
- (3) /Project
- (3 1) /Project/Background
- (3 2) /Project/Characteristics
- (3 3) /Project/Goal
- (3 4) /Project/Suggested solutions
- (3 5) /Project/Problems
- (4) /Project group member
- (4 1) /Project group member/Problem
- (4 1 1) /Project group member/Problem/Operationalization
- (4 1 2) /Project group member/Problem/Find information
- (4 1 3) /Project group member/Problem/Process thinking
- (4 1 4) /Project group member/Problem/Depiction of process
- (4 1 5) /Project group member/Problem/Other
- (4 2) /Project group member/Motivators
- (4 3) /Project group member/Participation

- (4 4) /Project group member/Learning
- (4 5) /Project group member/View of method
- (4 6) /Project group member/Generates arguments
- (4 7) /Project group member/Ownership
- (4 8) /Project group member/Provides information
- (5) /Method
- (5 2) /Method/Checklist
- (5 3) /Method/Use
- (5 4) /Method/Adaptation
- (6) /Other
- (6 1) /Other/Business thinking
- (6 2) /Other/General reflections
- (6 3) /Other/Principles
- (6 4) /Other/Final report
- (6 5) /Other/Perceived steering
- (7) /Project phase
- (7 1) /Project phase/Preparation and mobilization
- (7 2) /Project phase/Diagnosis
- (7 3) /Project phase/Preparation visioning seminar
- (7 4) /Project phase/Visioning seminar
- (7 5) /Project phase/Elaboration
- (7 6) /Project phase/Final report
- (7 7) /Project phase/Implementation

NUDIST category structure for data in the simulation study (ch .8)

- (1) /Card
- ... [Every information card represented a category. Reflections were categorized in accordance to which information card was showing when the reflection was made]
- (2) /Questions [pre and post interview questions]
- (2 1) /Questions/Educational background
- (2 2) /Questions/Career
- (2 3) /Questions/Perspective
- (2 4) /Questions/Method experience
- (2 5) /Questions/Further education
- (2 6) /Questions/Applied method
- (2 7) /Questions/Previous knowledge
- (2 8) /Questions/Realism
- (2 9) /Questions/Knowledge applied other than method
- (3) /Themes
- (3 1) /Themes/Questioning of client
- (3 2) /Themes/Formal organization
- (3 3) /Themes/Simulation
- (3 4) /Themes/Proposal (design)
- (3 5) /Themes/Goal
- (3 6) /Themes/Change drivers
- (3 7) /Themes/Delimitations
- (3 8) /Themes/Business
- (3 9) /Themes/Culture
- (3 10) /Themes/Client
- (3 11) /Themes/Project organization
- (3 12) /Themes/Solution ideas
- (3 13) /Themes/IT
- (3 14) /Themes/Approach

- (3 15) /Themes/Barriers to implementation
- (3 16) /Themes/Success factors
- (3 17) /Themes/Current process
- (3 18) /Themes/Timing
- (4) /Background
- (4 1) /Background/Company
- (4 1 1) /Background/Company/International
- (4 1 2) /Background/Company/ABB-MAC
- (4 2) /Background/Experience
- (4 2 1) /Background/Experience/Low
- (4 2 2) /Background/Experience/Medium
- (4 2 3) /Background/Experience/High
- (5) /Methods
- (5 1) /Methods/adaptation
- (6) /Proposal process

NUDIST category structure for case study reported in chapter nine

- (1) /Project background
- (1 1) /Project background/Choice of consultant
- (2) /Consultant background
- (2 1) /Consultant background/learning
- (3) /Method
- (3 1) /Method/Adaptation
- (3 2) /Method/Roles
- (3 3) /Method/Use
- (3 3 1) /Method/Use/Differences in use
- (3 4) /Method/Development
- (4) /Approach
- (4 1) /Approach/Planning
- (4 2) /Approach/Success factors
- (4 3) /Approach/Documentation
- (4 4) /Approach/Adaptation
- (4 5) /Approach/Support
- (5) /Project organization
- (5 1) /Project organization/Roles
- (6) /Client
- (7) /Knowledge sources
- (7 1) /Knowledge sources /"Theory"
- (7 2) /Knowledge sources /Databases
- (7 3) /Knowledge sources /Experience
- (8) /Questioning of client
- (9) /Integration vision - prototype
- (10) /Consulting competence

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