

# **Cooperative Venture Formation Processes:**

**Characteristics and  
Impact on Performance**

**Johan Roos**

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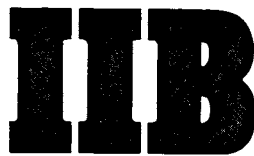
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**Johan Roos**



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**STOCKHOLM SCHOOL OF ECONOMICS**

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**Institute of International Business**



*To my Parents*





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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

In the 1980's, we have been witnessing something that might be characterized as a "paradigm shift" in international business. From viewing the world only in terms of a "competitive arena" (see Porter, 1980), often drawing analogies from military strategy and applications, such as von Clausewitz (1832), we see that the decision-maker of today needs not only to be able to act in a competitive and hostile environment but also to be able to cooperate with other companies, perhaps even with a competitor. To some extent, this implies that today's decision-makers must develop and constantly improve their cooperative talents.

Given the increasing popularity of cooperative strategies in international business, it is not surprising that the literature on this phenomenon is extensive. There are many examples of such cooperative relationships that appear under a variety of names such as: joint ventures (e.g., Franco, 1971), cooperation agreement (Gullander, 1976), (Edström and Högberg, 1977), interfirm relationships (Berg, Duncan, and Friedman, 1982), coalitions (e.g., Porter and Fuller, 1986), cooperative ventures (e.g., Lorange, 1987), corporate alliances (e.g., Killing, 1988), and collaborative agreements (Hergert and Morris, 1988). Researchers have studied cooperative ventures in terms of, for instance, basic rationales, types, industry

distribution, management and control aspects, cultural implications, impact on research and development, and failure and success. There are also many studies on financial considerations, technological considerations, and human resource considerations in cooperative ventures. Hence, much knowledge has been gathered regarding the implementation and management of such cooperative relationships<sup>1</sup>.

On the other hand, there seems to be only limited knowledge on how cooperative ventures are actually formed and their key activities during this formation process. Since cooperative ventures, in general, have a high mortality rate (see for instance, Franco, 1971; Harrigan, 1985; Kogut, 1987), this is somewhat surprising. As a consequence of this rate, we would expect a greater interest in the very fundamentals of the cooperative approach from which the venture is expected to emerge. This has to do with how we ensure that the cooperative venture is formed in a way that facilitates subsequent implementation of the cooperative strategy. In a recent article in the Harvard Business Review, a more general view of this lack of attention was stressed by Ohmae:

In the academic world, there is a discipline devoted to the study of interpersonal relationships. To my knowledge, however, there is not even one scholar who specializes in the study of intercompany relationships. This is a serious omission, given the importance of joint ventures and alliances in today's competitive global environment. We need to know much more than we do about what makes effective corporate relationships work. [1989, p.154].

On the other hand, it seems as though some scholars in recent years have increased their attention to the pre-venture design aspects of cooperative relationships. This might have to do with the fact that many ventures are formed with insufficient focus in the configuration:

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<sup>1</sup> A brief summary of research on cooperative ventures is presented in Appendix 1.

... many managers seem to pursue a knee-jerk approach to such [cooperative] strategies; they jump in without thinking through their motivations for cooperation or how the venture will fit the ongoing activities of the firm or into its scheme for strategy implementation. [Harrigan, 1986, p.10].

In an effort to develop a conceptual framework for how to manage joint venture formation, Schaan and Navarre (1988) have also provided a comprehensive statement of their opinion, which well statement summarizes our view on these matters.

Many joint ventures are undertaken too quickly, without investing sufficient time and effort in the management of their early phases. In most cases operating problems and unnecessary conflicts could have been avoided with a little foresight. Of course, not everything can be planned when setting up a joint venture. As for any other business, changes occur in the environment which a firm needs to adapt to, people and their priorities change, etc. In any case, an important ingredient to future success of a joint venture is to create, and maintain, a healthy climate in which the parents can resolve their differences to their mutual benefit. [Schaan and Navarre, 1988, p.1].

This dissertation represents the outcome of a study of how cooperative ventures are formed. The overall assumption is that the activities during the formation process have some characteristics which are very important for the outcome of the venture. The focus of this study, consequently, is on these common features, how they influence each other and the outcome. In other words, we will attempt to learn more about what makes effective corporate relationships work in Ohmae's (1989) terms.

## 1.2 Definitions

Many authors provide comprehensive definitions of various types of cooperative ventures<sup>2</sup>. In fact, it seems as though each author needs to come up with his own definition. Given the fact that many different types of cooperative strategies are being pursued, however, this is not surprising.

We define a cooperative venture as a contractual agreement between two or more companies to coordinate a set of activities on a long-term basis. This might be cooperation between any parts of the company's value chain (see Porter, 1985), such as product development, manufacturing, marketing and distribution, or a combination thereof. A cooperative venture does not necessarily involve an equity participation; nor does it need to be of vital importance for the company, even if this is often the case.

The formation process is defined as the set of activities under which managers in a parent company ensure that a cooperative venture is formed with a partner company.

## 1.3 The Research Question

Given our interest in how cooperative ventures are formed, the research question can be formulated as follows:

What are the fundamental activities of the process during which a cooperative venture is formed by companies, and what are their influences on each other as well as on the subsequent performance of the cooperative venture?

It should be underscored that our main focus is on the internal process within one parent organization, which will result in forming the cooperative venture. These activities represents one dimension of the formation process. Another dimension of the formation process, namely the nature of the

---

<sup>2</sup>

For instance, see Root (1988).

interaction process between the two parent companies, is of secondary importance in the present study. To some extent, however, the interaction processes will also be studied in this dissertation.

The research question can be separated into two sets of issues. The first set involves our interest in exploring the formation process, its fundamental elements, and how these elements influence each other. The second set of issues has to do with how these elements and, thereby the formation process in general, influence the subsequent performance of the cooperative venture. In other words, the former set of issues can be characterized as a type of pattern search among independent variables, whereas the latter set of issues deals with the potential impact on performance, i.e., on an outcome variable. Both sets of issues, however, involve the question of causality.

#### **1.4 Purpose and Limits of the Study**

From the research question, we can state that the purpose of this study is to identify, explore, and explain the elements of the formation process and how these elements influence performance and each other. Thereby, we should better understand how cooperative ventures are formed and also get an indication of which elements in the formation process appear to be important for the subsequent outcome. Hence, the purpose of this study is mainly exploratory, but also normative in the sense that we are interested in learning about the importance of the elements of the formation process for subsequent outcome.

We realize that a number of factors are important for forming a cooperative venture. Factors derived from both external and internal sources in one or both of the parent companies probably play important roles. One limitation of this study is that we do not consider factors other than those directly related to the internal formation process in the

company. Hence, firm-specific factors such as size, the age and industry of the company are not controlled. Nor do we consider macro-oriented environmental factors such as general economic conditions and geographical setting. However, the study is based on a particular population of Swedish and Norwegian companies, forming cooperative ventures during the first part of the 1980's, which suggests that such firm-specific variables tend to be similar for all companies.

Another limitation of the present study is that we will treat all companies in the present study as individual companies in a population, even though the cooperative ventures being studied, to a large extent, were formed between pairs of these companies. The reason for this is mainly practical; this study can be seen as a first step in a research effort to better understand the formation process. A logical follow-up step could be to pursue a multiple-informant study of such pairs of cooperative venture partners.

A study of how cooperative ventures are formed suggests a dynamic, longitudinal, research approach. However, the present study only to a small extent takes such a longitudinal approach. Instead, the major part of the research is based on a cross-sectional study. Hence, we do not have the kind of data that can characterize a process per se. Therefore, we do not claim to study the complete process of forming cooperative ventures; rather we are depicting parts of the process under which the ventures emerge.

A cooperative venture is formed by individuals in companies, which suggests that we should have a management-process-oriented research approach. We do focus on how the managers in each company acted and interacted during the formation process, but we do not discuss the individual decision styles of the decision-makers themselves - only the specific elements of the formation process during which they act.



## 1.5 Outline of the Dissertation

We believe that a better understanding of the complexity of how cooperative ventures are formed first requires that we recognize how little we really know about this matter. In Chapter 2, therefore, we present a literature survey of cooperative strategies to answer a few basic questions regarding cooperative strategies.

A first step in the literature review defines what cooperative ventures really are. Our approach views cooperative ventures as special phenomena between spot market activities and an internalized, wholly owned subsidiary in a corporation (section 2.2). In addition, we will discuss the fundamental interaction processes between two partners in such ventures (section 2.3).

Many rationales for cooperative strategies have been discussed in the literature, including, for instance, traditional motives to gain access to new markets and technologies as well as the desire to improve managerial capabilities. The most common of these rationales will be presented (section 2.4.1). This section will also include a discussion of different types of cooperative ventures. Many authors have addressed the issue, and a few major classifications of cooperative ventures will be presented (section 2.4.2).

One of the main themes in this review is to see how previous literature has addressed what is important for good performance in cooperative venturing. The literature indicates that the outcome, in general, is relatively bad and that the instability rate is relatively high. As we will discuss in this section, many reasons have been offered for this instability (section 2.5).

Given our interest in management processes, we will focus on four key managerial considerations in cooperative venturing that has been emphasized as important for cooperative venture outcome, namely delineation (section 2.6.1), partner selection

(section 2.6.2), control (section 2.6.3), and evolutionary pattern (section 2.6.4).

Much has been written on cooperative ventures. However, few researchers have studied how they are formed from a managerial process perspective. Thus, we have only limited help from the cooperative venture literature regarding the fundamental activities or elements of the formation process. In Chapter 3, therefore, we will draw analogies from studies of strategy formation, exemplified by foreign investment decision processes (section 3.2.1), resource allocation processes (section 3.2.2), and pre-acquisition processes (section 3.2.3). Thereby, we will see that such examples of strategy formation processes can be characterized in terms of a few fundamental elements. We will use analogies from these fundamental elements in our subsequent conceptualization of how cooperative ventures are formed.

Having arrived at an overall theoretical framework for the study of the cooperative venture formation process, the research design will be presented in Chapter 4. Since the purpose of the study is mainly exploratory, there is no need to test immediately a pre-specified detailed conceptual model. Instead, the research design has been chosen to include both quantitative and qualitative research approaches and an ongoing interaction between theory and data.

The database used in the study is presented in Chapter 5. This includes a presentation of the companies, a specific governmental venture capitalist involved in all these ventures, and a questionnaire study that was carried out on these companies. The specific results from this questionnaire study are presented in Appendix 4. However, the main insights from the questionnaire study are summarized in this chapter (section 5.5).

In an initial quantitative phase, a set of individual formation variables is elaborated by means of a simple bi-variate analysis in Chapter 6. In addition, the respondents' qualitative normative comments on how the cooperative ventures

were formed, and should be formed, are presented in this chapter (section 6.4).

Based on a combination of the theoretical discussion and the findings from the initial statistical analyses, a simplified conceptual model emerges in Chapter 7. In this chapter, we also expand on our theoretical discussion to include more of the relationships and interdependencies between the two parent firms during the formation process.

By means of latent variable path analysis, the conceptual model is evaluated in Chapter 8. The use of this specific "second-generation multivariate method" is discussed before the model is estimated.

The results from these quantitative analyses provide some interesting insights into how cooperative ventures are formed. However, the findings alone do not provide an ample answer to our research question. Given the results from the quantitative analyses in the previous chapters, therefore, a framework for a qualitative elaboration of the conceptual model is presented in Chapter 9. Both the relevance of the case-study method as well as our specific case studies are discussed.

Four case studies are presented in Appendices 6-9. Chapter 10 outlines the clinical findings on the analysis of the conceptual model for each company in the four case studies. The first part of the analyses are very focused in order to test and complement the previous statistical analysis. In a subsequent step, the relationship between the parent companies' formation processes - in each cooperative venture - are discussed.

A second type of clinical finding is presented in Chapter 11, namely an analysis of additional, or "residual," issues that seem to have played a role when these four cooperative ventures were formed. Most of the seven issues presented in this chapter can be related to aspects of the previously discussed fundamental elements of the formation process.

The third type of clinical findings is presented in Chapter 12. The discussion in this chapter focus on interaction processes between the parent companies. This

analysis comprises the final part of the analytical approaches in this study.

Finally, in Chapter 13 the findings are synthesized, the research contribution discussed, implications for both research and practitioners drawn, and new areas of research are suggested.

## CHAPTER 2

# COOPERATIVE VENTURES: A LITERATURE SURVEY

### 2.1 Introduction

This chapter should be seen as an introduction to the field of cooperative strategies. This introduction provides a background of cooperative aspects of international business and, thereby, helps us to better understand the present study of how cooperative ventures are formed.

It is widely recognized that different forms of collaborative arrangements have become an important part of international business. Cooperative ventures occur in many industries and between firms of different sizes, have numerous purposes, and may be vertical or horizontal from a value chain perspective. A multitude of examples of such cooperative strategies can be found in the automobile, semiconductor, computer, information technology, telecommunication, robotics, air transport, and biotechnology industries, among others.

In a study of 839 "collaborative agreements" from their INSEAD database, Hergert and Morris (1988) have found that most such agreements were carried out in "high-tech" industries: automobile (23.7%), aerospace (19.0%), telecommunications (17.2%), computer (14.0%), and other electrical industries (13.0%). They also found some interesting trends regarding types of cooperations. The largest share of the agreement turned out to be joint product development (37.7%). Moreover, the vast majority (71.3%) of

these ventures were formed between rivals in a value chain perspective!

Multinational companies within these industries have often formed what could be labelled "networks" of such alliances. This pattern of international networking seems to have taken a more structured form during the mid-1980s. To an increasing extent, partnerships are formed between companies from the three major trading blocks - the U.S., Europe, and Japan - which have resulted in what Ohmae (1986) labelled global triads - "the future shape of global competition." Hergert and Morris (1988) have shown that the largest increases in collaborative agreements were those between companies from the U.S and the EEC, followed by those between the EEC and Japan, and between the U.S and Japan.

This triangular pattern, of course, does not represent the general pattern of cooperative venturing. A recent example of a large alliance where only one of the corners of the "triad" is involved is the domestic U.S alliance between AT&T and Zenith, announced in March 1989, to come up with an alternative to the expected Japanese dominance in high-definition television screens. Moreover, in the European part of the triad, there is an increasing interest in cooperative strategies within Europe - especially within the EEC. An interesting early example of this is the Airbus project, which in spite of severe financial, political and cultural problems, has survived as an intra-European partnership. In addition, it is a well-known fact that many companies from European countries outside the EEC are increasing their cooperative efforts in the EEC countries so as to not be left out of the 1992 integration. Håkanson (1989), for instance, found that Swedish companies, for reasons of political factors, tend to maintain and sometimes strengthen R&D in acquired companies in Europe instead of the more traditional way of closing down and move R&D to the home country.

Even though alliances between large corporations in the so-called high-tech industries mentioned above receive the most attention in the media, cooperative ventures are also a

common ingredient in national and international business strategies of smaller companies. In spite of less financial involvement in absolute terms, such cooperative ventures naturally can also be strategically very important to a specific company. The companies in our study typically represent such smaller cooperative ventures formed between companies from two Scandinavian countries, cooperative ventures that, in a sense, are both regional and international.

This cooperative "paradigm" clearly seems to differ substantially from the traditional view of the multinational company operating with wholly owned units in various countries, the focus of much previous research in strategy and management. This new view suggests a distinction between internal hierarchial systems - studying one single firm -and cooperative agreements, which, by definition, includes interaction by at least two parties. These cooperative strategies are an alternative to classical strategies of vertical integration, diversification, and licensing. But how can we really understand such cooperative strategies? To answer this question, we will return to our definition of cooperative ventures (Chapter 1, p. 3), in which we do not distinguish between equity or non-equity participation; nor do we say anything about whether the relationship is loose or tight, whether it needs to be a specific size or of vital strategic importance for the company. Our only requirement is that it was expected to be a long-term relationship and that both partners would take a more or less active role in pursuing it. A cooperative venture could include cooperation between any part of the company's value chain, such as product development, manufacturing, marketing and distribution, or any combination thereof.

Influenced by Thorelli (1986), our starting point to better understand cooperative strategies is that it represents a phenomenon between operating in an open spot market and through a subsidiary, that is through a complete internalization of activities -in other words, between what

Williamson (1975) labeled markets and hierarchies. This discussion will also make it easier for us to understand the context of our specific research question, namely the focus on how a cooperative venture between two companies is formed.

In a second section we turn to a discussion of the main rationales for forming cooperative ventures, and what different types of cooperative ventures are being pursued. Many authors have provided comprehensive lists of various rationales and typifications. We will discuss briefly some of these rationales and types.

At this stage, we have discussed what cooperative ventures are, their basic rationales, and their different types. In the next section, we will take a closer look at some of the most important considerations for the performance of cooperative ventures discussed in the literature. Franco (1971), Harrigan (1985; 1986), Kogut (1986), and others have shown that cooperative strategies - at least joint ventures - have a high instability rate. However, such instability is not always equal to failure. We will focus on managerial considerations, including how to delineate cooperative ventures, partner selection, parent control, and evolutionary patterns of such ventures. This discussion will be based mainly on works by Harrigan (1985; 1986), Geringer (1987), Schaan (1983; 1985), and Lorange (1987).

In the last part of this chapter, these aspects of cooperative venturing will be tied together to demonstrate the importance of a study of how cooperative ventures are formed.

## **2.2 Cooperative Strategies - between Markets and Hierarchies**

Thorelli outlined a framework for understanding "networks," defined as "two or more organizations involved in long-term relationships" (1986, p.37). This definition resembles our definition of cooperative ventures. In fact, Thorelli argued that cooperative ventures is one of many strategic issues typically resolved in a networking context.



Therefore, we will draw some analogies from his reasoning on inter-organizational networks as a phenomenon between markets and hierarchies<sup>1</sup>.

Our focus is the link, or part of a broader network, between two individual companies establishing the above discussed contractual long-term relationship. According to network theory, networks generally can be seen as consisting of a number of "positions" and "links." A position would be defined as the individual company, and the links would be the relationship as such, i.e., the interactions between the organizations in the network. Inferencing from this theory, consequently, a cooperative venture can be understood in terms of a link between two positions in an overall network<sup>2</sup>. Thus, given our research interest (how cooperative ventures are formed), the focus is on the creation of the link between two companies.

The link is clearly based on a relationship over time. According to Thorelli the links "constitute a reflection and recognition of interdependence, as opposed to the autonomy postulated by the classic theory of the firm" (1986, p.41). The crucial point is, consequently, that these links differ fundamentally from individual transactions: they comprise many relationships, transactions and exchanges. In other words, they might be seen as a pattern of interactions between positions.

The links, or interaction processes, can be described in at least two dimensions: intensity and closeness. The nature of the links is also closely related to the issues of power and trust, both central concepts in network theory, but not

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<sup>1</sup> We will not discuss the network paradigm per se in this chapter. For a fuller discussion of the network paradigm, see, for instance, Håkansson, 1982; Hägg and Johanson, 1982; Mattsson, 1983; and Thorelli, 1986.

<sup>2</sup> This might be interpreted analog to a strategy (= link), in a structure (= the link between two companies), in a specific context (= the broader network).

explored further here. As Thorelli (1986) pointed out, however, since power and trust tend to be person-specific rather than firm-specific, the network paradigm places a new emphasis on personnel. Thereby, we have arrived at the individual level, that is, the managerial aspect of establishing a cooperative venture.

At this stage it might be a good idea to bring out the research question in light of the network paradigm. Thus, in network terms, we are interested in how a link is established between two companies, and the elements of the process during which this link is created. It is important to realize that this approach is fundamentally different from approaches that treat organizational phenomena in terms of events only. Hence, we will not elaborate on what strategy the company has, nor will we focus on structural matters, not even on the overall context where the link is created. Instead, the research question suggests a focus on the managerial process by which the link (the cooperative venture) is formed, mainly seen from one of the parent companies' perspective. Let us now turn to a discussion of the above mentioned interaction processes, that is, how the link is established.

### 2.3 Interaction Processes

Most of the literature on interaction processes regards interactions occurring between parties in an already established relationship or network. However, we believe that some of the basic dimensions used in describing these processes might help us to better understand interaction processes when forming a cooperative venture. This concerns the interaction between the decision makers, the frequency of their interaction, how many executives were involved, the time involved, and whether outside parties were used as catalysts or help. Harrigan (1986) discussed how the interaction pattern might shape the destiny of a cooperative venture; the interaction dimensions among the executives in a cooperative

venture do not, however, seem to have been discussed by other authors. When it comes to time spent, either too little or too much time may equally hamper the formation process. Lorange (1988) argued that one attribute of a less successful joint venture is the lack of interaction between the organizations - on various levels.

Mattsson (1988) discusses interaction processes in terms of a general orientation from one partner to another, manifested in two interaction processes, namely, exchange processes and adaptation processes, which "implies that the firms are prepared to interact with each other and expect each other to do so" (p.3).

The relationship is established through various exchange processes among the parties, that best can be characterized as "social exchange relations"<sup>3</sup>. The point is that there are a number of such exchanges that over time build up a mutual trust between the parties, i.e., a person specific social process similar to what Thorelli (1986) discussed. In addition to the social exchange processes, Mattsson (1988) underscored the importance of commercial and information exchange processes.

The second dimension of the exchange process is adaptation, that is, the process the parties go through in order to adjust to various misfits in the relationship on an ongoing basis. This type of adaptation can take place through adjustments of products, production, and/or various management routines.

Why is it important to understand these exchange relationships? Mattsson discusses three major reasons. First, this type of exchange processes strengthens the bonds between companies - they become more dependent on each other over time, however not necessarily symmetrically so. Second, ongoing adaptation makes the relationship more durable - the

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<sup>3</sup> Social exchange relations was first discussed by Blau (1968).

parties tend to use "voice" rather than "exit"<sup>4</sup>. From a different perspective, we might say that this creates a form of exit barriers in the relationship. The third reason is the fact that ongoing adaptations imply that there, indeed, is room for change as such in the relationship. Finally, exchange relationships and adaptation create a gradual mutual orientation towards each other, e.g., standardization of technical matters or management routines.

These theories clearly underscore that it is important to understand the exchange relationships because they will result in a mutual orientation of parties in a network towards each other. Johanson and Mattsson (1988) summarizes the implications of this concept:

They are prepared to interact with each other in order to cooperate and develop interdependent resources that each actor controls. They interact to get access to some of the resources controlled by the other actor. These exchange relationships develop over time and resources are used to establish, keep, and develop them. Exchange relationships in networks may become lasting, especially if the heterogenous resources controlled by the actors become adapted to each other and highly specialized. Exchange relationships also link actors, indirectly, to other actors with whom they do not have any such relationships [p.5].

Hence, there is a causal link between exchange relationships and resource interdependence.

These authors' discussion of interaction processes seem to fit well in the context of the present study of how cooperative ventures are formed. It seems logical that when going through a process of actually forming a cooperative venture, we need to reflect over both exchange processes and adaptation processes. In fact, Johanson and Mattsson outlined five areas of interaction strategies where we need to consider these processes:

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<sup>4</sup> See Hirschman (1970), for a fuller discussion of "voice and exit".

1. degree of long-term orientation,
2. degree of adaptation,
3. scope of the exchange processes,
4. complexity of communication pattern, and
5. institutional framework for the interaction.

It seems logical that these considerations are relevant when forming a cooperative venture. In other words, the implication is that to ask ourselves questions like: For how long are we willing to pursue a cooperative venture? How much are we prepared to adapt to the partner's wishes? In what areas are we willing to interact with the partner? In what ways are we willing to interact with the partner? In what context will we interact? By carefully thinking through these types of questions before and during the formation of a cooperative venture, we might avoid misunderstandings and conflicts when the venture is implemented.

Let us now discuss some of the most common rationales for cooperative ventures and what are some of the most common classifications.

## **2.4 Rationales and Classifications**

From the previous section, we have seen that cooperative ventures represent a phenomenon "in-between" markets and hierarchies, and that the interaction pattern between the partners is important. We have also seen that cooperative ventures have become increasingly popular as a strategic tool in international "networking." But what are the basic rationales for forming, and what are the different types of cooperative ventures?

### **2.4.1 Common Rationales**

A number of rationales for cooperative ventures have been discussed in the literature. Harrigan (1985), for

instance, discriminated between three types of motivations for (domestic) joint ventures: internal uses, competitive uses, and strategic uses. The first type of rationale, internal uses, concerns the creation of internal benefits in the company. For example:

- costs and risk sharing,
- obtaining resources where there is no market,
- obtaining financing to supplement the company's debt capacity,
- shared outputs of large minimum efficient scale plants,
- obtaining a window on new technologies and customers,
- improving managerial practices, and
- retaining entrepreneurial employees.

From this perspective, consequently, a cooperative venture can represent both a resource aggregating and sharing mechanism, concerned mainly with improving the internal capabilities in the company.

The second type of motivation, competitive uses, includes various competitive rationales for strengthening the company's strategic position in the industry. Hence, they represent motives that strengthen the company's capabilities toward the market, increasing the competitive advantage. Some of these motives include:

- influencing an industry structure's evolution,
- preempting competitors,
- providing a defensive response to blurring industry boundaries and globalization,
- creating of more effective competitors.

Harrigan underscored the long-term effects on competition, industry structure, and globalization, that is,

more external-type benefits for enhancing competitive advantage.

The third, and final, set of motives suggested by Harrigan, are those that might increase the company's strategic position; for instance:

- creating and exploiting synergies,
- transferring of technology, and
- diversification.

This third set of motives suggests that joint ventures can be a way to implement changes in the company's strategic position by creating synergies, obtaining technology, or entering new business areas. It seems logical to assume that these aspects, also, are aimed at strengthening the company's competitive advantage.

Harrigan's classification of joint venture motives, in terms of uses, provides a broad basis for understanding why such ventures are created. Her rationales for cooperative ventures seem to go well with the network approach. That is, creating value through linking-up with other companies can provide both internal and external benefits for both partners, i.e., increasing the company's competitive advantage. However, in spite of underscoring the cooperative characteristic of joint ventures, Harrigan still referred to these motives as competitive and strategic "weapons" (1985, p.31). This seems to reflect a view that cooperative strategies should be pursued in order for one party to create a weapon to be used against, not only the market, but also partly against the other party. To some extent, this resembles of a "win-lose" situation.

Other authors suggest different classifications of cooperative motives. Contractor and Lorange (1988), for instance, discuss both strategic management and industrial organization rationales for forming cooperative ventures from a value chain perspective. The overall prerequisite is that "the combined efforts of all partners must add up to a value

chain that can produce more competitive end results" (p. 9). The authors address the following seven types of benefits from cooperative strategies:<sup>5</sup>

- risk reduction,
- economies of scale and/or rationalization,
- complementary technologies and patents,
- co-opting and blocking competition,
- overcoming governmental trade or investment barrier,
- facilitation of initial international expansion, and
- vertical quasi integration advantages.

As can be seen, cooperative strategies can be both horizontal (similar inputs) and vertical (complementary inputs) or, as Hennart (1988) labeled the phenomenon, scale and link joint ventures. In our opinion, the degree of quasi-integration might be important when analyzing cost and benefits, but not for the present study of how cooperative ventures are formed. The key issue is that whatever form of cooperative venture is being created, it should be value creating in Porter's (1985) terms.

In general, both Harrigan's (1985) and this classification reflect a rather "rational" view of why cooperative ventures are formed. However, Harrigan mentioned very little about behavioral, political, and inter-organizational issues, whereas Contractor and Lorange (1988) raised these factors. However, they argue that the importance of these "softer" reasons will decrease if the above "harder" reasons are considered carefully.

Rationales for cooperative strategies discussed by other authors coincides well with the above two listings. For a fuller discussion of additional research on cooperative strategies, however, see the literature listed in Appendix 1.

There does, indeed, seem to be a number of general rationales for creating links between positions in a network

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<sup>5</sup> See Contractor and Lorange (1988) for a fuller discussion of these seven benefits.



sense - in the form of cooperative ventures. As mentioned, these rationales have to do with expectations of future internal benefits within the company, resulting in increased competitive advantage, as well as benefits, resulting from the venture's influence on the industry as a contextual setting. It is important to keep the diversity of rationales in mind when discussing cooperative venturing. The question of rationale is likely to play an important role in the managerial process of forming, implementing, and managing such ventures. As we will see in a subsequent section, these issues are closely related to the question of if and how a cooperative venture might evolve over time. But, having decided to establish a cooperative venture for whatever reason, how can we classify cooperative ventures?

#### 2.4.2 Common Classifications

Several authors have typified cooperative ventures along various dimensions. In broad terms, cooperative strategies can be defined in terms of the extent of inter-organizational dependence<sup>6</sup>. Contractor and Lorange (1988) outline such a classification, which includes, in an increasing inter-organizational dependence, various types of technical and production agreements, patent licensing, franchising, know-how licensing, management agreement, non-equity agreement, and equity joint ventures. Such classification is, however, of very little interest to us since we are focusing on only the latter two of these cooperative arrangements.

Killing (1988) also presents a framework for understanding different cooperative arrangements, discriminating between traditional joint ventures, non-equity alliances, and minority equity alliances. The traditional joint venture occurs when two or more partners join forces to create a new incorporated company in which each has an equity

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<sup>6</sup> See Pfeffer and Nowak (1976) for a fuller discussion of inter-organizational dependence.

position and representation on the Board of Directors. Non-equity alliances are agreements to cooperate in some way but do not involve the establishment of a new company nor cross-ownership between the parent companies. The minority equity alliances, then, are non-equity alliances wherein one partner has a minority ownership in the other parent company. This classification is similar to our conceptualization of such cooperative arrangements. Again, it should be noted that our focus is on the traditional "joint venture" and on the "non equity alliance." These are what we label cooperative ventures.

The most used classification dimensions for cooperative ventures seem to be the strength of the linkage with each parent's contribution to the venture from a value creating perspective. Porter and Fuller (1986), for instance, discussed the span of activities in the value chain as well as the geographical coverage of the "coalition." Two types of coalitions emerged, "X - coalitions" and "Y - coalitions". In X coalitions, the parent companies have a symmetric position to each other and in the Y coalitions, the partner companies have an asymmetric position to each other. Again, we can see similarities with the traditional vertical-horizontal classification.

Lorange (1988) and Håkanson and Lorange (1988) offers another typification based on the value chain and presents four archetypes of cooperative ventures. The first type links one partner's upstream activities with the other partner's downstream activities - where the upstream partner has the stronger resource base of the two. The second archetype is the opposite situation, where the "stronger" partner controls the downstream activities. The third archetype of cooperative ventures involves a linkage between two companies' downstream activities. Finally, the fourth archetype is a cooperation between two companies' upstream activities.

This typification seems to have many similarities with the classical vertical-horizontal perspective and is relatively straightforward, except for the difference between

archetypes one and two. This differentiation is somewhat confusing with respect to the notion of "archetypes" of cooperative ventures. One might think that the archetype would be represented by the upstream-downstream link as such, i.e., between one company providing the technology and the other providing the market network. In Lorange's conceptualization, however, one of these partners always has a stronger resource base, i.e., "dominating" the other party.

Berg, Duncan, and Friedman (1982) in some sense also related their typification on value creating activities, categorizing joint ventures as "technological" and "non-technological," depending on whether the venture involved R&D. Hence, the type of joint venture was related to the nature of the industry product and the degree of core technical know-how involved in the cooperative activities: assuredly a different definition, but clearly related to the value chain perspective.

Killing (1983) had a different approach to a classification of traditional equity joint ventures. He focused on the parent companies' role in influencing the venture's activities and decision making. Three types of joint ventures emerged: (1) shared, (2) dominant, and (3) independent. In the shared joint venture, both partners play an active, hopefully complementary, role in the venture. In the dominated joint venture, one partner typically plays a more dominant role in the decision-making, whereas the other partner may have a more passive role. In the third type of joint venture, finally, both partners play a passive role and, instead, the joint venture, as such, is more of an independent entity with its own decision making routines.

From a managerial process perspective, the notion of parent influence seems to be a very useful conceptualization. As we will see later on, such a classification will also help us to understand why cooperative ventures perform differently.

Tyebjee (1988) has developed a different typology of joint ventures. He focuses on partner characteristics, respective contribution, relative power, and scope of joint

venture activities. In his study of Japanese cooperative strategies in the U.S., four different types of joint ventures emerge. The first type of joint venture is labelled "adoption." This is typically an acquisition of an equity position in a young high growth U.S. company. The second type is the "rebirth," the infusion of state-of-the-art technology by a Japanese company into a subsidiary of a U.S. company. The third type of joint venture is labeled "procreation" and is the normal start up of a joint venture in the U.S. Finally, the "family ties" joint venture has evolved from horizontal ties between suppliers or from vertical relations between a supplier and a buyer.

There is also an interesting classification of joint ventures illustrating the large differences in cooperative strategy used by Japanese companies in the U.S. The first type, adoption, seems to be a variation of what Killing (1983) labeled "dominated" joint venture, in this case by the U.S. company. The second type, rebirth, also indicates a dominated joint venture, however, perhaps by the Japanese party. The third type, procreation, resembles the "shared" joint venture, where both parents play important roles, at least in a start-up phase. The fourth of Tyebjee's types of joint ventures should be thought of in terms of the value chain. For instance, this might be similar to Lorange's (1988) third archetype.

In his discussion of joint venture taxonomies, Root (1988) proposes a number of pair-wise dimensions by which one can characterize joint ventures:

- nationality and degree of interfirm cooperation,
- each company's contribution from the value chain,
- geographical scope and mission (in a value chain sense),
- fiduciary risk and environmental risk exposure, and
- relative bargaining power and ownership.

Hence, Root offers only a few additional dimensions in classifying cooperative ventures, such as geographical dimension and risk exposure. Relative bargaining power, for instance, has been discussed extensively by Harrigan (1985).

As can be seen, many important dimensions of how cooperative ventures may be classified seem to have been covered in the literature. Lorange and Probst (1987) represented a more management-process-oriented approach to the classification of cooperative ventures. They applied the notion of self-organizing systems and argued that, since any organization must adapt and evolve on its own to meet new environmental circumstances, a cooperative venture must possess some self-organizing properties to be successful<sup>7</sup>.

The authors presented four characteristics of such self-organizing systems, and from them derived three archetypes of cooperative ventures. The first characteristic is that the organization is not complicated. The more complex an organization, the more difficult it will be for a joint venture to become an effective self-organizing system. Thus, a joint venture's organization has to be designed in a way that fits with the complexity of its environment.

The second characteristic is self-reference. Since self-organizing systems are "operationally closed," the joint venture must develop feedback and learning properties to thrive from past experience. Expressed more operationally, effective and unifying planning and control routines must be established so that managers can easily redefine the joint venture's activities.

The third characteristic has to do with autonomy. Self-organizing systems must be autonomous, but not necessarily independent of resources, markets, technologies, and values. This implies that a joint venture must be organized so the manager is given sufficient authority to carry out the tasks in an independent way.

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See Probst (1986).

The fourth, and final, characteristic discussed by the authors is redundancy. This has to do with organizing the organization in a way that provides flexibility to deal with new circumstances. In order to find alternative solutions, therefore, more resources and management processes should be set up in the joint venture than are the very minimum.

Based on these characteristics of self-organizing systems, the authors presented three archetypes of joint ventures. The first type is the free-standing joint venture, pursuing its own strategy separate from its parent companies. The second type is the joint venture where one parent pursues a strategy that is closely related to that of the joint venture. In the third type, finally, both parent companies actively pursue the same strategy as the joint venture.

This classification of joint ventures has several important implications for how the ventures should be organized, for instance, regarding protection of core know-how and choice of managerial processes<sup>8</sup>.

Even though Lorange and Probst's (1987) discussion covered joint ventures, seen as a separate organizational entity, the classification may be applied usefully to cooperative ventures in general. In order to understand better the cooperative venture vis-a-vis the parent companies, it might be useful to use the above classifications of closeness to strategy, at least to discriminate between the second and third archetypes. We can also see that Lorange and Probst's conceptualization shares many similarities with Killing's (1983) three types of joint ventures: shared, dominated, and independent. Killing discussed parent influences and Lorange and Probst discussed closeness to parent strategies. Hence, these two conceptualizations go hand in hand and are well suited for our understanding of cooperative ventures. In the context of the present study, we can conclude that the question of strategic closeness between parent and child is an important dimension when forming such ventures.

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<sup>8</sup> For a fuller discussion of these matters, see Lorange and Probst (1987).

In the above discussion, we have seen that many forms of cooperative ventures exist. We have discriminated between these forms mainly on the basis of the parent companies' contributions from their value chain, their influence over decision making, and their proximity to the venture strategy. Given that we need to be observant about these dimensions in contemplating cooperative strategy, are these strategies successful?

## 2.5 Outcome

There is little doubt in the literature that all forms of cooperative agreement tend to be unstable. Recent articles in the media also seem to support this. The fundamental problem in the literature is, however, that most authors seem to equate instability and dissolution with failure. This, of course, is not always the case and, therefore, statistical findings investigating the instability of cooperative strategies might be difficult to interpret. As Kogut (1987) pointed out in his final paragraph for instance, imitation might be the objective of a joint venture; and when imitation is complete, the sign of success is termination. In other words, we must be careful in drawing conclusions from instability-oriented measures of cooperative strategies. A measure more relevant to the objectives is appropriate. In the following section, we will take a closer look at how cooperative ventures in general tend to perform.

In one of the first scientific studies of joint venture activity, Franco (1971) found an instability rate of 30% in joint ventures created by American multinationals. Instability was defined as whether the American partner in the venture re-organized its international activities related to the venture, i.e., a type of strategic change. He concluded that this instability seemed to be a result of multinational policies of partners that limited the strategic autonomy of the joint venture, rather than a partner conflict as such. Hence, too

much "hands-on" governance from the parent firms was negative for the stability of the joint ventures.

In their study of 172 multinational companies' "traditional" type of joint ventures, Stopford and Wells (1972) found that instability might result from a potential underlying conflict in the partners' ongoing desire for control and for additional resources. In other words, instability seemed to be related to control. As discussed above, this was also one of Schaan's (1983) findings.

In addition to the continuous argument that partner asymmetries are bad in general, more behavioral-oriented reasons for failure were also suggested by Harrigan (1986), who briefly addressed eight such reasons:

- Partners could not get along.
- Their markets disappeared.
- Managers from disparate partners within the venture could not work together.
- Managers within the venture could not work with the owners' managers.
- What was thought to be appropriate technology (or whatever the contribution was to be) by one partner did not meet expectations.
- Owners who were to contribute information or resources could not get their personnel down the line to deliver what had been promised.
- Partners simply reneged on their promises to deliver on their parts of the agreement.
- Other reasons destroyed the partners' cooperative spirit.

Even though Harrigan did not follow-up on them, these reasons for failure do indeed emphasize matters such as "trust" and "personal chemistry." We interpret this as a manifestation of the importance of developing such behavioral traits between the persons intimately involved in the delineation of the cooperative venture - during the formation process.



Other authors have discussed a number of reasons, often on the basis of a few clinical studies. Some of the reasons discussed in this chapter with literature support are summarized in Exhibit 2-1.

Author	Reasons for Instability
Franco (1971)	Limited strategic autonomy
Stopford and Wells (1972)	Conflict in desire for control
Killing (1983)	Problems with dual control - autonomy
Schaan (1983)	Bad fit of control mechanisms in the parent firm
Beamish (1985)	Problems with shared control
Harrigan (1985; 1987)	Partner asymmetries, lack of durability of advantages, imbalances in bargaining power
Kogut (1986)	Rival competitive incentives among the partners, competitive changes in industry structure
Lorange and Roos (1987; 1989)	Bad pre-venture design and evolutionary perspective
Geringer (1987)	Partner asymmetries
Schaan (1988)	Ineffective start-up phase

**Exhibit 2-1: Some Reasons for Cooperative Venture Instability**

Empirical tests of these reasons for instability have been carried out to only a limited extent. Kogut (1987), however, attempted to test a number of hypotheses from the literature. His overall assumption was that the reasons for terminating a joint venture lie in the very rationales for creating the venture in the first place. He argued that many joint ventures are motivated by competitive reasons, making them vulnerable per se. Four hypotheses were derived from the

literature (see exhibit 2-1) and tested empirically via a partial likelihood model:

- Dominant joint ventures are more stable than shared-control joint ventures.
- Joint ventures formed between companies which differ significantly in size are less stable.
- Joint ventures in more concentrated settings will be more stable.
- Joint ventures where one partner has market access are more stable.

Interestingly, none of the hypotheses was supported. These results become even more interesting if we recognize that some authors have argued that the failure rate of cooperative ventures are no higher than those of internal corporate ventures:

The trust of that literature [on cooperative ventures], perhaps unwittingly, seems to overemphasize the problems of running international joint ventures. There is, however, no hard evidence that their failure rate exceeds the normal corporate failure for comparative single-owner ventures. [Contractor and Lorange, 1988, p.24].

In other words, we must be careful to draw on several strong arguments for joint venture failure found in the literature, such as the notion of the devastating effect of partner asymmetries.

In summary, we have seen that many reasons for cooperative venture failure have been suggested in the literature, related both to environmental and internal parent-child-parent circumstances - reasons that are both rational and behavioral in nature. We cannot, however, state that cooperative strategies tend to fail more often than other ventures. The mere reasons for failure as such, are quite different - since a cooperative dimension is introduced. Given these results, what are some of the success factors in cooperative venturing?

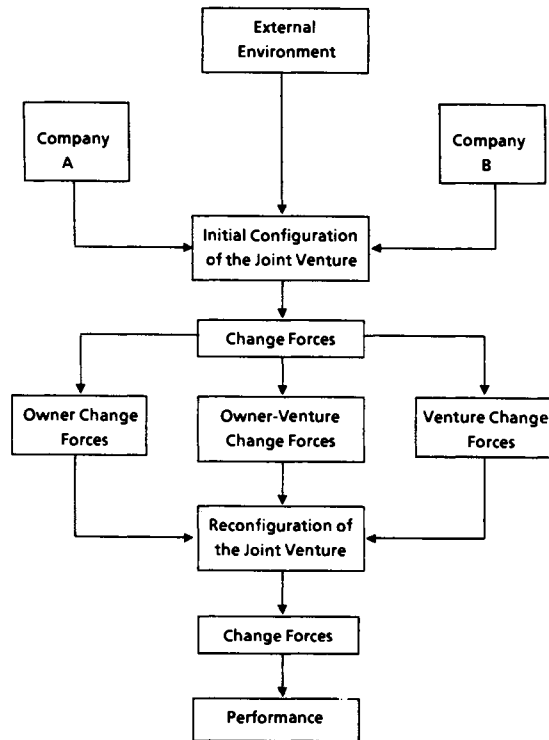
## 2.6 Success Factors

Many aspects of cooperative venturing have been discussed in the literature, but we have chosen to highlight only four specific success factors that we feel are particularly important for the present study: how cooperative ventures can be delineated, how partner companies can be selected, how parent companies can control the cooperative venture, and how such ventures might evolve over time.

### 2.6.1 Delineation

A number of conceptual models for delineating joint ventures have been proposed in the literature. None of these models gives exclusive emphasis to any particular aspect of the managerial process of creating a cooperative venture, but they can shed important light on how joint venture design can be conceptualized. Among these models, two will be discussed in some more detail, namely these of Harrigan (1986) and Tyebjee (1988).

Harrigan (1986) stated that the initial configuration of a joint venture, embodied in the joint venture agreement, depends on each participant's strategic needs and relative strengths (and often also governmental influence) in an ongoing bargaining process.



**Exhibit 2-2: Harrigan's (1986) Model over Joint Venture Dynamics**

Bargaining power is determined by the level of prospective benefits, the costs involved, other resources that will have to be provided, alternatives that we and the partner might have, the degree of urgency of the needs, and the size of entry and/or exit barriers. Hence, heavy emphasis is placed on the parties' relative bargaining powers and on the ongoing dynamics of joint venture activity. These dynamics can be derived from three types of fundamental change forces: (1) between the two parent companies, (2) between one parent company and the joint venture, and (3) within the joint venture.

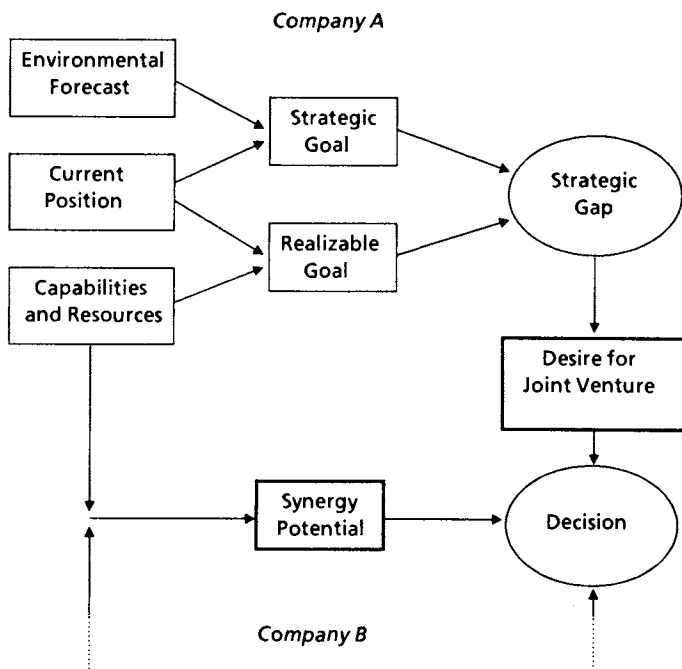
In the case of conflicts, presumably the parties will negotiate among themselves toward an understanding that it will pay to cooperate, based on their own selfish interests. We may wonder how potential adversaries go about reaching an agreement to become prospective partners. The negotiation

dimension of the process of reaching an agreement, characterized by Harrigan (1985) as an ongoing bargaining dynamic, may be important. However, we feel that a more gradual process of both rational and behavioral aspects shaping patterns of commitments may be a more realistic way of understanding how a cooperative venture is formed.

Our second model of joint venture delineation is based on a discussion of the decision to create Japanese joint ventures in the U.S. (Tyebjee, 1988). The model is greatly influenced by the above discussion of relative bargaining power as a major determinant in joint venture creation. In the author's words:

Whether or not two companies will decide on a joint venture will be dependent on both an internal assessment of each firm's strategic gap as well as the external assessment of the synergy potential of the other firm's capabilities and resources". [Tyebjee, 1988, p.462].

Hence, the decision to enter a joint venture is dependent on two major issues, namely, both companies' desire to engage in a joint venture and the potential synergy. The desire to engage in a joint venture is seen in terms of how much the company would actively search for a partner. In turn, this is determined by the difference between the firm's "strategic goals" and the "realizable goals" it could achieve in the future, which is labeled a "strategic gap".



**Exhibit 2-3: Tyebjee's (1988) Model of the Decision to Create a Joint Venture**

As can be seen from the model, the fundamental "forces" behind the decision to create a joint venture are "environmental forecast," "current position," and "capabilities and resources," emerging into the two types of goals discussed above.

The second major determinant, namely synergy potential, has to do with the traditional meaning of synergy, i.e., a "1 + 1 > 2" effect from two partners bringing together strategic resources.

As was the case with Harrigan (1986), Tyebjee's (1988) model focuses on rational, analytical dimensions based on existing resources and expectations of partner synergies. In addition to strengthening our belief that these type of issues are indeed important factors when forming a cooperative venture, it is difficult to see how this "uni-dimensional" type of joint venture delineation model adds to our understanding of the managerial process by which the link in

the network is created. However, given this rational view and focus on bargaining power, the partner selection must be of vital importance. In other words, how do we select our partner?

### 2.6.2 Partner Selection

Many studies have indicated that partner selection may be an important variable influencing how the joint venture will actually perform (see, for instance, Tomlinson, 1970; Berg and Friedman, 1982; Harrigan, 1984; and Killing, 1983), and that complementarity of partners is very important for success (see, for instance, Franco, 1976; Gullander, 1976; and Killing, 1982). We discuss here two studies of such partner selection - one relatively early and the other relatively new.

Tomlinson (1970) studied how British companies selected their joint venture partners in India and Pakistan. Based on an empirical study of 71 joint ventures, mainly of the traditional product - market type, he found that partner selection could be characterized as a distinct decision during the formation process. The most important criterion used in this decision process was whether the company had a previous good experience with the local partner. He also found that there was a correlation between three characteristics of the parent companies and partner selection criteria: size, industry, and rationale for pursuing the joint venture.

Tomlinson's (1970) was the first study of its kind and raised some interesting questions as to whether it was possible to predict the selection criteria used in certain types of joint ventures. The focus on India and Pakistan, coupled with the "access-to-local-market" type of joint ventures being studied, however, make the results difficult to generalize.

In an effort to better understand the mechanism by which partner companies are selected, Geringer (1987) developed a more detailed conceptual framework for such selection. Based on an empirical study of 90 recently formed joint ventures, he

tested the extent to which the broadly defined "task-related" criteria and "partner-related" criteria were important. His main finding was that complementarity is a useful concept for understanding joint venture partner selection. More precisely, the following findings emerged from the analysis:

- a high positive correlation between the perceived importance of potential critical success factor categories and the valences of their associated selection criteria categories,
- a positive correlation between the perceived difficulty of internal development categories and the valences of their associated selection criteria categories, and
- no negative correlation between the perceived relative competitive position on a particular variable category and the valence of the associated task-related selection criteria.

Geringer's (1987) findings offer interesting insights into the difficult issue of how joint venture partners are selected. He did, indeed, cope with some of the problems of many previous studies by collecting perceptual data directly from managers intimately involved in the partner selection process, i.e., primary data with a very high response rate. However, his results were based on simple correlations between individual selection criteria and individual success criteria. Therefore, the results can be interpreted only as clues to what seem to be the most important selection criteria in a specific setting. In our opinion, however, a more multidimensional approach is clearly needed to get a feeling for how to distinguish the importance of various selection criteria in various settings.

Having decided to form a cooperative venture and selected a partner, how can we make sure that our company can keep control over the dual activities?



### 2.6.3 Parent Control

Several authors have pointed to the fundamental problems of control as part of their analyses of cooperative strategies. This is not surprising, since a cooperative strategy, by definition, requires giving up some control over strategic activities. On the other hand, it also suggests the need to establish new control mechanisms regarding the cooperative venture as such. Harrigan (1985), for instance, pointed at "loss of autonomy and control" as a major drawback of joint ventures. The mere perception of loosening control over invested capital, technology, and information is a significant cost of cooperation. She suggested several control mechanisms, such as ownership shares, board of directors, personnel rotation, and "trial marriage" (where a team from both companies suggests how the joint venture would operate relative to the partner companies).

Broke and Remmers (1978) found that fear of loss of control was one of the major reasons for managers to prefer wholly owned operations over joint ventures. In other words, these companies want to operate closer to the hierarchical end position of the market and hierarchy scales. But given a cooperative venture, how can managers insure that they will retain control over the cooperative venture, and when and how can control be imposed? In order to understand these issues better, we will discuss the framework for parent control presented by Schaan (1985). First, however, we must define "control". At least three different ways of viewing control of joint ventures can be found in the literature: (1) through the formal agreement (Stopford and Wells, 1972; Harrigan, 1985); (2) through the parent companies' involvement in decision-making (Killing, 1982), and (3) through staffing, physical location, and planning and control routines (Raffi, 1978; Lorange, 1987).

Schaan (1983; 1985), indeed, represents the most comprehensive approach to studying joint venture control by linking the notion of control to influence on different sets of specific decisions and activities:

Managers in a parent company are considered to have control when they are able to influence joint venture decisions or activities important to the achievement of their own expectations or when they are able to prevent the implementation of decisions contrary to their interest. A parent company does not have more or less control in general, but it controls (or does not control) a specific decision or activity. In fact, two parents can simultaneously control a joint venture when they control different sets of activities or decisions that are important to the achievement of their own expectations. [1988, p.2].

Based on ten case studies of American joint ventures in Mexico, Schaan (1983) identified five different ways by which managers in parent companies can exercise control:

1. the board of directors,
2. provision of parent company services,
3. staffing,
4. organizational and structural context, and
5. informal mechanisms.

He found that the most important control mechanisms at the board level were majority ownership, veto rights, and persuasion. These findings reflect that control in joint ventures is not always a question of control by majority ownership. Instead, it also includes a blend of social and political aspects.

Provision of parent company services had to do with how the parent companies provide for the joint venture with direct support. Schaan found three areas where this occurred: special agreements (technical agreements, marketing agreements, supplier agreements, etc.), planning (preparation of strategic and/or operating plans), and staff services through training programs.

In the area of staffing, Schaan observed control through the appointment of both joint venture managers and other

managers, such as production and technology, marketing, and finance.

The parent companies also exercise control by shaping the organizational and structural context mainly via three mechanisms: capital budgeting and resource allocation, various policies and procedures, and performance measurement and reward.

The informal control mechanisms reflect the behavioral aspects of control, i.e., influence over people. These mechanisms include various ways to develop and maintain good working relationships between the two parties through, for instance, socializing, symbolic cross-ownership, or attending presentations held at the other party's headquarters.

According to a second set of results from Schaan's study, different factors in the selection of control mechanisms are found to enhance the likelihood of success. The key issue is to achieve a fit between the criteria of success, the activities or decisions to control, and the control mechanisms. In his sample, the successful joint ventures had such a fit, the unsuccessful did not.

In deciding what to control, four factors were found to play important roles: the parent company's success criteria, the joint venture's dependence on transfers from the parent, inter-organizational politics, and the managers' attitudes and predispositions toward control. Three types of factors were found to influence how to control: the characteristics of the activity or decision to control, the staffing of the joint venture, and the political circumstances of the control attempt<sup>9</sup>.

Despite the fundamental problem of generalizing the findings, Schaan's studies suggest that joint venture control is an important aspect of forming a joint venture. It is a combination of social and political processes, closely related to expectations, attitudes, norms, and beliefs - in many ways different from the standard list of strategic control in

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<sup>9</sup> See Schaan (1983; 1985) for a fuller discussion of what and how to control.

multinational corporations presented by, for instance, Doz and Prahalad (1981). Again, this is not surprising given the dual nature of joint venturing. To develop effective control mechanisms that will promote the joint venture over time, managers in both companies need to address the issues discussed above. This can help them to achieve a fit between what to control and how to control it, which, at least, might add to the likelihood of future success. Such devotion of time and effort must be carried out during the formation process.

So far, we have discussed how cooperative ventures might be delineated, how a partner can be selected, and how to control the venture. We will now turn to a discussion of how cooperative ventures might evolve over time, an evolution that will have implications for what we have discussed previously.

#### 2.6.4 Evolutionary Understanding

The notion of an evolutionary pattern in cooperative ventures has been suggested by Lorange (1987). The main reason put forward for such a pattern is that a cooperative venture, like other "organisms," needs to be adapted to changes in the environment:

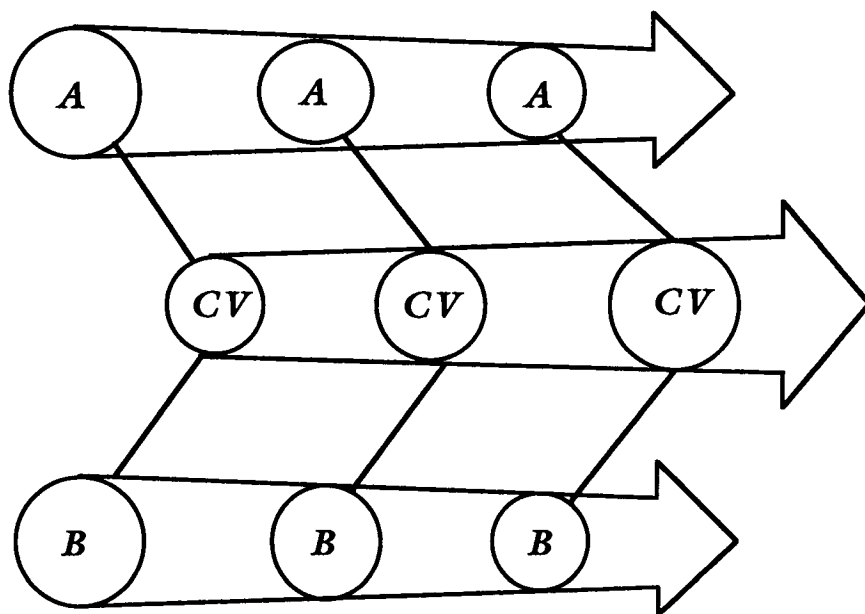
Just as we can observe with species in nature, the cooperative venture must receive 'energy' on an on-going basis, in this case from its 'parents', so that it can grow from a 'sibling' into a full-blown workable entity. [p. 10].

In his framework, Lorange made use of Killing's (1983) terminology of shared, dominant, and independent cooperative ventures. These classifications indeed seem to be identical to the framework for self-organizing cooperative ventures presented by Lorange and Probst (1987). The important point is, however, that the time dimension is introduced and that these types of cooperative ventures emerge in a particular pattern over time, namely over three phases.

In the first phase, two parent companies typically established a shared cooperative venture, in terms of

closeness to both strategy (Lorange and Probst, 1987) and decision making (Killing, 1983). Over time, however, this situation changes. One partner typically becomes more interested in the cooperative venture, gradually taking over more of the hands-on activities. Therefore, the cooperative venture would be dominated by one of the partners, being characteristic of both Killing's (1983) and Lorange and Probst's (1987) second type of cooperative venture. If both partners wish to remain active, the only alternative to this evolution is to terminate the venture. It should also be noted that a cooperative venture could also be formed with the purpose of being dominated by one partner only.

This type of dominated cooperative venture will, however, also evolve as a result of the difficulties of adapting to new opportunities as well as environmental changes. This typically leads to a need for a freestanding organizational entity with its own personnel and decision making routines - an independent cooperative venture. Again, the alternative to this evolution is to terminate the cooperative venture. It should be noted that a cooperative venture, of course, can be created as dominant or independent from the beginning. The evolutionary framework is pictured in Exhibit 2-3.



**Exhibit 2-4: Evolution of Cooperative Ventures**

In this exhibit, parent A becomes dominant in phase II. In addition to illustrating the three phases, exhibit 2-4 also pictures the gradual decreasing closeness to strategy and decision-making from the parent company's perspective. It also illustrates the emergence of the full-blown independent cooperative venture organization. This theoretical framework was supported by eight clinical studies of Swedish cooperative ventures reported by Lorange and Roos (1987), who showed that many cooperative ventures do indeed seem to be poorly designed when evaluated in a dynamic context. It should be noted, however, that the pattern discussed above can be reversed in part, in that the evolution might go from the first to the second phase, but thereafter reverts back to phase one<sup>10</sup>.

The evolutionary perspective, as such, is also consistent with other authors' findings. In her concluding remarks, for instance, Harrigan (1986), stated that "joint ventures are a transitional form of management - an intermediate step on the way to something else." (p.193). However, she did not elaborate further on what this transition would look like.

In our opinion, the findings on the evolutionary pattern have important implications for how we can understand cooperative ventures, in particular for the managerial process by which the venture is formed, i.e., the focus of this study. For instance, from the very beginning, we must recognize who is doing what and at what point in time. In other words, the formation process should include an open discussion of the expected dynamics of the venture. Thereby, the decision-makers in both parent companies will not be surprised over the subsequent requirements for wholeheartedly supporting a more increasingly independent entity. Coupled with the issue of protecting versus revealing core know-how in cooperative ventures, the movement towards independence leads us to an expansion of Lorange's framework. Even though we have

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<sup>10</sup> One of the above-mentioned clinical studies showed this pattern, however. Subsequently this case moved directly towards the third, independent, phase.

mentioned that the alternative to evolution between each phase is termination, we might argue that this has to do with the specific product's stage in the product life cycle. If the nature of the product is such that it is not likely to become "commodity-like" in the near future, it is difficult to see how a cooperative venture will evolve into an independent organization. Such an evolution would require that both partners give up all relevant know-how to an independent cooperative venture where both partners would merely have an equity position without hands-on control. Hence, this might jeopardize a unique and important revenue-yielding technology. Roos (1989) provide a typical example of this situation.

If the product is likely to become a commodity, on the other hand, there seems to be no problem with the creation of an independent entity. In this case, we might expect that the specific know-how is more diffuse in the industry and, therefore, is of less strategic value as such.

The discussion in this section can be summarized by saying that while the general evolutionary pattern of cooperative ventures moves towards independence, an important requirement is that the product will become a commodity and that both partners are willing to give up relevant know-how. Hence, this is an important implication for the managers involved in forming such cooperative ventures.

## **2.7 Tentative Conclusions**

This chapter has served to provide an introduction to the field of cooperative ventures and to help us better understand the present study of how cooperative ventures are formed. It is not our purpose to provide a complete survey and evaluation of the literature in this field. Rather, we want to highlight some aspects found in the literature, which we perceive to be particularly important and useful for the present study. Beginning with Franco's (1971) study of U.S. joint ventures, many scholars have devoted much time and effort to research on

a number of aspects of cooperative ventures. To better understand what these strategies really are, a network analogy has been used to illustrate a cooperative venture as a phenomenon between spot market contracts and an internalized self-sufficient organization, i.e., a "link in between."

Several findings from the literature survey can be underscored. The first finding concerns the importance of understanding the influence of interaction processes on the internal formation process within a company. More specifically, one needs to pay attention to what are both one's own and the partner's intentions and willingness for cooperation, or analogous to Johanson and Mattsson's (1988), the fundamental interaction strategy.

These aspects are closely related to the necessity of understanding the fundamental rationales for forming a cooperative venture in the first place. There seem to be as many rationales as there are types, or even numbers, of cooperative ventures. The rationales are both rational and behavioral in nature and can be derived from both environmental and internal inducements. However, these rationales must be understood by both partners.

Another finding is that the most widely spread view in the literature is that of cooperation based on an ongoing bargaining process, where both partners are trying to "get the better deal." In other words, a competitor-focused approach to strategy - "companyism gets in the way" (Ohmae, 1989). Given the basic theoretical nature of a cooperative venture, this is surprising. This win-loose or zero-sum prototype of a cooperative venture, does not seem to be the ideal type of attitude for pursuing cooperative ventures. Instead, we would expect that a more cooperative attitude would be a prerequisite for cooperative ventures. There are also, however, different views of this. Lorange (1988), for instance, has introduced the "win-win" concept in cooperative venturing - the venture must be designed in several dimensions so that both partners win. Schaan and Navarre have also



expressed an understanding of the importance of such a cooperative attitude:

If we believe that the trend towards greater use of joint ventures is a reflection of a fundamental change in the way firms compete through greater reliance on cooperative agreements of all sorts, we do not have the choice but to learn how to cooperate. It implies a dramatic shift in attitude from competition towards cooperation as a basis for survival. [Schaan and Navarre, 1988, p.25].

The importance of partner selection and parent control as key success factors, underscored in the cooperative venture literature, was surprising. In fact, almost all the authors seem to have touched upon the control issue. Given the "win-loose" attitude discussed above, it is not surprising that control is a matter that continuously bothers many authors.

A final finding from the literature survey is the notion that a cooperative venture will eventually evolve in a specific pattern towards independence, but, given certain premisses. This underscores the need for a dynamic attitude and understanding when forming such a venture.

The discussion in this chapter has provided us with a better understanding of the context of the study, i.e., the "cooperative dimension" as such. However, very few clues have been revealed regarding the content of the managerial process we are interested in. To find clearer traces of such clues, therefore, we will now turn to a discussion of strategy formation - an analog managerial process.



## CHAPTER 3

# FORMATION PROCESSES: ANALOGIES FROM STRATEGY RESEARCH

### 3.1 Introduction

In the previous chapter we presented a framework for better understanding the cooperative venture phenomena. This represents the overall cooperative context of our study. One of the main conclusions from the discussion was, however, that little help could be offered from the previous literature in this field to uncover the fundamental elements of the phase under which these ventures are formed, i.e., the core of our research question. Hence, we need indications on these matters from other fields of research. As mentioned previously, a cooperative venture often represents an important and strategic decision for a company. Could it, therefore, be possible to find some indications in the literature of, for instance, strategy formation?

In this chapter we will discuss some of the literature on managerial processes, such as strategy formation to find clues to the nature of the cooperative venture formation phenomenon. Given this purpose, we must emphasize that the formation of cooperative ventures will be seen as a typical managerial process, therefore involving similar types of problem solving processes described in the decision process and strategy formation literature.

The discussion begins with a review of the classical works on strategy by Ansoff (1965), Allison (1971), Hofer and

Schendel (1978), Andrews (1980), Mintzberg (1978), and others. Even though the formation of a cooperative venture in many cases is probably less inclusive than a complete strategy formation decision, we expect to find patterns similar to these types of strategy formation processes. Because it is, at least, two partners that form a cooperative venture, we will also have to recognize the potential influence of interaction processes on the individual formation process within one company.

To better understand the content of the cooperative venture formation phase, we will discuss examples of formation processes - namely the foreign investment decision process (Aharoni, 1966), the resource allocation process (Bower, 1970), and the acquisition process (Carter, 1971; Haspeslagh, 1988). Also, we will discuss the implication of the interaction processes between the two partners. Finally, we will draw some tentative conclusions regarding how cooperative ventures might be formed.

### 3.2 Strategy Formation

Organizations are not only "structural" in nature. There are also a number of information-sharing and decision-making processes that have been developed to integrate and coordinate activities, all of which constitute the form of organization (Bower, 1970). Cyert and March (1963) serve as a starting point for understanding decisions. Their process-oriented model views decisions by the company as resulting from a well-defined sequence of behaviors within the company. In describing how decisions are actually made rather than how they should be made, the authors argued that if cognitive limits of human beings are introduced, then the processes are quite different from those prescribed by management scientists. They suggested that a company's behavior should be analyzed within the context of the company's goals, expectations, and choices. Goals are evoked by the dimensions

of a problem and are determined by aspiration levels. Cyert and March conceptualized the goal formation process in three steps:

1. the bargaining process, by which the composition and general terms of the coalition are fixed;
2. the internal organizational process of control, by which objectives are stabilized and elaborated; and
3. the process of adjusting to experience, by which coalition agreements are altered in response to environmental changes.

The bargaining process goes on more or less continuously, turning out a long series of commitments. Choices take place in response to a problem when an alternative is found that satisfies aspirations among all the goal dimensions. In other words, it is only the cognitive process of problem solving that is critical. In our opinion, this is a very appealing view of the organization when we look at managerial processes. In other words, we are studying humans who deal with goal formulation and making choices, which often is done through "problematic search".

Strategy formation processes may be seen as a more rational problem-solving process for defining an organization's strategy, i.e., deciding "what to do." A process that involves goal formulation and choices requires us to identify and interpret strategic issues - events that have a potential impact on organizational performance (Ansoff, 1980). Strategy formation processes can be seen as including a number of consecutive steps involving assessments of various environmental and organizational conditions. According to Hofer and Schendel (1978, p.47), the strategy formation process might include the following seven steps:

1. strategy identification - the assessment of the organization's current strategy and strategic components;

2. environmental analysis - the assessment of the organization's specific and more general environments to identify the major opportunities and threats facing the organization;
3. resource analysis - the assessment of the principal skills and resources available to close the strategic gaps identified in step 4;
4. gap analysis - a comparison of the organization's objectives, strategies, and resources against the opportunities and threats in its environment to determine the extent of change required in the current strategy;
5. strategic alternatives - the identification of the strategic options upon which a new strategy may be built;
6. strategic evaluation of alternatives - an evaluation of the strategic options in terms of values and objectives of the shareholders, management, and other relevant power sources and stakeholders; the resources available; and the environment opportunities and threats that exist in order to identify what best satisfies all these demands; and
7. choice of strategy - the selection of one or more strategic options for implementation.

Hofer and Schendel's model separates the strategy formation process into two hierarchical levels in the organization, namely the corporate and business levels. Two other important features of this model are the inclusion of (1) social and political analysis and (2) contingency planning as part of the strategy formation. Hence, from this viewpoint the strategy formation process is mainly rational in its nature and may create the context of strategic decision, i.e., set the style for subsequent implementation of the strategy.

The major strategy formation models proposed in the literature seem to differ primarily in the degrees of explicitness, detail, and complexity with which they consider the seven steps mentioned above. Based on case studies of a number of large corporations, for instance, Ansoff (1965) proposed a complex model for identifying the types of diversification strategies that a company might follow. In addition to rational factors, other variables are included in

the formation process, such as a more elaborate search for opportunities and internal striving for synergies. Harrigan (1983) also stressed the importance of developing synergies between divisions.

The model suggested by Andrews (1980), another typical example of an explicit rational view, is based on relatively simple adjustments of internal resources to external opportunities, building on the company's strengths and ameliorating its weaknesses - going after opportunities and avoiding threats.

Another set of authors has questioned whether this rational view provides a correct description of the strategy formation and/or decision-making process. Allison (1971) carried out an extensive case study of how complex strategic decisions are made, as exemplified by the Cuban missile crisis. In addition to the rational view, he suggested two distinct, but not mutually exclusive, models for forming complex decision to offer insights into how strategies are formed. In his "organizational process" model, decisions are made based on existing rules, procedures, and policies, i.e., internal organizational factors. Allison argued that because each organization has its own sets of goals and wishes, the organization cannot perceive the entire problem, only parts of it. In other words, a behavioral dimension. In his "bureaucratic politics" model, on the other hand, the decision-maker represents the interest of a specific coalition, one of many, within an organization. This will result in decision-making based on political assessments of power and structures, i.e., a political dimension.

Freeman (1984) and MacMillan and Jones (1987) further underscored the importance of recognizing the potential impact on the strategy formation process by interaction with a stakeholder. Consequently, one of the major insights from Allison's (1971) study is that the strategy formation process probably can be seen as a combination of rational, behavioral, and political processes.

At this stage, we might wonder about the strengths of the relationships in these models. At first, it might seem to be impossible to operationalize the various constructs of power and structure - in rational, political and behavioral dimensions - present at different organizational levels. Perhaps, however, we can view these constructs as a combination of several underlying more "tangible" factors?<sup>1</sup>

The complexity of the management tasks involved in such strategy formation processes appears to become quite imposing as we continue to broaden and enrich the strategy formation concept. This has resulted in the suggestion that we should allow managers to develop their strategies in a more incremental fashion. By building on past momentum, we can ameliorate some of the cognitive limitations that otherwise make complex strategy formation processes difficult. Quinn (1980) chose this alternative way of describing strategy formation. Influenced by Lindblom's (1959) concept of "muddling through" in political decision-making, he found that the process used to arrive at the corporate strategy is typically fragmented, evolutionary, and largely intuitive. "Muddling through" basically states that the information processing capacity is so limited that we can change only incrementally what we did last year. In Quinn's terms, however, it is a logical - not random - sequence. Therefore, neither the "formal systems planning" nor the "power-behavioral" paradigm adequately characterize the way successful strategic processes operate. Instead, effective strategies tend to emerge from a series of subsystems,

each of which attacks a specific class of strategic issues (e.g., acquisitions, divestitures, or major reorganizations) in a disciplined way, but which is blended incrementally and opportunistically into a cohesive pattern that becomes the company's strategy [Quinn, 1980, p.95].

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<sup>1</sup> This is discussed further in Fornell, Lorange, and Roos (1989).



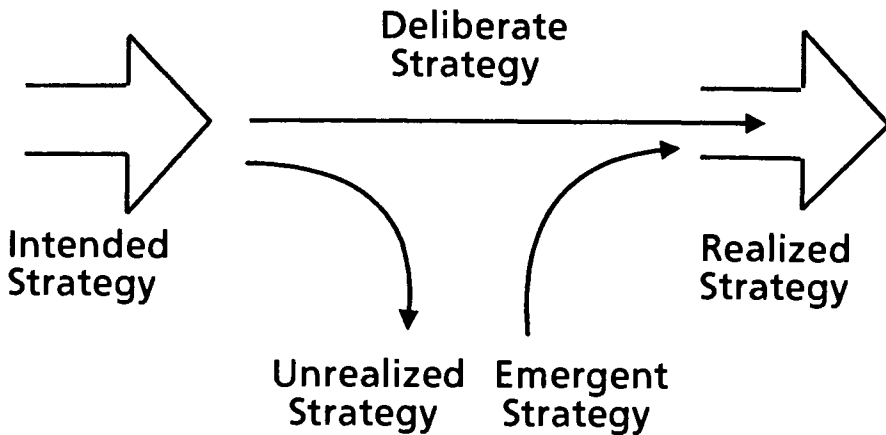
Due to cognitive and process limits, these subsystems are managed and linked together in an approach Quinn labeled "logical incrementalism," i.e., strategies are constantly being reshaped and improved:

Such incrementalism is not "muddling." It is a purposeful, effective, proactive management technique for improving and integrating both the analytical and behavioral aspects of strategy formation [p.95].

Even though we might wonder about his unit of analysis, Quinn's discussion seems to be very useful for our conceptualization of how cooperative ventures are formed. The previous combination of rational and behavioral aspects might be blended in an incremental formation phase.

Pennings (1985) suggested that strategy can have three meanings that constrain or direct subsequent activities. First, it can be a statement of intent. Second, it can be seen as an action of major impact. Finally, it can also be a "rationalization" or social construction that gives meanings to social activities, i.e., an ex post facto rationalized strategy. Again, this only underscores the "soft" nature of the concepts of strategy formation processes and, thereby, the difficulties of operationalizing such constructs.

Mintzberg (1978) portrayed strategy in general as a pattern in a stream of actions. Based on case studies of secondary material on U.S participation in the Vietnam War and the strategic development in the Volkswagen Group, he viewed the "initial" strategy as intended, which is then reshaped by emerging strategies and evolves into realized strategy, due to the organization's strategic position and experiences.

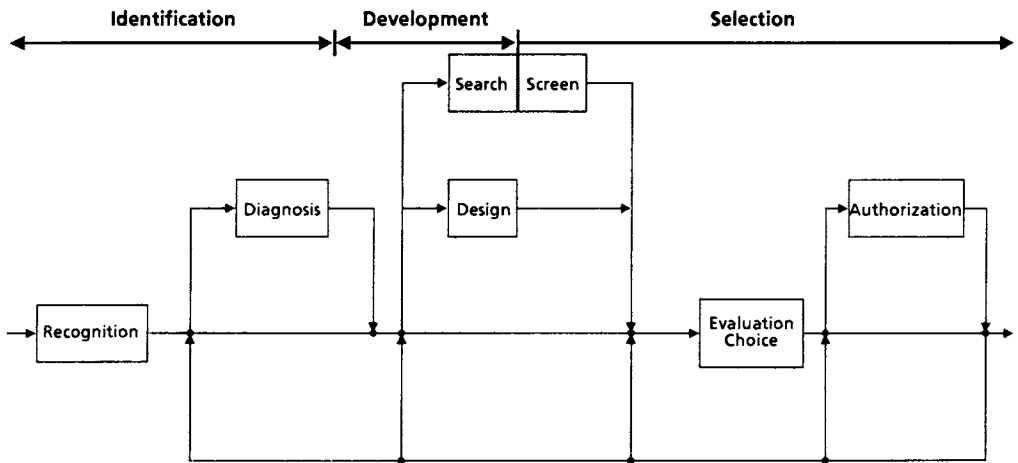


**Exhibit 3-1: Mintzberg's (1978) Model of Strategy Formation**

The intended strategy is the a priori guideline and the realized strategy is the a posteriori behavior. These viewpoints were further elaborated by Mintzberg and Waters (1985), who identified a number of other, less basic, strategies.

In general, we might say that this viewpoint represents a more evolutionary, behavioral, and organizational context oriented approach toward strategy formation. However, these conceptualizations are difficult to employ. For instance, what is the intended strategy? Is it a number of formal plans or informal statements or visions? Is the emerging strategy completely unintended or to some extent intended?

Mintzberg, Raisinghani, and Théoret (1976) outlined a relatively complex model for unstructured decision-making, which seems to be a model for top-level decision-makers where the unit of analysis is the decision per se.



**Exhibit 3-2: Mintzberg, Raisinghani, and Théoret's (1976)  
Model of the Structure of Unstructured Decision-Making**

The unstructured decision process is described in terms of three central routines: (1) identification, (2) development, and (3) selection. Three sets of routines support these central phases. There are six sets of dynamic factors that describe the relationship between these routines. The identification routine consists of two variables: decision recognition (opportunities, problems, and crises) and diagnosis (comprehension of the evoking stimuli and determination of cause-effect relationships). The development routine comprises a search (a hierarchical stepwise process) and design phase. Finally, the multistep selection routine contains three routines combined in several ways - screening, evaluation, and authorization.

Even though we might question the usefulness of such a complex model (especially considering the methodology used!), the model addresses the very important issue of how one might

research a process: Should it be seen as consisting of sequential steps or as a simultaneous flow? Mintzberg, Raisinighani, and Théoret explained how their conceptualization of the three main "routines" of the decision-making process should be seen: "We find logic in delineating distinct phases of the strategic decision process, but not in postulating a simple sequential relationship between them" (1976, p.252).

The authors were clearly influenced by the findings of Witte (1972), who investigated the "phase theorem" in 233 decision processes. His primary finding was that the notion of sequential phases in decision-making is not an adequate picture of how decisions are indeed formed. Instead, the decision processes are characterized by a number of different sub-decisions at various points in time. It seems as though in some sense Mintzberg, Raisinighani, and Théoret argued for both viewpoints: The decision process can be seen in distinct phases but; on the other hand, there is probably more than a simple relationship between them. Even if their discussion regarding this matter is not very enlightening, we must probably accept that no straightforward answer can be given to this complex question.

In this context, it may be useful to highlight briefly Allen's (1977) study of the research and development process in companies, showing how human and organizational systems can be restructured to bring about improved productivity and better person-to-person contact. In our opinion, Allen's work underscores the importance of understanding how information is communicated within a company - through managerial processes. In Allen's study, it is the high-performing engineer who ranges out and extends his communication links far beyond his immediate work groups. To be fully effective the engineer must also be encouraged to develop contacts throughout his organization. In other words, we might expect a high degree of "internal consensus" in the organization to result from these contacts, thereby facilitating communication and positively affecting the research and development process. This agrees with what Pelz and Andrews (1966) found:

Frequent contacts with many colleagues seemed more beneficial than frequent contact with just a few colleagues. Similarly, having many colleagues both inside and outside of one's own group seemed better than having many colleagues in one place and just a few in the other. So anything you can do to promote these forms of contact should be in the right direction [quoted in Allen, 1977, p.123].

Allen thereby introduced the concept of the "gatekeeper" in the organization, a concept subsequently used by many other authors. The gatekeeper is one of few individuals in an organization to whom others frequently turn for information. This key person differs from his colleagues in the degree to which he exposes himself to sources of information outside his organization.

The gatekeeper is the individual who meets the requirements at both ends of the flow diagram and maintains a high level of communication both within and outside his organization [Allen, 1977, p.152].

In other words, the gatekeeper acts as a medium between the outside world and the user of the information, a type of "boundary agent." The gatekeeper is often easily identified, but Allen argued that the problem is to recognize and reward him, and organize information dissemination around him. It is the gatekeeper who must translate external information into a form that can be understood locally, i.e., a channeling or "funneling" of communication. For our purpose, the most important aspect of Allen's study is the concept of the "gatekeeper", as such, and this individual's importance in a formation process.

We might summarize the above literature, for the purpose of our study, by saying that the phenomenon of forming a cooperative venture will probably have many similarities with decision-making and the strategy formation process. The process under which a cooperative venture is formed is expected to consist of complex relationships and a number of related phases; but what phases, sub-decisions, or routines?

It should be noted that in a study of how managers go about evaluating a corporate venture project and the importance they attach to the various criteria they use as they assess the ventures, Day, Desarbo, and MacMillan (1986) found that six of eight variables deemed important were internal to the company rather than external to the market: corporate fit, low initial investment, experienced venture champion, proprietary technology, high gross margin, and high rate of return. In other words, managers tend to focus inward on the company rather than outward on the environment - variables on which they can make an informed judgment.

In order for us to get a better view of the potential fundamental elements in the cooperative venture formation phase, we now turn to three examples of formation processes that have influenced the present study: how the foreign investment decision emerges in a company, the resource allocation process within a company, and, finally, how companies prepare for an acquisition. As mentioned previously, we expect to be able to draw analogies of managerial processes from these examples and, thereby, better understand the fundamental factors when cooperative ventures are formed.

### 3.2.1 Foreign Investment Decision Processes

Aharoni (1966) developed a conceptual model for strategy formation, using as an example the foreign investment decision in thirty-eight U.S. manufacturing companies in Israel. The starting point was that the decision process did not seem to have anything in common with the predictions of the classical theory of capital investments:

In fact, one important thesis of this book is that in organizations composed of individuals and groups within a certain culture, faced with uncertainty, operating on a basis of incomplete information, and constantly pressed by ongoing activities, one simply cannot behave in a rational way as the term is defined in economic theory. The too common tendency to abjure the complexities, to fortify oneself behind a set of assumptions, and to label any

deviation from an expected norm of behavior as irrational will certainly not lead one to an understanding of the ongoing activities of organizations, and will be of little help in predicting their behavior. What is needed, instead, is a search for the rationality of the behavior. In other words, a search must be made for the elements in the baffling complexity of an organizational system that explain the behavior and make the variables interrelated and sensible [Aharoni, 1966, p.9].

Hence, Aharoni wanted to recognize those factors that had been regarded as "noise" in the economic theory. The process of arriving at a foreign investment decision was assumed to be "the final product of a logical process, at the end of which doubts end and actions begin" (p.14). In other words, actions are assumed to follow decision, which, by the way, may not always be the case according to Cyert and March (1963).

The decision process is not simply a matter of approving or rejecting a proposal based on the above-mentioned presentation, i.e., it is not a dichotomous, event-oriented perspective:

the term "decision" will be used without any implications of a conscious or deliberate intellectual process. By "decision process" we mean the continuous dynamic social process of mutual influences among various members of an organization, constrained by the organization's strategy, its resources, and the limited capacity, goals, and needs of its members, throughout which choices emerge [Aharoni, 1966, p.15].

These decisions are also, according to Aharoni, made by groups of individuals. This is, however, only one of the dimensions by which he classified decisions. Other dimensions included:

- by level of the organization,
- by magnitude of possible results expected,
- by degree of repetition involved,
- by number of alternatives, and
- by amount of information available.

Hence, the foreign investment decision emerges at some point in time as the cumulative result of small acts performed by individuals - in several dimensions. It is a consequence of a process of incremental adjustments to changing conditions of the company and its environment - a "stream of events in many dimensions." Therefore, such a decision process should be analyzed in terms of a system that also includes the impact of the environment and the characteristics of the organization and the individual.

According to Aharoni, it is not important to learn when and by whom the decision is made. Rather, the cumulative process of individual and organizational commitments that result in this decision should be studied. This might be compared with our purpose for studying the formation phase as such. We believe, however, that to understand the whole, the parts must be investigated. Aharoni also developed his thoughts on intended and desired aspects of the commitment process as follows:

A commitment represents a state of mind, a feeling that guides action, not a legal obligation. Commitments are made by the operation of personal bureaucratic arrangements (for example, accumulation of money in a pension fund may work as a constraint on a man wishing to leave his current job). They are also made through the process of individual adjustment to social position (for instance, having once claimed to be a certain kind of person, one may find it necessary to act, as far as possible, in an appropriate way). In general, they are made: "through a series of acts no one of which is crucial but which, taken together, constitute for the actor a series of side bets of such magnitude that he finds himself unwilling to lose them. Each of the trivial acts in such a series is, so to speak, a small brick in a wall which eventually grows to such a height the person can no longer climb it. The ordinary routines of living - the daily recurring events of every-day life - stake increasingly more valuable things on continuing a consistent line of behavior, although the person hardly realizes this is happening. It is only when some event changes the situation so as to endanger those side bets that the person understands what he will lose if he changes his line of activity." Such a series of small acts creates individual commitment. Acts of individuals may also create organizational commitment [Aharoni, 1966, p.123].



Aharoni argued for two specific and sequential forces that are fundamental for shaping the strategy formation process: initiation and investigation.

We have to choose some arbitrary point in the continuous process of organizational activities from which our description will start. It seems most appropriate to start our description by an analysis of the forces leading some individuals in a company to focus attention on the possibilities of investments abroad, and to devote time and other resources to the investigations of this possibility. In the later discussion, we shall refer to any one of these forces as an initiating force [p.49].

The initiating forces of an investment decision process are very important in Aharoni's reasoning. As a matter of fact, the investment decision depends largely on the strength of this force, which consists of five sub-forces. In fact, he found that in any given case it was almost impossible to pin down only one of these reasons:

1. the drive of a high-ranking executive,
2. an outside proposal,
3. fear of losing a market,
4. the "band wagon effect",
5. strong competition from abroad.

In other words, it might be useful to think of these sub-forces as indeed building-up the "initiating force" discussed earlier.

Clearly, the existence of a number of additional initiating forces can be argued and can indeed be of significant importance in a decision or strategy formation process, such as environmental pressure, opportunities for technical improvement, or disappointments regarding sales or quality. Such additional forces, however, were not major driving forces according to Aharoni. Instead, they are considered as exogenous residual elements ("auxiliary forces") in the process.

Since the investment decision is a realization by the decision-maker that his objectives might be served by foreign direct investments, it presupposes an awareness that an investigation might be worthwhile. Aharoni, therefore, reasoned that the next logical step for a decision-maker is to gather information to serve as a basis for an intelligent decision. The variables to be investigated ("the depth and scope of the investigation") depend upon the nature and magnitude of the initiating forces and the perception of the investigator. If the impact of the initiating force has created sufficient momentum such that the investigator feels that the project cannot be abandoned, this phase will bring to light potential problems to be solved to ensure the project's acceptability. On the other hand, every obstacle will weaken the power of the initiating force, even to the extent that the investment could be halted.

Aharoni also underscored the sequential nature of the investigation process. A number of variables should be considered - not only those that are considered important by the investigator, but also those that are perceived as being important for superior managers in the organization. This argument has been supported by Barwise, et al. (1988) in their study of strategic investment decisions in large diversified companies. They found that lower-level managers try to predict higher-level managers' doubts so they can formulate the investigations accordingly, a phenomenon they labeled "outguessing."

We must recognize that a complete "scanning" of the business environment, capturing all aspects, is unrealistic. This has been discussed by Aguilar (1965) who argued that the capacity of individuals to absorb information is insufficient considering the amount of information available:

Environmental scanning must necessarily remain an incomplete and imperfect process, for the relevant world is far too extensive and complex ever to be completely summarized [p.9].

Despite this statement, Aguilar provided a four step guideline for a scanning process. Pointing at several "modes" of scanning, such as undirected viewing, informal search, etc., he found that, even if an organization is involved in several modes of scanning simultaneously, it typically seeks information by one mode more than by another. He also stressed the necessity to adapt one's scanning procedure:

Since all scanning cannot be done by the most effective mode (formal search), there is a continuing need to make (and perhaps to change) the assessments by which information and scanning modes are completed [p.23].

We should note that, even though Aharoni (1966) conceptualized the process as one consisting of logical steps, he emphasized that the investigation process per se can also create further commitment. If this commitment, in Aharoni's terms, can lead to an additional positive "push" from the initiation force, we might interpret this to mean that there is an interrelationship between the investigation force to the initiating force. Again, Barwise et al. (1988) found support for such a "feed-back loop" in their study of strategic investment decisions.

This is very interesting for understanding the cooperative venture formation phase. From Aharoni (1966), we can identify two separate type of "forces," "phases," or "routines" that might characterize the core of such a formation process, namely, commitment and investigation. It should be noted, however, that these concepts are not identical to those discussed by Aharoni.

We might also argue that the relationship between commitment and investigating would probably be both positive and negative in nature, e.g., the investigation might reveal knowledge that implies that we would be better off "killing" the project at hand, that is, reduce organizational commitment. Aharoni did not discuss this aspect.

Let us now turn to a discussion of the managerial process by which companies allocate their resources, i.e., another example of a strategy formation process.

### 3.2.2 Resource Allocation Processes

Bower (1970) studied how resources were allocated in corporations. Since traditional capital and investment decision tools, e.g., NPV, did not provide good descriptions, he wanted to find out what forces really influence the capital investment process in a large corporation.

He described the investment process as consisting of two identifiable sub-processes, one having to do with the substantive content of a project (= "definition"), and the other the rate at which it moved upward through the organization (= "impetus"). Impetus is, in fact, a process of multilevel choices in which a project acquires commitment from successive levels of general management. Both processes are influenced by a common set of structural, historical, and personal forces in a context. Bower assigned the following meaning to "definition":

Definition is the process by which the basic technical and economic characteristics of a proposed investment project are determined. The definition process develops as studies are undertaken, task forces created, and the various steps taken will in the end express the project definition as completed capital appropriations requests [p.67].

Bower argued that the cognitive process merely describes how a project is defined; and that definition is responsive to a whole set of contextual forces such that there is definition only when there is no intervention from a higher level. Moreover, the separate and different, mostly political, process that gives it impetus is necessary to explain how projects that are defined move toward funding. Bower explained the initiating phases of the definition process as "the problem-solving steps of search, analysis, and choice in a

sequential process over time" (p.285). Again, we can see that the initial phase of a strategy formation process can be seen as a sequential narrowing-down process over time. However, Bower's discussion suggests that we should recognize the importance of context in the formation process. However, this advice seems to have been followed-up to only a limited extent.

Bower's concept of "impetus" seems, to some extent, to be related to Aharoni's (1966) concept of commitment. Bower offered the following definition of "impetus":

Impetus, the force that moves a project towards funding, has been defined as the willingness of a general manager at the division president's level, or one below, to commit himself to sponsor a project in the council of division officers and before the division general manager [1970, p.68].

In contrast with Aharoni (1966), however, Bower argued that making commitments is a well-defined part of the general manager's job. The manager indeed knows that he will be evaluated and rewarded in part based on his performance. This will influence his decision as to what projects he will allocate the impetus.

Bower also recognized the importance of a third set of factors influencing the process, namely "context." One subset of context is the various elements of the corporate structure:

Structure constrains the definition of projects and shapes the pattern of impetus. When the difficulty of changing modes of organizational behavior is taken into account and measured by time and cost, this limitation acquires central, in fact, strategic importance [1970, p.286].

Consequently, Bower realized that decision-making processes are wrapped up in other strategic processes in the company and, thereby, he came across organizational hierarchical levels. He emphasized the importance of an individual manager's personal push to project in the process, i.e., the intermediate level's impetus. Bower's model is theoretically similar to Cyert and March's (1963) "coalition

model," and since "structure" is included in the analysis, we might argue that it is analogous to a combination of Allison's (1971) models 2 and 3, in particular if we view these models as organizational levels.

Bower's most interesting aspect is his strong emphasis on a specific individual's role in the formation process, at the top or intermediate levels. To some extent, this phenomenon seems to be related to Allen's (1977) concept of the "gatekeeper," and Carter's (1969) early emphasis on a project's "sponsor" in project evaluations in companies, which is what we will discuss in the next section.

### 3.2.3 Acquisition Processes

Carter (1971) studied the main elements which influence the formation of expectations in one company's investment and acquisition process in the computer-oriented industry. He clinically studied six different decisions (three regarded as investments and three regarded as acquisitions) and found that the most important factors for such decisions were a sponsor's need for project acceptance and ex ante approval. These findings on "organizational sponsors" of a specific project, coupled with the findings of Bower (1970) and Allen (1977), underscore the need to consider several organizational levels when trying to understand formation processes.

In addition, Carter revealed an interesting ongoing "power struggle" between the sponsor of a project and the manager, i.e., the person who makes the actual decision. This involves three main factors, namely the sponsor's power, the manager's desire for the project, and the "comparative ignorance" of the manager versus the sponsor. For instance, if the project is known to have strong external and/or internal support, the manager tends to be less inclined to dispute forecasts.

Even though this study of formation processes, like many others, was based on only one clinical study, the main conclusions are of great interest for our understanding of how

cooperative ventures are formed. Carter pointed to three "critical elements of the decision process" (1971, p.278). He labeled the most critical element the "information component" - the necessity of gathering relevant and accurate information in order to form a good basis for a decision. The second critical element is the necessity to obtain data for planning, which is often a problem even if a great deal of information is gathered. Although he stresses that the key issue is to make good "pro forma analysis", one might wonder what is really the difference between gathering information for decision-making as opposed to planning. The third critical element, on the other hand, is the necessity of developing a control system to facilitate formalized planning systems.

Turning to a more recent study of the pre-acquisition process in companies, Haspeslagh (1986; 1987; 1988) has argued that this process is, itself, a critical factor in the deal's ultimate fate. He explained his conceptual starting point in research on acquisitions as

the perspective that whereas "strategic fit" may determine the potential for value creation of an acquisition, and "organizational fit" may determine the difficulty of implementation, only an understanding of the nature of the acquisition process itself, and the determinants of its quality, will allow us to understand and hence influence value creation through acquisitions [1987, p.3].

In addition, he sees acquisitions as specific cases of resource allocation decisions. For our purposes, Haspeslagh (1988) has provided the most meaningful findings. Based on clinical studies of eleven acquisitions of four large diversified industrial companies, his overall finding is that successful acquisitive development is based on a "disciplined organizational approach" to the overall acquisition process. More precisely, the quality of the acquisition process is determined by:

- quality of strategic assessments,
- degree to which there is a widely shared view on the acquisition purpose,
- degree of specificity in the source of expected benefits/problems,
- degree of explicit regard for the organizational conditions which the realization of these benefits requires; and
- degree of attention for the timing of implementation.

Interestingly, at least two of these findings seem to coincide with the previous discussion of formation processes, namely, the questions of analyzing and creating internal consensus or push in the organization. In fact, Haspeslagh discusses this in terms of a "sponsor" (1988, p.7) as well as an "acquisition gatekeeper" (1987, p.28).

### 3.3 Tentative Conclusions

In this chapter we have discussed some literature on managerial processes and strategy formation processes. This has been a brief, but inspiring, review of several classical works in strategy research. Our overall starting point was that the process by which a cooperative venture is formed could probably be seen as analogous to various types of strategy formation processes. In other words, we were interested in learning about the content of the formation phase. This chapter has provided several examples of the content of such managerial processes.

For the purpose of the present study, several very general tentative conclusions have emerged from this literature review. Drawing upon analogies from what we have just discussed, the phase under which cooperative ventures are formed is likely to be multidimensional in nature and characterized by several interrelated stages over time. A number of complex, rational, behavioral, and political aspects



influence how the cooperative venture is formed. Several functional levels in the organization are also expected to participate in the formation. Finally, various environmental factors from outside the organization probably influence the formation phase.

Turning to the question of the content of the formation phase, we can see that most of the literature points to at least two fundamental elements of the formation processes, namely, the notions of "commitment" and "investigation."

Author	"Commitment"	"Investigation"
Aharoni (1966)	Initiation force	Investigation force
Carter (1969)	Sponsor	Pro forma analysis
Bower (1970)	Impetus	Definition
Haspeslagh (1988)	Shared view	Strategic assessments

#### **Exhibit 3-3: Theoretical Support of Two Formation Elements**

Hence, we might expect that the core elements of the formation processes discussed in this chapter might also play important roles in the formation of cooperative ventures - in the context of the earlier discussed interaction processes. We might argue, therefore, that the roles of the gatekeeper, the impetus maker, and the sponsor are to channel information and provide "organizational push" within a company. In addition, further push, in a wider respect, is added if information is collected so that the internal hierarchical organizational consensus regarding a specific project develops. Thereby, the organizational "sub-forces" probably can be aimed more easily at the same target, e.g., in a project evaluation and assessment in several organizational levels and functions.

It should be noted that the literature discussed above has focused on strategy formation and management processes studied within one company. In combination with the cooperative context discussed in Chapter 2, these tentative conclusions have provided us with an overall theoretical framework for the present study of how cooperative ventures

are formed. In contrast with the above examples of internal processes in one company, however, we might expect that since we have at least two parties that interact during the formation, this process can indeed be stopped by either party at any point in time. In other words, an "optimal" interaction process should result in a more explicit and, thereby, more easily observed, internal formation process in one single company.

If we wish to describe how the cooperative venture is formed, however, we must choose some arbitrary point in the continuous process of organizational activities from which our description of the cooperative venture formation process will start. For our purposes, it seems most appropriate to begin with an analysis of the situation after the cooperative venture idea has been initiated. Of course, we must recognize that historical considerations might be a part of the formation process as well.

## CHAPTER 4

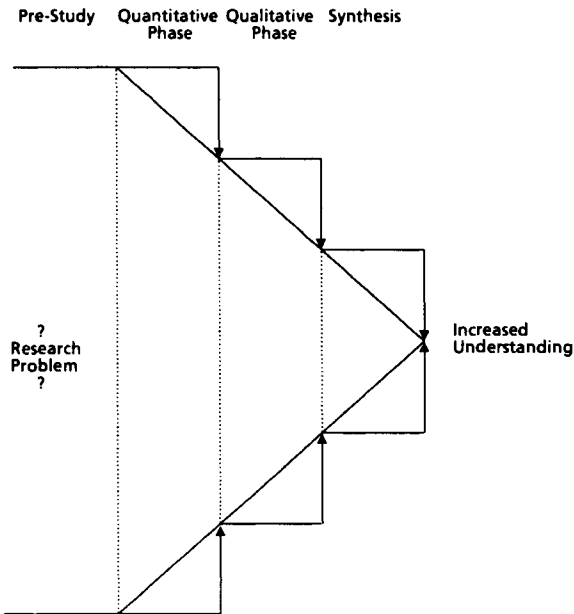
# RESEARCH DESIGN

### 4.1 Introduction

In the previous chapters, we have discussed several aspects of cooperative ventures and drawn analogies from other types of formation processes, i.e., what may be the content of the formation process. One of the main findings from this discussion has been that at least two key elements seem to be present in most formation processes, namely "initiation" and "investigation." Based on a review of the literature, however, it seems difficult to specify a detailed conceptual model or a set of hypotheses about how cooperative ventures are formed. Given our exploratory research purpose, this is not necessary. Instead, the major findings gleaned from the literature will be combined with data in order to develop such a conceptual model. Accordingly, in this chapter we will discuss how the research was designed.

The study was carried out via two empirical research approaches - quantitative and qualitative. The primary objectives of the former were twofold. First, to learn which elements of the formation practices seem to be most important in terms of their potential influence on performance. Second, to further understand the relationships between some theoretically important elements of the formation process and their influence on performance, elements that also emerged from the initial analysis.

The primary objective of the qualitative approach was to arrive at a more detailed and enhanced understanding of what the quantitative results suggested. This included a detailed discussion and interpretation, in four case studies, of the previously used quantitative variables from the emergent conceptual model. This analysis was expanded to incorporate additional elements of the formation phenomenon found in the case studies. The two research approaches helped to gradually narrow down the complexity of the phenomenon under study and, after some synthesis, to increase our understanding of how cooperative ventures are formed. This process is illustrated in Exhibit 4-1.



**Exhibit 4-1: Research Design**

From the discussion of the theory, we can conclude that the elements of the cooperative venture formation process are of an "untouchable" nature and incorporate several types of aspects. This initial presumption results in several methodological requirements. The first requirement is a research method where intangible elements can be captured. It

is also likely that the elements of the cooperative venture formation phenomenon are related to each other in a relatively complex way. Hence, the second methodological requirement is that the phenomenon be studied in terms of a system of "indirectly observed" variables. We also know that many cooperative ventures are motivated by reasons other than just short-term profit. The third requirement is, thus, to employ a performance measure that captured several aspects of how a cooperative venture might perform in the eyes of a parent company.

In the following sections, we will discuss first the choices between the qualitative and quantitative analytical approaches and then the two analytical approaches used in the present study.

#### **4.2 A Qualitative or Quantitative Approach?**

In the early phase of this research project, we had to set the levels of richness and coverage in the study as well as the quality of the knowledge being generated in the research. These issues are closely related to the question of whether to use "qualitative" or "quantitative" research methodologies. These two analytical approaches are often seen as the opposite endpoints on a scale, offering different advantages and disadvantages.

The qualitative research approach, commonly called for and used in research on managerial issues, is identified with the case study methodology. This approach typically involves an in-depth analysis of many "soft" variables in a few cases. The quantitative approach, on the other hand, is identified with statistical methodologies involving fewer and "harder" variables in many cases. This fundamental difference can be illustrated as follows:

**Qualitative Approach:**

		No. of Variables				
		1	2	3....	<u>v</u>	
No. of Cases	1	<div></div>				
	.					
	.					
	c					

**Quantitative Approach:**

		No. of Variables	
		1... <u>V</u>	
No. of Cases	1	<div></div>	
	2		
	3		
	.		
	.		
	C		

**Exhibit 4-2: Conceptual Difference between Qualitative and Quantitative Research Approaches**

Normally,  $V > C$  and  $C > V$ , where the first setting would typically lead to case analysis and the second would imply a statistical type of analysis.

The debate on qualitative "versus" quantitative research methods, in the social sciences in general, has received a great deal of attention in the literature. Numerous advantages of the case study approach have been put forward by many authors. For instance, the possibility of a holistic approach, the use of different methods to gather data, and the generation of new theories as well as the falsification of existing theories. In his discussion of qualitative research and the epistemological problems of the management disciplines, Archer (1988) identified three distinct positions on the adoption of these methods:

1. Qualitative methods allow to pay detailed attention to microlevel aspect that are barely accessible to quantitative approaches.
2. Quantitative methods constitute the "rigorous, hard" approach to research, but in some circumstances the state of theoretical development is such that they cannot be employed, and the "less desirable, soft" qualitative approach might be used.
3. In contrast with the "pseudo-science" of quantitative methods, qualitative approaches permit access to the "real" stuff of human interaction.

In other words, the difference lies in (1) the kind of phenomenon under study, (2) the quality of the knowledge produced, and (3) the type of possible generalizations.

The use of such research approach has, on the other hand, also received criticism - for instance, problems in scientific control, the inability to make inferences from one case to another, the idea of that "it is always better to study several cases rather than just one," etc. It is not the purpose of this chapter to provide comprehensive assessments and comparisons of these two analytical approaches - this can be found elsewhere. Rather, we simply want to point out the fundamental differences between the two approaches to better understand how the present study relates to these general approaches.

In designing the study, we did not want to position ourselves on either of the two end-points of this qualitative "versus" quantitative scale. The important point is not the question of using either quantitative or qualitative research methods but, rather in some way, to draw benefits from both approaches in a complementary fashion.

These ambitions lead us to consider some type of analogy from small sample studies, an approach that has been put forth as having several major advantages. Bowman, for instance, stressed the advantages of this "middle ground" approach:

Somewhere between these two end positions of one versus a thousand comes the small sample work, with a range chosen here of five to fifty. This middle ground offers the strong advantage of some comparative analysis, multiple variable work, some qualitative richness, and possibilities of research replications for either followers or skeptics, through stretching sometimes the availability of convincing statistical tests [1984, p.3].

We are, indeed, interested in obtaining the advantages described by Bowman, but not necessarily through such a small sample study. Hence, our intention is to have both the possibility of a comparative analysis from a database as well as obtaining more detailed richness from case studies. In

other words, we want to reduce the differences between the number of variables and the number of cases as illustrated in Exhibit 4-2, perhaps even to the extent that only a number of cases would be described - the rectangle would become more like a quadrate.

#### 4.3 Phase One: A Quantitative Approach

Fowler has outlined the following three general characteristics of the survey research method as such:

- (1) The purpose of the survey is to produce statistics - that is, quantitative or numerical descriptions of some aspects of the study population. (2) The main way of collecting information is by asking people questions; their answers constitute the data to be analyzed. (3) Generally, information is collected about only a fraction of the population - that is, a sample - rather than from every member of the population [1988, p.9].

In the present study, the purpose of this first methodological phase is, indeed, to make comparative analyses by producing statistics and numerical descriptions of the phenomenon studied. Information was collected through a questionnaire, following Fowler's general characteristics of such a method.

We have argued that - given the exploratory purpose - it is not necessary to pre-specify a number of hypotheses regarding how various elements in the formation process are related to each other; nor is there an absolute need to specify a complex conceptual model. Based on our initial knowledge of the phenomenon under study, derived from the literature, the first methodological step was, therefore, to carry out a questionnaire survey of how a set of companies carried out their cooperative venture formation practices to learn how cooperative ventures are formed and to identify the most important elements during this formation.



Although a detailed model was not specified for this, we assumed that decision-makers in a company go through some logical steps when forming a cooperative venture. As was evident from the previous chapters, such a formation process might be simplified into consisting of only a few fundamental elements. However, the questionnaire was designed to cover the following seven sets of issues regarding each company's background in relation to the venture, approach to the formation process, and perception of the results:

1. general background,
2. previous experience,
3. alternatives and choices,
4. pattern of cooperation,
5. the agreement,
6. performance and experiences, and
7. role of an outside stakeholder.

These seven sets of issues follow, at least to some extent, a temporal order. The first set considers the general background, and initiation, of the cooperative venture, indicating the various approaches to venture initiation, various organizational functions' commitments to and involvement in the preparations, and the internal consensus of the cooperative venture in both companies.

The second set of issues deals with previous experiences of both the cooperative ventures and the partners. Logically, a third set handles alternatives and choices regarding the cooperative venture, indicating the search process, the type of cooperative venture, and the degree of investigations and assessments performed.

The fourth set of issues highlights the pattern of interaction with the partner, indicating the extent of and type of partner interaction, and whether outside help was used. The fifth set focuses on the cooperative venture agreement, indicating the issues covered, the degree of specification, and the economic advantage of the agreement.

The sixth set centers on the perceived performance and experiences of the cooperative venture. Finally, the seventh set deals with the role of the external stakeholder, in this case a particular governmental venture capitalist<sup>1</sup>, indicating the background for contacting, the importance of, and the experience of this particular stakeholder.

Coupled with the literature survey, this initial exploration via the questionnaire was expected to help us better understand these key elements and their influence.

#### 4.3.1 Two Sets of Statistical Analyses

The general description of the database was expected to provide us with a feeling for how cooperative ventures actually are formed. The next step is to carry out an analytical step and relate individual formation practices to a performance measure. Thereby, we hoped, in terms of the formation practices, to discriminate between parent companies of "very good" and "less good" cooperative ventures. These results would indicate which of these were the very key elements of the formation process and thereby would help us develop a simplified conceptual model. The specific results of this initial analysis are reported in Chapter 5.

Given this emergent conceptual model, a second statistical analysis was to analyze this conceptual model of the formation process and its influence on performance. The conceptual model, consisting of a few theoretical constructs, was operationalized through indirectly observed variables and analyses via latent variable structural modeling. This analysis is presented in Chapter 8.

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<sup>1</sup> This will be discussed further in Chapter 5.

#### 4.4 Phase Two: A Qualitative Approach

The findings from the previous analyses were expected to provide us with relatively "rough" answers to the research question. We were studying managerial processes and are interested in detailed information on them. Hence, a natural second methodological step was to carry out clinical studies of how cooperative ventures were formed.

Yin provided the following general definition:

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life setting when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used [1984, p.23].

In our opinion, this definition pictures what we expect from a case study approach. Yin also argued that case studies have at least three different applications. First, this approach could be used to explain casual links in interventions that are too complex for the survey or experimental approaches. Second, they could be used to describe the context in which the intervention has occurred. Finally, they could be used to explore those situations in which the intervention being evaluated has no clear single set of outcomes.

As mentioned earlier, our qualitative research approach had the following three main purposes:

1. to help us interpret the findings from the quantitative analyses.
2. to help us understand contra-intuitive findings, i.e., not only a lack of relationships but also relationships that are difficult to understand.
3. to help us understand if important issues have been omitted in the quantitative phase of the study.

We decided to carry out four case studies of cooperative venture formation, including both parent companies' formation

practices in each case. The framework for the selection of the companies to be covered in the case studies is presented in Chapter 9.

These case studies were analyzed in two different ways, in terms of both the conceptual model and a further exploratory "residual analysis."

#### 4.4.1 Three Sets of Analyses of the Case Studies

Given the findings from the statistical evaluation of the conceptual model, the first set of case study analyses was to make a detailed assessment of each company's formation process in terms of each variable from the conceptual model. This involves for each company the extent to which each variable was present during the formation process, how the fundamental elements discussed in Chapter 3 were related to each other, and how these constructs seem to influence performance. This analysis was expected to provide us with a firm basis for comparison with, and expansion of, what the analysis of the conceptual model had suggested. The complete analyses are presented in Chapter 10.

One way of determining what such a simplified conceptual model can contribute to our understanding of how cooperative ventures are formed is to focus on those aspects in the case studies which could not be explained by this model. Hence, a second case-study analysis was to focus on additional issues that emerged and seemed to play a role in the formation of the four cooperative ventures, i.e., a type of residual analysis. Through this analysis, we expected to both identify several issues and assess the importance of these issues relative to the more fundamental elements elaborated on via the conceptual model. This analysis is presented in Chapter 11.

Finally, using the brief discussion in chapter 2 on interaction processes as a departure point, we will take a closer look at such processes between each pair of parent companies. This discussion is presented in chapter 12.

#### 4.5 Phase Three: Synthesis

At this stage, we expected to have obtained a more detailed set of answers to our research question. The next logical step in our research approach was, therefore, to integrate the findings from the quantitative and qualitative analyses and provide a synthesis of the results. As illustrated in Exhibit 4-1, this was the final phase in our research approach, by which we hopefully would obtain an increased understanding of how cooperative ventures are formed.

This discussion will consider the fact that we have studied a very specific population of cooperative ventures - an almost complete population, not just a sample of such a population. We will also relate the various findings to the literature and point out major surprises and new areas for research.

Despite the problems of generalizing the findings from this study of a specific population in a specific setting, we cannot resist reporting some observations on the practical problems and opportunities facing a company contemplating forming a cooperative venture. The synthesis is presented in Chapter 12.

#### 4.6 Tentative Conclusions

We can draw at least two general tentative conclusions from this discussion of how the research was designed - one related to research approaches and the other concerning the issue of generalizing the results.

The first conclusion involves the expected advantage of using several research methodologies in a complementary way. Given the exploratory purpose and the lack of specific clues in the theory, we have argued that a logical approach is to begin with a survey that would put more "meat on the bones" and, coupled with theory, would add to an emerging overall

conceptualization of the phenomenon being studied. A next natural step is to explore and, perhaps test, this conceptualization in the specific population. As we will see in Chapter 8, new statistical methods provide tools to elaborate on such conceptualizations. Hence, the lack of methodologies is not an excuse for avoiding an effort to deal with such "networks" or "systems" of complex variables.

The crucial point is, however, not to rely completely on quantitative results. This is a natural approach and seems to be particularly important in research on managerial processes where we need to be able to interpret the numbers. Hence, we have argued that a good approach is to conduct follow-up clinical studies to facilitate such interpretations. In addition, we have seen that another argument for such clinical studies is to deepen our understanding by exploring additional sets of potentially interesting factors.

The second general tentative conclusion has to do with the extent to which we are allowed to generalize the findings from this study. Given the fact that we are dealing with only a cross-sectional sample, extending to 91% of the population, in a similar cultural and geographical setting, this is indeed an important issue. It is obvious that we are allowed to draw inferences from the "sample" to the population. The important issue is instead whether we can discuss the findings in the context of other populations. These matters will be discussed in Chapter 13.

## CHAPTER 5

### THE DATA BASE

#### 5.1 Introduction

This chapter forms the initial discussion of the data, collected through a sixteen-page questionnaire from sixty-seven Swedish and Norwegian companies forming thirty-three cooperative ventures (see Appendix 3). All of these companies received partial project financing for entering the cooperative venture from the governmental venture capitalist, the Swedish-Norwegian Industrial Development Fund (SNI) described below. This chapter explores the database to help us better understand the specific data used in the study.

In the following sections, we will describe briefly the companies participating in the study, the SNI, and how the questionnaire study was carried out. The chapter focuses, however, on how the companies formed their cooperative ventures, as pictured in the questionnaire.

We should note that this chapter presents the responses from the questionnaire study only in aggregated terms. We have not carried out any statistical analyses but will simply report the number of responses in connection with each question. Hence, we were interested only in picturing the general formation practices in the sixty-seven companies. The results from each section will, if possible, be related to the previously discussed literature on cooperative ventures.

## 5.2 The Companies

In this section, we will take a closer look at the companies participating in the study. Appendix 4 provides a summary of some of the basic facts on the companies, such as turnover, export share, number of employees, and industry. The information is from 1986, i.e., the year before the questionnaire study was undertaken. It should be noted that this list represents 56 of the 67 companies in the study and illustrates the temporal order in which they were formed. We have not been able to provide a full set of information for these 56 companies. Either the companies did not provide this information in the questionnaire, or SNI did not have this information in their files - other sources of information were not used.

In addition, the pairs of parent companies and types of cooperative ventures are indicated. That is, whether the input is product development from one partner and market development from the other, or whether both partners share product development and market development, or whether a separate legal entity - joint venture - was created, and in that case what was the equity split (Norwegian partner/Swedish partner).

As can be seen from this summary, the size and degree of export differs significantly between the companies. The turnover range from SEK 300.000 to 20 billion (!), the number of employees range from 1 (!) to 18.000, and the export sales ranges from 0 to 95%. Coupled with the small number of companies, there seems to be limited use of further descriptive statistics on these differences. The conclusion is, on the other hand, that the companies being studied are indeed very different, at least in terms of these aspects.

From a pair-wise perspective, the cooperative ventures are also very heterogenous. Three archetypes are represented, namely, large-large, large-small, and small-small. In the extreme cases of the large-small categories (some four cooperative ventures), the Swedish partner is always the larger one. This clustering can be compared to that of



Håkanson and Lorange (1988), who discussed four archetypes of cooperative ventures in terms of possible combinations of value chains.

When it comes to industry distribution, the cooperative ventures can be categorized, at least in a broad way, in seven industry groups. More interestingly, there is approximately the same amount of cooperative venture in information technology, offshore, automobile, and electronics. These industries also represent one traditional industry in Norway (offshore), one traditional Swedish industry (automobile) and two new emerging "high tech" industries, namely information technology and electronics.

In ten of the 37 cooperative ventures one partner provided the product development and the other partner the market development competence. In other words, 28% of the cooperative ventures were traditional upstream-downstream, or buyer-supplier, ventures. In eleven cooperative ventures, equal to 30% of the sample, the partners provided both type of inputs, i.e., joint product and market development. Hence, these cooperative ventures between partners that can, to some extent, be characterized as rivals. A separate joint venture company was established in 16 ventures (32%), all involving product and market development. Interestingly, the Norwegian partner had always 50% or more of the equity in any of these joint venture companies.

From this brief discussion, we can conclude that these cooperative venture parent companies indeed represent a cross-sectional sample of Scandinavian industry, large and small, traditional and new, and between buyer-suppliers and between rivals. As could be seen in Chapter 2, consequently, this sample differs very little from Hergert and Morris' (1988) database of some 900 collaborative agreements.

### 5.3 The Swedish-Norwegian Industrial Development Fund

In this section, we will describe the bi-lateral capital fund/venture capitalist that has provided project financing to all companies involved in the present study. The purpose is to understand what type of organization this is and how it operates.

The Swedish-Norwegian Industrial Development Fund (SNI) was established as a bi-lateral foundation by the two countries' governments in 1981. The purpose of SNI is to stimulate industrial cooperation between Swedish and Norwegian cooperative ventures that can result in short-term mutual commercial exploitation - either in the form of production or marketing. This includes support for product development and market development but not basic research projects. SNI shall also support large projects with "significant risks"<sup>1</sup>. In other words, the two governments wanted SNI to act as a catalyst between Swedish and Norwegian companies to form industrial cooperative ventures. But how could such a bi-lateral catalyst be established?

#### 5.3.1 Background

The background of SNI can be derived from a proposed agreement between the largest Swedish company, VOLVO, and the Norwegian government in 1978. In May 1978, these two parties reached a tentative agreement to transform VOLVO into a Swedish-Norwegian concern. This would be one of the major industrial transactions in the two countries's history where Norway would gain access to a large multinational and diversified corporation and Sweden would gain access to the increasingly important Norwegian source of export revenue, namely, petroleum from the North Sea. However, due to emerging opposition to the agreement from major stockholder groups in VOLVO and from other industrial groups in Sweden, the

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<sup>1</sup> Regeringens proposition [1980/81:189, p.10]. and "SNI Objectives and Strategy" from April 13, 1989.

agreement was not accepted by VOLVO's stockholders. Thus, this major Swedish-Norway agreement was never implemented.

After initial disappointments on both sides, the two governments continued their discussions on future cooperation between the two neighboring countries. In addition to larger projects within the energy field, it was found that there was significant scope for various types of industrial cooperative ventures between Swedish and Norwegian companies. These discussions resulted in a bi-lateral agreement in March 1981 covering three areas:

1. long-term deliveries of crude oil and petroleum-based products from Norway to Sweden;
2. option of long-term deliveries of electrical power from Sweden to Norway; and
3. establishment of the Swedish-Norwegian Industrial Development Fund (SNI).

#### 5.3.2 Project Financing

SNI is a Swedish foundation with its head office in Oslo but has also a branch office in Stockholm. In addition to a Managing Director, only a few people are employed, including a representative in the Stockholm office. In fact, in the bi-lateral agreement it was outlined that SNI was to be an unbureaucratic organization - to operate in close cooperation with the two National Industrial Development Funds. SNI was to hire consultants from these organizations as well as outside consultants.

SNI was granted a capital-base of SEK 250 million to be used as project financing for Swedish-Norwegian cooperative ventures. The project financing takes the form of risk loans to each partner of the cooperative venture, covering at most 50% of the costs involved in the venture. These loans have an interest rate a few points lower than a bank loan. The main difference from a normal bank loan is, however, that SNI does not require any pledge for its risk loans - other than the quality of the project itself. Because only 50% of the

cooperative venture costs can be financed by SNI, this loan typically is on top of the companies' equity and bank loans. We can also note that sometimes the project financing can be based on a royalty agreement. In other words, the risk loan is reimbursed as a percentage of generated revenues from the cooperative venture.

How can Swedish and Norwegian companies receive such project financing? Approved project financing typically has the following background. First, the Swedish and the Norwegian partner companies make preliminary inquiry at SNI to find out whether their potential cooperative venture may be in line with SNI's rules. If the answer is yes, the partners are requested to send in a joint formal application for project financing, including basic facts regarding the cooperative venture. In addition to the standard business plan, the application must include a cooperation agreement, describing "who-is-doing-what-and-when" type of issues. Also, in approximately one-half of the cases, SNI partly sponsors (up to 50%) a feasibility study to be carried out by an external expert, which is jointly assigned by the companies and SNI. The feasibility study will subsequently become an integrated part of the application.

In a second step, SNI will assign two other outside experts/consultants - a Swedish and a Norwegian - to jointly evaluate the application and the project. These experts recommend to SNI's Managing Director whether or not the companies should receive project financing.

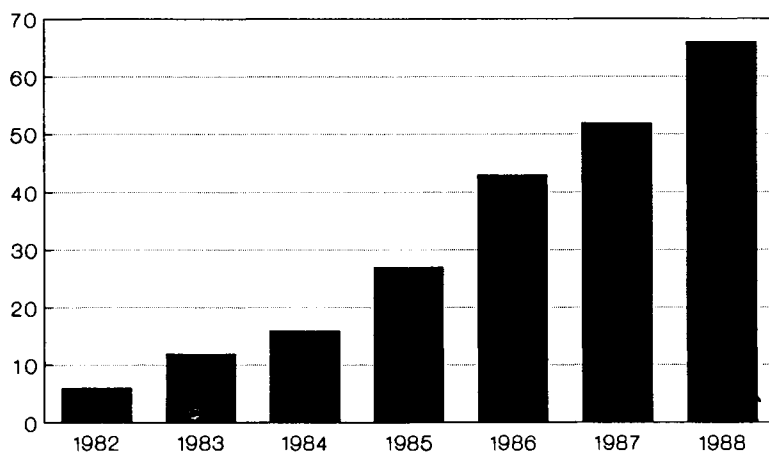
In a third step, SNI's Managing Director - who has extensive business experience in both countries' industry - includes his evaluation of the prospective cooperative venture and subsequently recommends his Board of Directors to approve or reject the application. Today, the process from initial contacts to final decision by the board takes between two to six months. After an approval of project financing, the partners and SNI formalize a loan or royalty agreement, outlining the details of the project financing.

The partners are required to come in with a relatively simple cost/revenue report regarding the cooperative venture activities once or twice a year. SNI will a posteriori provide 50% of the relevant cooperative venture costs as outlined in these reports. Thus, the financing is provided gradually - in line with the actual expenses.

SNI receives approximately 200 formal applications, regarding of project financing per year, of which some 20 are brought to SNI's board for a decision. Only three to five applications are annually rejected by SNI's board.

### 5.3.3 Operations

It took a few years before Swedish and Norwegian companies began to use this new source of venture capital. As we can see from exhibit 5-1, only a handful of cooperative ventures with SNI financing were formed during the organization's first three years.



**Exhibit 5-1: Cooperative Ventures formed with SNI Financing  
1981/1982 - 1988**

A shift of Managing Director in August 1984, however, resulted in a new and increasing trend of cooperative venture activities. By the end of 1988, 66 cooperative ventures had been formed. The present study include the parent companies of some 90% of the cooperative ventures formed between 1981 and 1986. Hence, many cooperative ventures have been formed after this study<sup>2</sup>.

The potential partner companies have come to require more and more "hands-on" advice from SNI regarding how to form cooperative ventures. This has resulted in SNI's Managing Director and assistant often taking an active role as a neutral "third party" in assuring that the cooperative venture is accurately formed. This increasing demand for more "cooperative know-how" by the potential partner companies was one of the main reasons for initiating the present research project.

In this context it is important to note that the nature of the population, i.e., parent companies to SNI-sponsored Swedish-Norwegian cooperative ventures, suggest a limitation in our ability to draw conclusions. This will be further discussed in Chapter 13.

#### **5.4 The Questionnaire Study**

In January 1987, the Managing Director of SNI sent a letter to the seventy-four project leaders, explaining SNI's formal support of the research project and encouraging the project leaders to complete the questionnaire to follow. The questionnaire was sent to the key executive directly in charge of the cooperative venture in each parent company (the questionnaire is presented in Appendix 3). This executive was

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<sup>2</sup> As discussed in section 5.2, these cooperative ventures represent many industries and are of many different sizes. However, there is an increasing trend towards cooperative ventures in the information technology field.

typically the lead person during the venture's formation, initiation, and implementation. In the smaller companies, the project leader was often the Managing Director, which indicates the strategic importance of the cooperative venture to these companies. In the larger companies, the project leader was usually a technical manager or a marketing manager directly active in the cooperative venture's activities. Hence, we attempted to document how the cooperative venture was formed in companies, as perceived by these most knowledgeable and intimately involved in this process.

"Memory tapping" through such a questionnaire suggests that at least two types of errors might occur, namely misinterpretation and memory failure. The risk of systematic misinterpretation has to do with whether there are ambiguous or misleading questions in the questionnaire, systematically causing all respondents to provide incorrect answers. To eliminate as much of this risk as possible, the questionnaire was tested on two respondents from the sample, one project leader each from a Swedish and Norwegian company as well as the Managing Director of SNI. Even though this was expected to decrease the risk, we must always recognize the risk of random misrepresentation resulting from the fact that this is a single informant questionnaire study - only one person in each company was to respond.

The relative newness of the cooperative ventures coupled with the fact that the questionnaire was sent to the persons being involved in forming the ventures, suggests that the risk of memory failure, at least unintended, seemed to have been low. Since this is a study of attitudes, each respondent was indeed likely to respond in a way that, at least to some extent, contained elements of post-rationalized "wishful thinking" (Weick, 1979). Still, we believe that the decision-makers' own perceptions do have some validity, in the sense that they are the ones who actually trigger decisions and actions.

We should note that we could see no reason for the respondents providing deliberately misleading answers. In

fact, during an executive training seminar in December 1986, organized by SNI, many project leaders were intrigued by the study and expressed their willingness to participate.

Two weeks after mailing the questionnaire, all the respondents were contacted by telephone and asked whether there were issues in the questionnaire that were unclear. Only a few respondents needed further clarifications. By mid-April 1987, sixty-seven questionnaires had been returned, yielding a response rate of 91%. Hence, the sample represented a nearly complete population of this particular type of cooperative venture. (It should be noted, however, that not all respondents provided answers to all questions). Thus, Fowler's (1988) third characteristics of quantitative studies, i.e., that normally a sample of a population is being studied, is not relevant in the context of the present study. We must keep in mind that this fact will have consequences for both subsequent statistical tests and the question of generalizing the results.

## **5.5 Results from the Questionnaire Study**

The complete results from the questionnaire study are presented in Appendix 5. For each of the questions, the frequency and distribution of the answers will be reported and elaborated. In this section, we will discuss how the respondents characterized the companies' formation practices in terms of the following interrelated set of issues, that is, the outline of the questionnaire:

- background of the cooperative venture,
- previous experience,
- alternatives and choices,
- pattern of cooperation,
- the agreement, and
- role of SNI.



The cooperative ventures described in the present study can be characterized as very "cooperative," in that the venture idea was generated together with the partner and that the companies did not consider going it alone. The ventures also represented a strengthening of the existing business and were product development and/or market development driven, where the top management took an active role. In addition, there was a high degree of internal consensus regarding the cooperative project. Hence, the general background for creating a cooperative venture seems to have been relatively good in this population of companies.

From Appendix 5, we can also see that even though the companies, to a large extent, did not have previous experience with cooperative venturing, they had previous experience with their partner companies. Also, very few alternative partners were considered but a relatively high number of investigations and analyses were carried out, by at least by one-half to two-thirds of the respondents. In addition to the general rationales for partner selection, we can see that the competencies sought were product development or market development.

The partners had relatively extensive contacts, which they considered to be at the right level of intensity. They met at least four times during the formation process and used only legal assistance. The human relations between the partners were very good.

We can also see that many of the "standard issues" were covered in the cooperative venture agreement, which also was considered to have the "right" level of details. The agreement also covered what was intended to be covered and was perceived to be equally advantageous for both partners. Also, neither of the partners had violated parts of the agreement.

Many of the companies did not know about SNI before the cooperative venture, and SNI was contacted during the negotiations. The main reasons for involving SNI were financing and, thereby, lowering the risk. The cooperative ventures would not have been pursued in their present form

without SNI financing - only in a different form - indicating that the governmental venture capitalist did play an important role during the formation phase.

## **5.6 Tentative Conclusions**

The purpose of this chapter was to explore the database and, thereby, help us better understand the specific data used in the study. In appendix 5, we have described the database in terms of the questionnaire responses on the formation process practices. Based on these descriptions, an interesting picture emerges.

In general, we see that the cooperative ventures in this study were oriented mainly toward product and/or market development. Knowing that these ventures typically are technology - market oriented, this is somewhat different from the database analyzed by Hergert and Morris (1988). The companies had limited experience with cooperative venturing but seemed to know the partner company from before. They carried out many investigations beforehand and had intensive contacts with each other during the formation phase. The companies also shared a very "cooperative" attitude toward the venture. Not all potentially important issues were covered in the agreement, which was also perceived by the respondents. The agreement was viewed as advantageous to both partners in the short-term as well as the long-term perspectives.

As a source of project financing, SNI seemed to have played an important role for most companies - not a surprising finding given the specific population. The partners were, to a large extent, satisfied with SNI.

In general, the results were perceived to be very good. This, however, must be considered in connection with the relative youth of the ventures - all were less than four years old. Thus, this population differs in this aspects from most other studies regarding instability rate (see Chapter 2).

Through this discussion, we have arrived at a tentative picture of how these cooperative ventures "typically" were formed. A next logical step in our exploratory study is to search for the most important of these individual formation process variables, in terms of their association with subsequent outcome. In other words, we will assume that all these formation variables are important for the outcome. The question is, however, whether all individual variables related to an outcome variable. Coupled with the fundamental theoretical factors discussed in Chapter 3, this will help us to conceptualize a model of how cooperative ventures are formed.



## **CHAPTER 6**

# **DIFFERENCES BETWEEN PARENT COMPANIES IN "GOOD" AND "LESS GOOD" COOPERATIVE VENTURES**

### **6.1 Introduction**

This chapter, which forms the first part of the quantitative analysis of the database, focuses on the differences in formation practices between parent companies in "good" versus "less good" cooperative ventures. The purpose of this analysis is to learn which activities during the formation process seem to make a difference to parent companies in cooperative ventures with good and less good, or even quite unsatisfactory, results. We hope that this analysis will add to what we have learned from the literature survey, thereby helping us develop a simplified conceptual model of how cooperative ventures are formed.

The analysis is based on how the respondents characterized each of the seven sets of issues in the questionnaire, i.e., their formation practices, how they perceived the results and experiences, and the role of SNI. Each of these variables will be cross-tabulated against a measure of the perceived performance of the cooperative venture.

In the following sections, we will first discuss the performance criteria used to discriminate between the parent companies. Cross-tabulation results will then be reported and evaluated for each variable in the seven sections, illustrating different aspects of formation practices. The

findings will finally allow us to draw some tentative conclusions.

## 6.2 The Outcome Criteria

Performance criteria are needed to discriminate between the respondent companies. As a generic performance criterion, we used one variable where the respondents assessed how the general results were perceived to date (question number 4 in appendix 5). The distribution of the responses is outlined in exhibit 6-1:

	Very good				Very bad	
	1	2	3	4	5	N/A
Distribution:	20	20	9	8	3	7

**Exhibit 6-1: Distribution of the Performance Criterion, i.e., "How Do You Perceive the General Results So Far?"**

Sixty of the sixty-seven respondents answered this question. The remaining seven indicated that their projects had been dissolved, and thus, they could not answer this question. We can also see that the distribution is quite skewed, in that two-thirds of the respondents felt that the performance was very positive. Eleven of the respondents thought that the general performance so far was less satisfactory or even quite unsatisfactory. In addition, nine felt that the general results were neither good or bad.

To discriminate more accurately between groups of respondents and to carry out cross-tabulations, we will divide the distribution into three equally large classes. The first class consists of the 20 respondents who were most satisfied with their cooperative ventures corresponding to one on the Lickert scale. The second class consists of the respondents who seemed to be satisfied with the cooperative venture to a

lesser extent than the respondents in the previous class, corresponding to a two on the Lickert scale, totalling 20. The third class, finally, consists of the respondents who were not satisfied with the performance of the cooperative venture, corresponding to a three, four, or five on the Lickert scale - again totalling 20. Hence, we will interpret a three as being "not-clearly-positive" and group these nine responses with the eleven dissatisfied respondents. The rationale for this is practical, it allows for cross-tabulation with three equally large groups. It should be noted, that we carried out cross-tabulations when these nine responses were excluded. The results only differed in a few cases. The classes are summarized below.

Class no.	Lickert scale	No. of respondents
1	1	20
2	2	20
3	3-5	20

**Exhibit 6-2: Three Classes of Respondents**

### 6.3 Differences

The questionnaire consisted of sixty-three individual variables that characterize various phases in formation practices and fifteen variables that characterize how the respondents perceived the results and their experiences with the cooperative venture. These variables were appropriate for cross-tabulating with the performance criteria discussed above. To judge the likelihood that the patterns in the cross-tabulation in fact express "true" difference (and not a random difference), the  $\chi^2$  value was estimated for each cross-tabulation. Since the main focus of this research was to picture the formation practices in each company, we did not cross-tabulate the variables characterizing SNI's role in the

formation phase. The following significance levels will be used in the presentation.

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**Significance Levels**

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< 0.01  
0.01-0.05  
0.06-0.10

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**Exhibit 6-3: Significance Levels**

In interpreting the level of significance, we must remember that the sample represents virtually the entire population being studied (91%). Thus, the significance tests are not needed to generalize from the sample to the specific population in this case. However, the values of significance will be used as a indicators of the strength of the relationship in the population.

In the following section, we will report only the cross-tabulation results that express a certain strength in exposed differences between effective and less effective cooperative ventures those having a  $\chi^2$  test significance level of 0.10 or less. Each of the significant cross-tabulation results for each of the variables characterizing the formation practices will be provided. First, we will look at the variables depicting the general background of the company contemplating a cooperative venture. Second, we will investigate the experience issue, in terms of both the partner and other cooperative ventures. Third, we will study various alternatives and choices. This also includes how the companies researched the cooperative venture idea and the prospective partner. The fourth set of issues concerns the pattern of cooperation and interaction between the partners. The fifth set of issues looks at the agreement. Finally, the sixth set of issues involves the performance and experiences of the venture. Because these sets of issues follow the questions outlined in Appendix 5, the individual questions will not be repeated here.



### 6.3.1 General Background

Only two cross-tabulations out of a total of ten (see Appendix 5, section 1: questions 1-3, 4a-e, 5a-b) indicated differences between respondents in the three classes when it came to the general background for entering into cooperative ventures. The marketing and product development functions were, in general, more active in the formation practices, compared to other functions in the parent companies of "good" cooperative ventures (significance level 0.05).

The fact that the marketing and product development functions were involved more actively in the early formation phase is not surprising, given the nature of the cooperative ventures and product and/or market development. On the other hand, it might be that effective cooperative ventures emerge from a general organizational climate where marketing and product development regard cooperative ventures as a natural, viable strategy implementation vehicle.

There were no differences when it came to the degree of internal consensus, i.e., an indication that this factor is a prerequisite of all cooperative ventures. Hence, such a venture must "look favorable" to the organization in order for it to be undertaken in the first place. This is consistent with the discussion of commitment/initiation in strategy formation (see Chapter 3).

### 6.3.2 Earlier Experience

Only one variable out of six distinguished between the classes of respondents (see Appendix 5, section 2: questions 1a-d, 2-3). The parent companies in "good" cooperative ventures had, in general, earlier business contacts with their partners (significance level 0.01). This finding might underscore the importance of having already established a network of relationships. In this way, communication probably becomes less costly, occurs more easily, takes less time, and

reduces the chances of miscommunication. In other words, the formation practices should be facilitated; and the cooperative venture can probably be delineated more easily.

Surprisingly, there were no differences between the classes of respondents when it came to previous experiences with cooperative ventures. Hence, this is in opposition to previous findings on a positive learning curve in joint venturing<sup>1</sup>. In interpreting this, however, we must remember that the companies in this population had very limited experience with cooperative ventures in general.

### 6.3.3 Alternatives and Choices

Nine of twenty-four factors differed between the parent companies in "good" versus "less good" cooperative ventures (see Appendix 5, section 3: questions 1-2, 3a-o, 4a-g). These nine factors fell into two groups: (1) those that concern the strategic rationale for partner selection and therefore the cooperative venture in general and (2) factors involving the degree of the investigations carried out.

With regard to reasons for partner choice, there was a difference in that the companies in the "good" cooperative ventures were to a larger extent interested in:

- (a) gaining access to the partner's geographical home market (significance level 0.10);
- (b) gaining access to the partner's product development competence (significance level 0.10);
- (c) possibilities of achieving competitive advantages (significance level 0.10); and
- (d) to a smaller extent interested in possibilities of rationalization (significance level 0.10).

In other words, the parent companies in the "good" cooperative ventures stressed more heavily the benefit of getting access to revenue-generating and "tangible" resources,

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<sup>1</sup> See Lyles (1988).

such as home market and product development competence, with the purpose of increasing their competitive advantage. Accordingly, these companies also de-emphasized cost-oriented motives, such as rationalization. In sum, it looks as if these companies were focussed more strategically in their approach to the cooperative venture than their less effective counterparts.

The parent companies in "good" cooperative ventures also made a difference when it came to various business analyses and investigations. To a greater extent, these companies (all with significance level 0.05):

- (a) formulated the cooperative venture's objectives;
- (b) analyzed the cooperative venture's fit with their own strategy;
- (c) analyzed the cooperative venture's fit with the partner's strategies;
- (d) analyzed the partner's resources; and
- (e) analyzed the competitive situation.

As we can see from this summary, there are surprisingly many significant differences. The formulation of the venture's objectives and the emphasis on checking the venture's fit with one's own strategy might be motivated by the realization that the company should benefit strategically from the cooperative venture. The more careful analysis of the partner's strategy and resources can, in general, be motivated by a need to understand the venture relative to the partner's present and future business activities. The larger degree of analyses of the competitive situation, finally, verifies the picture of a more realistic and careful approach to cooperative venturing by these companies.

In general, these findings support what we concluded from the literature review<sup>2</sup>. These types of careful a priori

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<sup>2</sup> See analogies from Aharoni, 1966; Bower, 1970; and Haspeslagh, 1988.

investigations seem to be an attribute of parent companies for successful cooperative ventures, indeed consistent with Lorange and Roos (1987).

#### 6.3.4 Pattern of Cooperation

In only one of nine cases (see Appendix 5, section 4: questions 1a, 2, 3a-b, 4a-c, 5-6), did these results yield a significant difference between the three classes of companies - the parent companies in the "good" cooperative ventures, to a lesser extent, used external consultants during their formation practices (significance level 0.10). This might presumably indicate that these companies, to a larger extent, "knew what they were doing."

#### 6.3.5 The Agreement

Six of 14 cross-tabulations (see Appendix 5, section 5: questions 1a-n) showed significant differences between the parent companies in terms of what they emphasized in the agreement. The parent companies in the "good" cooperative ventures emphasized to a greater extent:

- (a) rules for assignment of top management (significance level 0.10),
- (b) rules for assignment of a management committee (significance level 0.10),
- (c) routines for strategic planning (significance level 0.10),
- (d) rules for protecting core competence (significance level 0.10),
- (e) rules for ownership changes (significance level 0.10), and
- (f) routines for strategic control (significance level 0.05).

As we can see, these companies generally seem to have a stronger articulation of several important aspects of the

agreement. This includes management processes routines, such as strategic planning and strategic control, and management assignment rules. In addition, these companies also include procedures to protect themselves in the case of ownership changes and the maintenance of control over core competence. These issues have been discussed in Lorange and Roos (1987); and the findings add to our belief that the formalization of the agreement is important as such. However, this finding is in contrast with that of Håkanson and Lorange (1988) who found that the cooperative venture contract had no relevance for the outcome. One explanation to this is that a "standard type" of contract are broadly used.

#### 6.3.6 Outcome and Experiences

As we pointed out in the first part of this chapter, the perceived performance indicator used in the cross-tabulation analysis attempted to capture the general results of the cooperative venture to date, as perceived by the respondents. Needless to say, we can argue that such a perception measure can hardly be a robust measure of performance. In an attempt to control for this, we therefore looked at fifteen other indicators that might shed further light on the experiences and results of the cooperative ventures (see Appendix 5, section 6: questions 1a-h, 2a-b, 3a-e, 4). These other indicators have, again, been cross-tabulated against the original perceived performance measures previously used. The results from these cross-tabulations are provided below.

The parent companies in the "good" cooperative ventures perceived that the following costs induced by the venture were of less importance:

- (a) lost opportunities (significance level 0.05),
- (b) delays (significance level 0.01), and
- (c) bad reputation (significance level 0.05).

Experiences resulting from the cooperative venture operations to date had also, to a lesser extent, resulted in changes in:

- (a) the project's adaption to one's own strategy (significance level 0.05),
- (b) the input of one's own resources (significance level 0.05), and
- (c) the input of the partner's resources (significance level 0.01).

Finally, the respondents in the parent companies in the "good" cooperative ventures felt that the operations would have been less successful had they been pursued within one's own company as opposed to within the cooperative venture (significance level 0.05).

From these cross-tabulations, we can see that these parent companies de-emphasized several cost issues. For instance, they seem to be only a little concerned about lost opportunities, delays, and bad reputation. These findings are not surprising in that respondents who perceived the cooperative ventures as successful would not be likely to have opportunity loss, delay, and reputation problems (see Weick, 1979). We can also see that in these companies there seems to be less need to change the cooperative venture project's concept, when it comes to the project's adaptation to one's own strategy, to an input of one's own additional resources or to additional inputs from the partner. Consequently, as expected, the successful cooperative ventures did not call for major revisions in their concept or an infusion of new resource inputs.

The respondents also indicated that the more successful cooperative ventures would have been less successful if they had gone-it-alone within their own parent company. This may add final credence to the importance of being convinced of and committed to the idea that a cooperative approach makes the most sense in a given circumstance, i.e., one of the main conclusion from the literature survey.

All the cross-tabulation findings herein, lend credence to the performance measure used previously. Hence, the performance measure used in the cross-tabulations probably provides a reasonably realistic reflection of the "true" performance.

#### **6.4 The Respondents' Experience**

This section presents a number of comments from the questionnaire respondents. Consistent with the design of the questionnaire, these "qualitative" comments can be organized into five sets of issues, namely, general background issues, alternatives and choices, pattern of cooperation, the agreement, and experience.

The purpose of this presentation is to complement the cross-tabulation results above, and gain initial insights into the important issues when forming a cooperative venture, as perceived by the people actually doing it. Such practical insights might help us in our subsequent analytical approaches.

The comments will be listed under each of these areas, and some tentative conclusions will be drawn. We should note that even if several respondents had identical comments, only one of each type is presented.

##### **6.4.1 General Background**

The project leaders had the following comments regarding the general background of the ventures:

- the management team must be motivated;
- use competent personnel in the venture;
- be careful when appointing personnel to the venture,

- all personnel must have a strong sense of involvement in the project as such;
- project managers must be given the necessary authority;
- project managers must be from the same hierarchical level in both firms; and
- the parent firms must be as similar as possible - including size.

As we see there is a strong concern about the quality and motivation of the personnel who are to be involved in the cooperative venture, which underscores the behavioral dimension of forming a cooperative venture. This suggests that a general precaution factor for success is that an organization should be willing to release good people to the cooperative venture and be able to motivate them.

#### 6.4.2 Alternatives and Choices

The project leaders had the following comments regarding the alternatives and choices.

- make careful assessments of why you want a cooperative venture;
- conduct careful market analysis;
- carefully survey competitors and alternative technical solutions; and
- both parties must have equal opportunities to assess the cooperative venture concept and undertake cost analysis.

These comments seem to emphasize the need for careful and comprehensive strategic investigations and that both parties' viewpoints must be considered.

#### 6.4.3 Pattern of Cooperation

The project leaders had the following comments on the pattern of cooperation between the partners.



- close cooperation results in greater efficiency;
- get acceptance of the venture in both partners' top management;
- both parties must allocate sufficient amounts of time for the project;
- spend a great deal of time on the cooperative model;
- formulate the budget together; and
- good personal chemistry is the key.

The human chemistry issue is heavily emphasized in the qualitative comments. It seems particularly important that the partners actually spent the time and effort required to get the cooperative venture going and that there was a genuine willingness to do this, especially at the top level in the partner companies.

#### 6.4.4 The Agreement

The following comments on the cooperative venture agreement emerged.

- formal rules must be clear in order to avoid misunderstandings;
- all aspects of cooperation must be carefully regulated in the agreement;
- carefully discuss all issues before signing the agreement;
- relate corporate goals to economic consequences in the agreement;
- there must be a satisfactory agreement before the operations take off;
- the agreement must be balanced so that all partners get a reasonable share of benefits;
- all partners must always be willing to provide resources for the venture;

- the agreement can never be too specific;
- both parties must agree on various specifications beforehand;
- specify who is doing what;
- it is necessary to regulate carefully issues such as strategic planning, control routines and financing of the operations; and
- it should be stated clearly in the agreement whether the parties should form a separate entity.

We notice that virtually all the comments stressed the importance of a carefully delineated and sufficiently specific agreement. Aspects highlighted are the need to ensure that all critical issues, including potentially sensitive conflict issues, are discussed before signing, that role issues (in terms of who is doing what) are clarified, and that financing and resource requirements are clear. A final observation regarding the comments concerns the fact that in a balanced cooperative arrangement all the parties realize that a separate entity is being set up and act accordingly as supportive owners of this entity.

#### 6.4.5 Performance and Experience

The last group of comments concerned various aspects of the project leaders' general experiences with the cooperative venture.

- everything takes more time when there is more than one partner involved;
- costs are always underestimated;
- do not trust optimistic forecasts;
- always have an exit possibility;
- all premises change;
- always have an alternative to the cooperative venture operations;

- it is important to get something tangible to start with in order to get going;
- the success of the venture is completely dependent on the partners' genuine will to pursue it;
- the formation phase is key for implementation and success;
- it should be clear from the beginning how the operations will be financed;
- it is crucial to have influence over the planning and control of the venture operations;
- be realistic regarding the possibilities of achieving greater market shares with a new cooperative venture;
- cooperation takes more time and costs than one expects;
- do not become too enthusiastic;
- the implementation phase takes more time than expected;
- time plans must be followed up;
- formal restrictions are different in each country; and
- it is difficult to balance input and output between two partners.

As we see, there are many items covered - all of them valid insights in their own right. Many of them suggest that for a cooperative venture to work, both partners must wholeheartedly want it to be the case. In line with this, cooperative ventures require prime attention, management capacity, and commitment.

## 6.5 Tentative Conclusions

In this chapter, we have conducted some initial analyses of the formation practices in the companies in the SNI population. Our purpose was to see whether we could discriminate how the parent companies in the "good" versus "less good" cooperative ventures carried out their formation

practices. The analysis was carried out by means of cross-tabulating a number of formation practice variables against a perceived performance measure, but included also a listing of the respondents' comments as found in the questionnaire.

Several conclusions have emerged from the findings. A first general conclusion is that the nature of the formation activities seems to make a difference, i.e., an encouraging support for the overall assumption of this study.

Another general conclusion is that not all parts of the formation phase seem to be important. More precisely, general background did not seem to play any significant role, i.e., who generated the initial idea or the degree of internal consensus. This finding differs from what has been discussed by Aharoni (1966), Harrigan (1985; 1986), Killing (1983), Lorange (1980), and others. On the other hand, the degree of engagement and commitment to the cooperative venture from various organizational functions did seem to be important. The product development and market development functions were more involved in and committed in the parent companies of the "good" cooperative ventures. Even though this might be a logical characteristic of "good" formation processes, it might also be explained by the fact that most ventures fall within this category. To some extent, however, these findings can be interpreted to support the "initiation" construct of a formation process, discussed in Chapter 3.

An unexpected finding was that earlier experience, i.e., conceivable learning effects, did not seem to be important in this population of companies. This is surprising since previous research has shown that such a learning effect is very common.

These parent companies in the "good" cooperative ventures also differed in that they seemed to be more oriented toward creating new competitive advantages through access to new markets and technologies - as opposed to rationalization and reducing costs. The parent companies in the "good" cooperative ventures had, to a larger extent, carried out more careful investigations and analyses before entering into the venture.

Hence, this is consistent with what we had expected from the literature survey, i.e., support for the "investigation" factor (see Chapter 3). In addition, these companies also seemed to have a more complete, dynamic, and longitudinal perspective in the agreement. As we discussed in the literature review, we expected that the agreement issue would have some differentiating effect on cooperative venture performance. It was, however, surprising to find these clear differences.

Despite the simple bi-variate analyses carried out in this chapter, a preliminary and broad picture of a "good" cooperative venture formation process emerges - formation processes characterized by a strong "internal push" from commitment and engagement from various organizational functions, particularly the product development and marketing functions, manifesting the drive for increasing the companies' competitive advantage through the venture. This internal push is complemented by a more rational analytic phase aimed at providing a sound basis for the cooperative venture operations relative to both parent companies. Finally, the formation process ends up in a comprehensive and inclusive cooperative venture contract, covering both operative and strategic aspects of the activities.

In general, the qualitative comments seem to support the overall notion of the importance of the formation process. In other words, these comments do indeed support our initial knowledge of the pre-venture design phase, as reported in Lorange and Roos (1987) and the findings from the cross-tabulations.

A relatively unexpected set of comments, however, concerns precautions when it comes to staffing the venture, which seems to be the overruling other issues. It is also surprising to find so many comments on the importance of carefully monitoring the agreement.

Coupled with the conclusions from the literature survey of the content of formation processes, these findings will form the basis for an emergent simplified conceptual model of how cooperative ventures are formed.



## CHAPTER 7

# AN EMERGENT CONCEPTUAL MODEL

### 7.1 Introduction

The literature review in chapters 2 and 3 provided a tentative understanding of what might be some of the key fundamental elements in the cooperative venture formation process. As we can see from Exhibit 3-4, several authors have underscored the two fundamental activities of investigation and investigation in formation processes. Even though these elements were defined differently, the main message was that a "push" from these elements is necessary for completing a formation process. One of the main conclusions from the initial, very simple, analysis of the database (see chapter 6) was that the strength of these two elements seems to be a discriminating factor between parent companies in "good" versus "less good" cooperative ventures (broadly defined). Hence, these findings supported what was underscored in the literature.

These findings were, indeed, encouraging but raised the question of how the two elements were related to each other and how they influenced outcome. In other words, we are interested in an indication of the relative strength of these elements in the formation process. To explore this, we needed a conceptual model for these relationships. The purpose of this chapter, therefore, was to arrive at a theoretically and empirically derived conceptual model of the relationship

between these fundamental elements and how they influence subsequent outcome. This simple model is adapted to the present database - a model that can be empirically elaborated on subsequently. Based on the literature support in chapter 3, the formation of cooperative ventures has been characterized in terms of the two fundamental elements - "internal push" and "analytical scope." In addition, given the nature of the database, the external influence of SNI was introduced as a fundamental element of the formation process and labeled "stakeholder strength." The conceptual model can be interpreted such that the formation of a successful cooperative venture is a function of how well an organization can handle, at least, these three theoretical constructs.

As we stated earlier, we realize that a number of other factors are important to consider when forming a cooperative venture. For instance, age and size of the parent companies, the purpose, and the industry in which the venture operates. It is, however, not the aim of this study to cover these other potential sources of influences when it comes to exploring the formation process and its importance for subsequent success. Nor is it possible, with the present database of sixty-seven companies, to control for all these influences. Instead of including some of these influences, we have chosen not to include any.

The three theoretical constructs outlined are hypotheses to characterize the fundamental parts of the formation process, as well as of importance for the subsequent outcome of the cooperative venture.

In the following sections, each of these three theoretical constructs will be discussed to show how they might be related to each other and might influence outcome. This includes a discussion of how outcome was measured, reflecting the perceptions of the parent companies.



## 7.2 Internal Push

We have seen previously that there may be any number of reasons for considering a cooperative strategy. It is also difficult to identify one single reason for such a cooperative strategy or to identify the initiator of a project. Various reasons, taken together, that lead one or several decision makers in a company to form a cooperative venture will be labeled "internal push." This concerns whether an organization is ready to enter a cooperative venture, with the understanding that it might have to give up some independence in a traditional sense and, thereby, accept certain constraints on future strategic actions. Internal push might also be a function of the climate within the organization. The extent to which a firm might have sufficient positive experience with previous cooperative ventures may be an important factor, as is the extent to which the potential cooperative venture is seen as non-controversial within the organization, i.e., a type of internal consensus in the organization. As we noted in chapter 2, these aspects of a cooperative strategy have been discussed by many authors, including for instance, Contractor and Lorange (1987), Harrigan, (1985), Killing (1983), and Geringer (1987).

It is also important to understand the extent to which key personnel from critical organizational functions in the company engage in, and are committed to, the cooperative venture in order to help realize its full potential. This commitment can be regarded as a voluntary reduction of alternatives, since, by committing themselves, the actors automatically reduce their alternative choices of action (Macmillan and Jones, 1987). Consequently, we have chosen to view the theoretical construct "internal push" in terms of the following variables (see Appendix 5, section 1: questions 4a-e, and 5a):

- internal consensus regarding the cooperative venture,
- commitment to the cooperative venture by top management,
- commitment to the cooperative venture by the financial function of the company,
- commitment to the cooperative venture by the product development function of the company,
- commitment to the cooperative venture by the production function of the company, and
- commitment to the cooperative venture by the marketing function of the company.

The "internal push" can be seen as an explanatory combination of these indicators and is expected to both influence other factors in the formation process and also directly influence the subsequent outcome of the cooperative venture, that is, play an important role in the formation process. This conceptual relationship is supported by the findings in the previous analysis of differences between parent companies in "good" versus "less good" cooperative ventures (see chapter 6) as well as by the respondents' comments regarding the formation process as found in the questionnaire (see Appendix 3).

The theoretical construct "internal push" can be seen as an overall drive in the company to pursue the cooperative venture. Without such a "cooperative drive," it is hard to see how cooperative ventures will be delineated and made to work in an effective mode. We might even expect some counter-productive reactions during the formation process, perhaps to the extent that the formation of the venture comes to a halt. A strong "internal push" is, therefore, a desirable but not a sufficient, condition for forming a cooperative venture - both when it comes to the formation process inside the company's own organization and when the formation process is viewed in terms of an ongoing interactive process with the partner.

We should note that our "internal push" construct is quite different from the "initiating force" concept used by

Aharoni (1966) in his study of the foreign investment decision process. He used several external sub-factors in his theoretical construct, while we have used only internal indicators. There are also differences in how the other authors listed in Exhibit 3-4 conceptualized their respective initiation construct. Therefore, we must be careful when comparing these theoretical constructs.

### 7.3 Analytical Scope

A next logical phase in forming a cooperative venture might be to devote time and other resources to analyses and assessments of a number of potentially critical factors in connection with the cooperative venture opportunity. This might concern the extent to which analyses are carried out regarding a company's own and the partner's resources and strategy, considering that the cooperative venture might evolve and become a business activity on its own (Lorange, 1987). It might also have to do with the degree to which typical steps found in competitive strategic analysis and/or environmental scanning are included. Hendersen (1979), Pierce and Robinson (1988), Quinn (1978), among others, have provided examples of what the nature of these analytical steps might include. The overall purpose of this type of analysis is to, at least, satisfy ourselves that the cooperative venture concept seems to be competitively realistic.

The "analytical scope" construct can, thus, be seen as consisting of several such analyses and investigations. Even though, of course, the nature of "analytical scope" also depends of the nature of "internal push," we have chosen to view this theoretical construct in terms of the following variables (see Appendix 5, section 3: question 4b-g):

- analysis of the cooperative venture's fit with the company's strategy,
- analysis of the cooperative venture's fit with the partner's strategy,

- analysis of the market for the cooperative venture's product,
- analysis of the cooperative venture's competitive position,
- analysis of the company's own relevant resources, and
- analysis of the partner's relevant resources.

As was the case for "internal push," the "analytical scope" construct will be seen as an explanatory combination of these six variables. The strength of these activities is expected to play an important role in the formation process, in addition to directly influencing the subsequent outcome of the cooperative venture. This was also one of the key findings from the analysis of the differences between parent companies in "good" versus "less good" cooperative ventures (see chapter 6) and follows the thread of the project leaders' qualitative comments (see chapter 6.4.)

We should note that when conceptualizing this theoretical construct, we considered including another variable, namely, the extent to which the cooperative venture objective was formulated (see Appendix 5, section 3: question 4a). However, this variable does not indicate any analytical aspects per se, merely an internal clarification of the venture's mission as such.

Even though we believe the above six rational and analytical variables are important factors in the formation process, we should stress that a good analysis per se does not result in excellence. We must also recognize the managerial aspects in question. This point has been underscored by, for instance, Lorange and Chakravarty:

While crisp strategic analysis of course is critically important, the capabilities of the general manager and his associates to interpret and commit to the strategy may be equally critical. Holistic thinking and overall critical pattern recognition must also be emphasized. A good analysis in itself does not automatically lead to good strategy formation and implementation [1989, p.3].

The theoretical construct "analytical scope" can be seen as an overall measure of the analytical effort in the company regarding the cooperative venture. A lack of such analytical drive or - analogous to Aharoni's (1966) reasoning - lack of "depth and scope of the investigation," might result in an inadequate basis for making important decisions in connection with establishing the cooperative venture. Decisions subsequently might have great impact on both the implementation of the cooperative venture and how it can evolve. Consequently, and as was the case for "internal push," we expect a strong "analytical scope" construct to be a desirable condition for forming a cooperative venture.

#### **7.4 Stakeholder Strength**

In addition to these two fundamental factors discussed above, we recognize that an outside stakeholder might play a potentially important role when forming a cooperative venture. Any organization has a multitude of internal and external stakeholders, such as a parent company, shareholders, key personnel, individual competitors, the employees, a strong supplier group, a strong buyer group, and the government (Freeman, 1984).

Macmillan and Jones (1987) classified external stakeholders into three categories with respect to their relationship to the company: (1) providers of input, (2) competing for the company's providers of input, or (3) having some special interest in how the company operates. The first category includes suppliers, buyers, financial institutions, labor pool, etc. Since the company depends on these stakeholders for its survival, we can expect the relationship to be a symbiotic one that strongly influences their behavior with respect to one another. The second category consists of various types of competitors, such as actors in the environment, who seek to attract the company's dependents.

Since competitors do not need one another to survive, competitiveness defines the nature of these relationships. In the third category, we find various special interest groups which are concerned with those aspects of the company's operations that affect their interest. Macmillan and Jones (1987) argued that these types of relationships are based on conflict-compromise rather than on cooperation.

One argument is that such an external stakeholder has the power to "insist" on more professional analysis and implementation requirements (Freeman, 1984). In general, we might expect that the formation process might gain in confidence from being part of a broader network of stakeholder' objectives, i.e., to some extent being dependent on such a stakeholder. This may strengthen the confidence of the two parties that are directly involved (Astley and Fombrum, 1983). Macmillan and Jones (1987) argued that it is vital for any strategy formation process to identify the stakeholders and to carry out a stakeholder impact analysis. In this study, the stakeholder is equivalent to SNI, i.e., the governmental venture capitalist that provided project financing to all the cooperative ventures we polled. As we previously discussed, however, there are many types of external and internal stakeholders that might play important roles when forming a cooperative venture. Hence, we might also view SNI as an example of such a stakeholder. This particular stakeholder falls into the first and third category of the relationships discussed by MacMillan and Jones (1987).

SNI might be seen as playing several roles in addition to being a source of capital, e.g., a source of professional competence in cooperative venturing that might provide additional power to the investigation process in the company. We need, however, to be able to measure SNI's influence relative to the other theoretical constructs. Even though SNI potentially played several roles, we have chosen to focus on its role as provider of up to 50% project financing to the ventures, in terms of risk loans. Thus, the strength of this stakeholder will be measured by how important SNI financing

was to each company in question. More precisely, the following variables were used (see Appendix 5, section 7: questions 4a-b):

- whether the project, in its present form, would have been pursued or not without external support, and
- whether the project, in a different form, would have been pursued or not without external support.

The "stakeholder strength" can be seen as an explanatory combination of these two indicators. In both the early discussion of the database (chapter 5) and in the analysis of differences between parent companies in "good" versus "less good" cooperative ventures (chapter 6), we see that many of the cooperative ventures would not have been pursued in their present form without project financing from SNI. Some of these ventures, however, would have been pursued in a different form. Hence, a high value of the "stakeholder strength" can be interpreted to mean that the influence of SNI was strong, i.e., the company was very dependent on the financing in order to form the cooperative venture. A low value would mean that the company was not as dependent on SNI financing and would, at least, have carried out the cooperative venture in a different form. Hence, this theoretical construct is expected to influence other factors in the formation process and possibly also directly influence the subsequent outcome of the cooperative venture.

## 7.5 Outcome

In order for us to assess the importance of each factor, we need to measure outcome. Again, we are confronted explicitly with the intriguing question of how to identify and assess an adequate outcome measure. We have seen previously that cooperative ventures typically are driven by several rationales. We could, of course, argue that a cooperative venture would not have been established unless the goal was to

increase profits - like most business operations. On the other hand, we know that a majority of cooperative ventures are established for joint product development (Hergert and Morris, 1988), where it could be argued that the short-term goal is not increased profits per se. As we also pointed out in chapter 2, the purpose of a cooperative venture might be to learn from the other partner. When this learning is accomplished, the sign of success is termination.

It is not the purpose of this study to provide a complete discussion of the problems involved in measuring organizational outcome correctly (see Cameron and Whetten, 1983). However, we can note that, thus far, it seems as though the research on organizational outcome has not provided consistent answers to these questions. Normally, outcome is discussed in terms of "effectiveness" and in terms of attaining basic organizational goals, resources, or just simply survival (Goodman and Pennings, 1977), which is not adequate in our setting.

Kimberly et al. (1983) argued that words and attributes typically used to describe high performing organizations, such as "rapidly growing," "highly profitable," "well-managed," "high market share," "large size," actually describe various aspects of an organization's control. Several authors have noted, however, that research seems to acknowledge slowly that organizations, in fact, pursue multiple, sometimes contradictory, goals which are more or less easy to measure (Cameron, 1978; Kimberly, 1982; Kimberly et al., 1983). In addition, and as argued by Kimberly et al. (1983), we must not only measure what organizations do today but also, more importantly, get a feeling for future possibilities:



Traditional perspectives on outcome tend to ignore the fact that organizations also perform in other, less observable arenas. Their outcome in these arenas may in some cases be more powerful shapers of future possibilities than how they measure up on traditional criteria. And, paradoxally, competence in the less observable arenas may be interpreted as incompetence by those whose judgments are based solely on traditional criteria. Particularly in the case of organizations serving the interests of more than one group where power is not highly skewed and orientations diverge, the ability to develop and maintain a variety of relationships in the context of diverse and perhaps contradictory pressures is critical yet not necessary visible to the external observer [1983, pp.257-258].

Hence, organizational effectiveness is not only a question of producing tangible benefits, such as profits. It might be a question of the ability to respond to various stakeholders' interests - in particular, those interests that have control over the organization, not only in "organizations serving the interests of more than one group," e.g., cooperative ventures. Thus, we would like to have a more comprehensive measure of outcome than just a single indicator, such as the one we used in our earlier analyses of the database (chapter 6).

How shall we obtain a decent measurement of cooperative venture outcome from the parent company's perspective, particularly given the fact that the ventures in our database are relatively young? We have argued that the use of "survival rate" or similar measures is somewhat suspect, since "death" does not always equal failure. Many other reasons for dissolving a cooperative venture could be given by a parent company in a specific case. For instance, consider a take-over where the new parent company does not have an interest in the product of a successful cooperative venture. Moreover, in a cooperative situation, where, by definition, at least two parties are involved, the "pressure" for outcome is likely to be very complex. This is very different from the situation in a venture with only one owner. In this case, it has been shown

that traditional measures of effectiveness are less satisfactory - other criteria must be developed.

These [other] criteria are likely to involve informal, less visible as opposed to formal, visible aspects of how the terms and conditions of a focal organization's existence are negotiated [Kimberly et al., 1983, p.262].

In order to capture important aspects of "outcome," and given the relative newness of the cooperative ventures in the present study, we chose to use several criteria, all of which were based on the respondents' perceptions of their situations via the questionnaire.

The first criterion involves an assessment of the general results to date (see Appendix 5, section 6: question 4), which was the outcome criterion used in the previous bi-variate analyses in chapter 6. This measure might indicate how the parent company feels about the cooperative venture's outcome compared to previously specified targets. Also, it might incorporate the influence of various potentially important intangible external factors.

The second and third measures concern differences between planned versus present costs and revenues incurred by the cooperative venture (see Appendix 5, section 6: questions 2a-b). Thereby we might get a feeling for the financial dimension which is usually difficult to grasp in traditional accounting measures.

A fourth measure, finally, is intended to capture the behavioral aspects of cooperative venturing, namely, the personal relationship between the project leaders (see Appendix 5, section 4: question 7). This measure was chosen to capture more behavioural, learning-oriented, aspects of the formation process. In summary, the following variables were used to indicate outcome.

- general result so far,
- difference between planned versus present costs,
- difference between planned versus present revenues, and
- personal relationship between the project leaders.

The theoretical outcome construct can be seen as an explanatory combination of these four indicators.

Needless to say, we recognize that there are a number of other factors that influence the parent companies' assessment of the cooperative venture's outcome. Factors stemming from other sources, such as economic changes, governmental interaction, shifts in demand, new technologies, substitute products, ownership changes, management turnover, general goodness of decision, and so on, might have a decisive impact on this assessment. These factors will, however, be treated as exogenous and will thus be outside the scope of this study.

## **7.6 The Conceptual Model**

We have now defined the three fundamental theoretical formation constructs as well as the outcome construct that will be used in our conceptual model. In the following section, we will discuss how these factors might be related to each other.

Looking first at the "internal push," one might expect that a strong drive from such internal commitment, engagement, and consensus will positively influence which, and to what extent, various investigations and analyses are carried out, i.e., the "analytical scope." In other words, a company would become more eager to learn about the cooperative venture possibilities and the partner. This is probably the "normal" situation. However, as Aharoni (1966), Bower (1970), and Barwise et al. (1988) pointed out, we might expect a feedback loop from the degree of investigations to the degree of commitment and engagement for the venture project. The better

the results of the investigations the more committed a company might be. On the other hand, if the investigations result in bad news, the commitment might subsequently decline. Hence, the feedback loop can be both positive and negative.

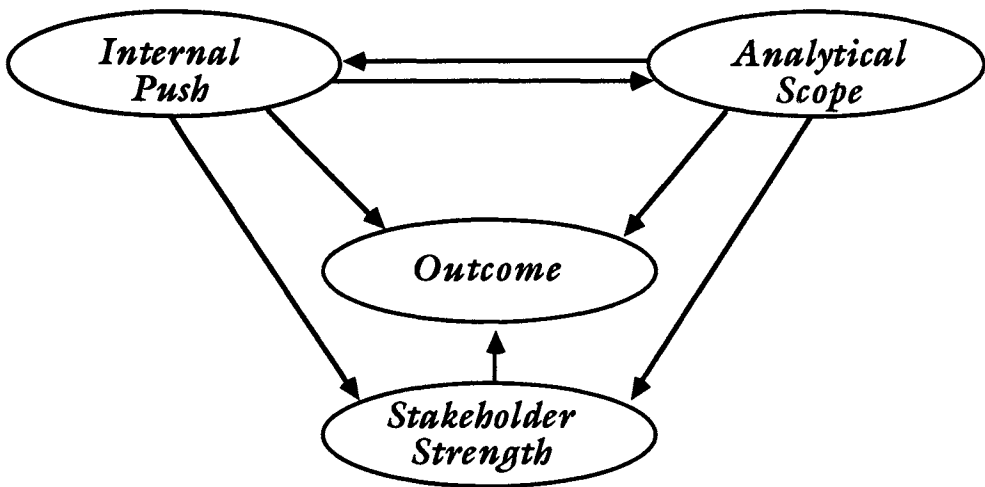
The internal enthusiasm and consensus might also influence how important SNI is to the project. Normally, we would expect that the higher the internal commitment, the lower the need for external financing. As we explained in chapter 5, however, in this study we are dealing with specific companies that seek up to 50% project financing of the cooperative ventures - financing that they could not have obtained from traditional, more risk-adverse, sources of financing. We expect, therefore, that most companies needed this financing and that the more they wanted this financing, the more committed they were.

This is also consistent with the way SNI operates as an organization. The SNI administration ensures that the partners are committed enough to the project before recommending financing. Hence, a strong "internal push" would, at least to some extent, positively influence the "stakeholder impact." It is difficult to see how there could be a recursive relationship between these two theoretical constructs. In the previous discussions, we have seen that in most cases the companies contacted SNI during or after the negotiations with the partner - not before. Hence, it is not likely that SNI, in general, influenced the degree of initial commitment and enthusiasm.

On the other hand, SNI might play an important role when it comes to the "analytical scope." After an initial proposal for a cooperative venture project, SNI often assigns an outside consultant both to carry out a feasibility study and make sure that the partners are sufficiently acquainted with each other. Hence, the stronger the importance of SNI financing, the more we would expect SNI to require comprehensive analyses and investigations. In other words, there is an expected positive relationship from the

"stakeholder impact" to the "analytical scope." The opposite situation, however, seems to be impossible.

This discussion can be summarized in the conceptual model presented in Exhibit 7-1 of how cooperative ventures are formed. This model consists of the three theoretical constructs as well as the outcome construct, which all factors are expected to influence. The arrows symbolize the hypotheses' causal relationships.



**Exhibit 7-1: Conceptual Model**

## 7.7 Tentative Conclusions

The purpose of this chapter was to arrive at a theoretically and empirically derived conceptual model of the relationship between the fundamental elements of the cooperative venture formation process in the present database. The starting point was the theoretical discussion in chapters

2 and 3 and the analogies drawn from research on strategy formation processes. These theoretical findings were supported by the initial empirical findings from the bi-variate analysis in chapter 6. The three constructs are related to each other and to a theoretically derived outcome construct, intended to capture several dimensions of how the parent companies perceived the venture's outcome.

This conceptual model is, indeed, a simplification of how cooperative ventures are formed, as seen from one parent company's perspective. In fact, it is a reduction of the previous analysis of seven sets of formation practices. However, given our research purpose (see chapter 1.4), the discussion of the previous literature (chapters 2 and 3), and the simple initial analysis of the particular database (chapter 6), this simple model seem to capture the core activities of the formation process.

Instead of converging into an elaboration of a multitude of potentially important and unimportant issues, we have tentatively shown that these fundamental activities, at least, seem to be important. At this stage, however, the question to answer is how important these activities are and how they influence each other?

## CHAPTER 8

# ESTIMATION OF THE COMCEPTUAL MODEL

### 8.1 Introduction

In this chapter we will analyze the conceptual model that emerged in chapter 7. This model consists of a few theoretical constructs that are seen as a combination of several underlying indicators. The constructs are also related to each other in a network sense-not just a bi-variate sense. The conceptual model specifies the assumed direction of the relationships, but gives no hints of the strength of these relationships in this specific population. Accordingly, the purpose of this estimation is to determine the relative strengths of each relationship between the theoretical constructs.

This chapter will begin with a presentation of the methodology used, including an introduction to, and motivation of, the use of a specific structural equation approach to estimate the model - namely the Latent Variable Path Analysis with Partial Least-Square Estimation (PLS). We will argue that this method is suitable for exploring a pattern in a set of cases, i.e., congruent with our purpose, rather than testing a theory per se, which is not our purpose. We will also discuss briefly the question of theory testing and explanation and see that given the research purpose - the latter of the two - the choice of methods is limited.

Three methodological considerations will also be discussed before specifying the models to be estimated. Based on the conceptual model and its feedback loop between two constructs, two complementary models will be estimated. This is necessary in order to obtain an assessment of the strength of this recursive relationship.

The final section of this chapter will discuss the results from the two estimations and, finally, draw some tentative conclusions.

## **8.2 PLS - A Second Generation Multivariate Method**

There has been a dramatic change in the use of quantitative research methods in social science during the last decade. Many researchers have taken the step from using simple bi-variate methods to using various multivariate methods, such as factor and principal component analysis, cluster analysis, and multiple regression. However, with contributions from psychometrics, econometrics, quantitative sociology, statistics, biometrics, education philosophy of science, numerical analysis, and, last but not least, computer science, a new set of multivariate methods has been developed. Since these methods provide more flexible ways for bringing theory and data together, they have been labeled "second-generation multivariate methods." Fornell explained the evolution of these methods:

Like the transition from bi-variate statistics to the first-generation of multivariate analysis, the shift to second-generation methods involves generalizations and extensions of the first-generation methods. In fact, all first-generation methods are special cases of second-generation methods [1987, p. 238].



The common characteristics of these methods are that they are all part of a methodological recognition that scientific theory involves both relatively abstract as well as empirically based variables. Whereas first-generation methods require little in terms of a priori specification, second-generation methodology emphasizes the cumulative aspect of theory development by which a priori knowledge is incorporated into empirical analysis. In fact, all first-generation methods are special cases of second generation methods. Such knowledge can be derived from theory, previous empirical findings, or research design.<sup>1</sup>

Introduced by Wold (1966), PLS is one of several second generation multivariate methods. More precisely, it is a general model for canonical correlation, redundancy analysis, external single-set component analysis, multiple regression, multiple discriminant analysis, multiple analysis of variance, principle components, and correspondence analysis. It is not a general model for factor analysis; and, although it embodies simultaneous equations, it differs from the traditional econometric approach in that it estimates relationships among both latent and directly observed variables. The main purpose of PLS is the prediction of empirical and/or theoretical variables - not theory testing. Wold explained the fundamental principle of PLS as follows:

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<sup>1</sup>

For a more detailed discussion of these methods, see for instance, Fornell (1982; 1987).

A soft model [i.e., a PLS model] can be interpreted as a give-and-take of information, information conveyed by inner relations between inner variables [i.e., the indicators], and by outer relations between the latent variables and their indicators. It is characteristic of soft modelling that all causal-predictive information of the model, and, in particular, all information between the different blocks of indicators, is assumed to be conveyed by inner relations via the inner variables. As long as he adheres to this fundamental principle, the investigator is free to design the arrow scheme (i.e., the PLS model) in accordance with his intention, intuition, and knowledge. In particular, he is free to design which latent variables and other inner variables the model should contain, which relations there are between the inner variables, and which indicators should be used for indirect observation of the various latent variables [Wold, 1982, p.329].

As illustrated in the conceptual model in chapter 7, the "inner relations" were assumed to be directionally linear. In other words, a change in an independent theoretical construct was expected to tell us how much a dependent theoretical construct would change, i.e., an assumed causality and analog to a regression coefficient. As pointed out by Cliff (1983), causal inference from structural modeling must be consistent with established principles of scientific inference. Since the purpose of this research is to point out the causal relationships in this sample, an assessment of the relative strengths of the relationships between the theoretical constructs forms the very core of the research interest in this study, i.e., indeed consistent with scientific inference in general. This perspective can be contrasted with symmetric relationships, e.g simple correlations, which do not provide information on the causal direction of the relationship.

The key feature of PLS is thus the estimation of each theoretical variable arrived at as a weighted aggregate of its indicators. The weights for the aggregates and the path coefficients are estimated in an iterative way by the PLS algorithm. In general, the estimation proceeds through two stages. The first stage measure the indicators as deviations

from their means, and the second stage estimates the parameters of theoretical constructs.

### 8.2.1 Relationship between Theoretical Constructs

The theoretical constructs in a model can be either endogenous or exogenous. The relationship between these constructs form an independent system of linear structural relationships. Let  $\eta = (\eta_1, \dots, \eta_m)$  be a vector of  $m$  endogenous theoretical variables, and  $\xi = (\xi_1, \dots, \xi_n)$  be a vector of  $n$  exogenous theoretical variables. The structural relationship between the theoretical variables (the "inner model") can be written as:

$$\eta = \beta\eta + \Gamma\xi + \delta \quad (1)$$

In this equation,  $\beta(m \times m)$  is a matrix of coefficient parameters for  $\eta$  (with zeros in the diagonal), and  $\Gamma(m \times n)$  is a matrix of coefficient parameters for  $\xi$ , and  $\delta$  is a  $(m \times 1)$  random vector for measurement errors. The theoretical variables are standardized so as to have unit variance, that is,  $\text{var}(\eta_i) = 1$ ,  $i = 1, \dots, m$ , and  $\text{var}(\xi_j) = 1$ ,  $j = 1, \dots, n$ . Also,  $E(\eta) = E(\xi) = E(\delta) = 0$ .

The measurement equations ("outer relations") are:

$$y = \Lambda_y \eta + \epsilon \quad (2)$$

$$x = \Lambda_x \xi + \delta \quad (3)$$

In these equations,  $y' = (y_1, y_2, \dots, y_p)$  and  $x' = (x_1, x_2, \dots, x_q)$  are the observed criteria and explanatory variables, respectively;  $\Lambda_y (p \times m)$  and  $\Lambda_x (q \times n)$  are the corresponding regression matrices; and  $\epsilon$  and  $\delta$  are residual vectors.

### 8.2.2 Relationship between Theoretical Construct and Indicators

The relationship between the theoretical construct and the respective indicators reflects the epistemological relationship in the model, i.e., the link between theory and data. In this context, a few basic considerations have to be satisfied.

First of all, we must recognize that theoretical constructs are seen as indirectly observed variables as such, indicated by several directly observed such indicators. An initial consideration concerns the fact that the theoretical constructs are seen as composites of the respective indicators, completely determined by only the combined effect of the indicators. Hence, these combined theoretical constructs, per se, are assumed to be free of measurement errors. However, each indicator has a measurement error, represented by the proportion of variance not shared by the theoretical construct. In other words, in the present study the theoretical constructs are viewed as component constructs. This theoretical view can be contrasted with an approach where the constructs are seen as consisting of the combined effect of the directly observed variables plus an indeterminate measurement error. In this approach, consequently, the theoretical constructs are viewed as factor constructs.

According to Fornell (1982), there are three types of such epistemologic relationships, illustrated by the use of reflective, formative or symmetric indicators. If the theoretical construct is seen as giving rise to the observed variables, the indicators are reflective. In other words, if the theoretical construct can be seen as the independent variable.

On the other hand, if the observed variables give rise to the theoretical construct, the indicators are formative. The theoretical construct can be seen as the dependent variable. Finally, if there is no assumption of the direction of the indicators, the indicators are symmetric. As explained earlier, the indicators to the three formation constructs are

seen as giving rise to their respective theoretical construct. The indicators of the outcome construct, on the other hand, are seen as reflecting the theoretical outcome construct.

In PLS, the unobservable variables are estimated as exact linear combinations of their empirical indicators, i.e., components. That is:

$$\eta = \pi_{\eta} y \quad (4)$$

$$\xi = \pi_{\xi} x \quad (5)$$

where  $\pi_{\eta}$  ( $p \times m$ ) and  $\pi_{\xi}$  ( $p \times m$ ) are regression matrices. In other words, all cases will have a value. From equations (2), (3), (4), and (5), the observed constructs can be viewed either as underlying factors or as indices produced by the observed variables, i.e., according to what was discussed above.<sup>2</sup>

### 8.2.3 Estimation

PLS estimates by means of a nonlinear operator for which the vector of the loadings is a fixed point. It is a least-squares approach that minimizes residual variances under a fixed-point constraint. The iteration to convergence implies that one part of the parameters is considered to be known and therefore fixed, while the other part of the parameters is fixed in the next iteration and what was previously fixed is estimated. The estimation proceeds in two steps. In a first step, an estimate is obtained for each theoretical variable as a linear combination of its indicators, so that the correlation between any two related theoretical constructs are maximized. In the next step, these estimates are treated as directly observed variables and  $\beta$  and  $\Gamma$  in equation (1) are estimated. As explained in greater detail by Fornell and

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<sup>2</sup> For a discussion of predictor specification in PLS, see Fornell (1982) and Fornell, Lorange, and Roos (1989).

Bookstein (1982), the problem of estimation is reduced to a series of interdependent simple and multiple regressions. This is, however, a stepwise estimation, not a simultaneous global optimization. Specifically, there are four minimization criteria in PLS:

$$\text{Min TR } (\zeta \zeta') \quad (6)$$

$$\text{Min TR } (\epsilon \epsilon') \quad (7)$$

$$\text{Min TR } (\delta \delta') \quad (8)$$

$$\text{Min TR } (E E') \quad (9)$$

Equation (6) means that all errors in the structural equations will be minimized, which will result in maximization of all  $R^2$  values. Minimization of equation (7) means that the measurement error in the  $y$  variables will be minimized, and equation (8) minimizes the measurement errors for the  $x$  variables. Equation (9) will always be "minimized" to zero in PLS because the latent variables can always be expressed as exact functions of their respective indicators, that is,

$$E = \eta - E(\eta|y) = \xi - E(\xi|x) = 0.$$

### 8.3 Theory Testing or Explanation?

The new structural equation approach, within the group of second-generation multivariate methods, is strongly identified with maximum likelihood factor analysis procedures generalized by Jöreskog (1979) and the associated computer program LISREL (Jöreskog and Sörbom, 1981). For marketing, in particular, nearly every application of structural modeling has used LISREL for parameter estimation (Fornell and Bookstein, 1982). The choice between methods is closely related to the researcher's purpose - theory testing or explanation?

The question of whether the purpose is theory testing or explanation is, in turn, closely related to the difference between a maximum likelihood estimation, based on a factor model (e.g., LISREL), and a partial least square estimation,

based on a component model (i.e., PLS). As we will argue in the following section, the former is more suitable for theory testing, while the latter is more suitable for explanatory purposes.

As mentioned above, under a factor model, the observed measures are assumed to have random error variance and measure specific variance components that are not of theoretical interest. This latter part of the observed variables is, therefore, excluded from the latent constructs. The covariances among the constructs are adjusted accordingly and, consequently, the amount of explained variance in the theoretical construct is not the main concern. Factor-based methods provide, therefore, parameter estimates that best explain the observed covariances (Anderson and Gerbing, 1988).

A confirmatory measurement, or factor analytic mode, specifies the relation of the observed measures to their underlying constructs. A confirmatory structure then specifies the causal relationship among the latent constructs, as proposed by theory. With full-information methods, such as LISREL and EQS (Bentler, 1985), measurement and structural sub-models are estimated simultaneously. Under the assumption of the normal distribution of the observed variables, maximum likelihood estimates are unbiased, consistent, and efficient. Since the standard errors of the parameter estimates can be obtained, it is possible to test their significance. In addition, it is also possible to test the overall fit of the model, because the fit model is distributed as a  $\chi^2$  adjusted by a constant multiple (Anderson and Gerbing, 1988).

Another disadvantage of these methods is that large sample sizes are required, not only relative to the number of variables but also in absolute numbers. Anderson and Gerbing (1988) came to the conclusion that a sample size of 150 or more is needed to obtain parameter estimates that have standard errors small enough to be of practical use. Other authors argue that even larger sample sizes are needed. Tanaka (1984), for instance, suggested sample sizes of at least 400. Moreover, in small sample size estimations other problems

often occur, such as improper solutions and factor indeterminacy. Fornell and Bookstein (1982) provided an example of these problems.

For explanatory purposes, on the other hand, the partial least square approach via the PLS approach is more suitable. In contrast to a maximum likelihood estimation, it is useful to explain all observed variance. Under the component model, no random error variance or measurement-specific variance is assumed. As we explained above, the parameters are estimated so as to explain as much variance as possible in a set of observed variables or in the latent variables<sup>3</sup>. PLS estimates the latent variables as exact linear combinations of the observed variables and can, therefore, provide exact values of the component scores. This exact definition of the component scores and the objective of explaining a large share of the variance can be useful when trying to predict the component scores of individual cases. (Anderson and Gerbing, 1988; Fornell and Bookstein, 1982).

One of the major disadvantages of the PLS approach is that there is no overall test of model fit. Instead, how good the fit is is evaluated as the amount of variance explained in the latent variables; and standard errors of the parameters can be obtained through jack-knifing (Efron, 1982; Dijkstra, 1983). As underscored by Jöreskog and Wold (1982), PLS will provide parameters that are asymptotically correct under the joint condition of consistency (i.e., large sample size) and consistency at large (i.e., many indicators per latent variable). Finally, Dijkstra (1983) argued that when using PLS in practice, the correlation between the latent variables will be underestimated, whereas the correlation between the indicators and their latent variable will be overestimated.

Before differentiating too much between the methods, we should note that some of the key authors on these methods argue that LISREL and PLS are complementary rather than competitive:

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<sup>3</sup>

See also Fornell and Bookstein (1982).



Maximum likelihood is theory-oriented, and emphasizes the transition from exploratory to confirmatory analysis. PLS is primarily intended for causal predictive analysis in situations of high complexity but low theoretical information [Jöreskog and Wold, 1982, p.270].

Based on the above discussion, however, some fundamental practical differences between the two methods can be derived. Among them, we will underscore the following three differences, which, on a cumulative basis, made us choose PLS over LISREL:<sup>4</sup>

First, data input for the LISREL algorithm is the covariance matrix of the observed variables, and LISREL is a Maximum Likelihood approach to retrieve the parameters from this covariance matrix. The task of estimating parameters from the covariance matrix is the source of the well-known identification problems in LISREL. Further, LISREL estimates the distribution of each latent variable, but cannot estimate either its case value nor its mean value:

To predict the case value of the observable, the case value of the latent variables must be estimated. Using raw data input, on the other hand, PLS makes an explicit, albeit deliberately approximate, estimation of each latent variable as a weighted aggregate of its indicators. The requisite weights, and later on other PLS parameters, are estimated using cross-product data input, and, therefore, no identification problems will arise [Wold, 1982, p. 342].

Second, in scaling up from smaller to larger systems as needed when dealing with real-world problems, LISREL sooner or later is likely to break down when there are too many parameters to estimate. In PLS estimation, the size of the model and the number of parameters is practically unrestricted. This concern, however, is not important for the present study.

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<sup>4</sup>

For further discussion of this matter see Fornell and Bookstein (1982) and Wold (1982).

Third, in the LISREL estimation it is assumed that the observable indicators under analysis are ruled by a joint multivariate distribution, usually a normal distribution, subject to independent observations. PLS, on the other hand, operates as a series of interdependent ordinary least square regressions, presuming no a priori distributional form at all.

#### **8.4 Methodological Considerations**

Frequently it is relatively easy to specify, estimate, and evaluate a structural model. It is important, therefore, not to over-interpret the findings from such an analysis. In this section we will discuss three sets of methodological considerations that should be addressed when setting up and estimating a structural model, namely, conceptual, statistical, and practical considerations. The emphasis will be on the conceptual considerations. The purpose with this discussion is to better understand and be alert to any pitfalls in structural modeling that might play a role when evaluating the results.

##### **8.4.1 Conceptual Considerations**

When specifying a structural model, an important question according to Bentler and Chou (1987) is whether the sample comes from a population that is relevant to the theoretical ideas being evaluated. In the present study, we have argued that the sample at hand should be seen as a population as such in that the sample, indeed, consisted of 91% of the population. Hence, in this case we do not have the problem of assessing whether the phenomenon being evaluated should be similar in, for instance, cooperative ventures between large and small firms, old and young firms, or between firms from different industries. The crucial point is, on the other hand, whether the population as such is relevant.

A second conceptual consideration regards whether the data have been gathered under appropriate conditions of measurement, that is, appropriate in relation to the theory. In the present study, the data were gathered through a questionnaire, from the key decision-makers involved in the initiation and formation, and under confidentiality. This would, thus, give credence to our argument that the data were collected in an appropriate way in relation to the phenomenon under investigation.

A third conceptual consideration has to do with whether a structural model attempts to describe cause-effect sequences that occur over time. In the present study, we have chosen to describe only some fundamental factors that occur when forming a cooperative venture and that influence subsequent outcome. By definition, this approach implies a time lag. Despite this time lag, we have argued that the basic pattern in the model makes sense, since our theory predicts some causality<sup>5</sup>. However, we must recognize the potential bias on causal effects over time lags<sup>6</sup>.

Strotz and Wold (1960) argued that such "instantaneous causation," with simultaneous mutual influences of variables on each other, makes sense where these influences are congruent with a firm's philosophy. Other authors have argued that cross-sectional models based on data at one time point only will virtually always yield biased results on causal relationships<sup>7</sup>. We might argue that longitudinal data might always be needed in order to evaluate causal sequences. In our model, however, we have not measured longitudinal data, but merely pictured various aspects of a phenomenon. We will not state that there are fixed causal relationships between the variables. Instead, we will estimate two model specifications,

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<sup>5</sup> These issues have been discussed by, for instance, Strotz and Wold (1960).

<sup>6</sup> This has been discussed by Reichart (1987).

<sup>7</sup> See, for instance, Gollob and Reichart (1987).

derived from the conceptual model and illustrating potential patterns of causal relationships.

This discussion raises the issue of drawing causal inferences in general. As underscored by Cliff (1983), causal inferences made from structural modeling must be consistent with established principles of scientific inference. There are, at least, three issues which must be discussed in connection with this matter. First of all, we need to stress the necessity of realizing that models are never confirmed by data - they gain support by failing to be disconfirmed (Anderson and Gerbing, 1988). Even though our simple model may fit the data, there may be other models that fit equally well. As we see in the next section, two different causal specifications of the model will equally fit the data. We must also consider how the causality is specified. Cliff (1983) emphasized that we should not always consider temporal order as a must for causal relationships. In addition, it is well known that correlation does not imply causation - the problem is that we are studying response-response rather than stimulus-response.

The fourth conceptual consideration has to do with whether the variables have been operationalized appropriately. We have argued previously that the theoretical constructs in the conceptual model are in accordance with theory. There is, of course, an obvious gap in meaning between the observed variables and what they were intended to mean. This concerns both invalidity, i.e., that we have measured something else, and unreliability, i.e., random measurement errors. The consequence of this, therefore, is that everything does not necessarily mean what we have understood it to mean. Cliff (1983) refers to this problem as the "nominalistic fallacy."

The fifth and final conceptual issue to be addressed deals with the relationship between a latent variable and its indicators. According to Bentler and Chou (1987), a latent variable "makes sense when its indicators are logical consequences of the latent variable, not causally related to each other, and are correlated sufficiently high to suggest a

common concept." In general, we have argued that the three fundamental factors, seen as latent variables, can be derived from theory. Hence, in Bentler and Chou's terms, given that the indicators fulfilled these requirements, our latent variables make sense in our conceptual model.

Summarizing the discussion, we can see that the present study seems to fulfill the conceptual requirements discussed in Bentler and Chou (1987). Let us now turn to a discussion of the statistical considerations associated with structural modeling.

#### 8.4.2 Statistical Considerations

It has been argued that if a number of statistical conditions are violated, the statistics involved may be misleading. According to Bentler and Chou (1988), at least the following conditions must be fulfilled:

1. independence of observations,
2. identical distributions,
3. simple random sampling,
4. functional form, i.e., relations among variables are linear,
5. specification of the distribution of variables,
6. covariance structure - not correlation structure,
7. large sample size,
8. a model has been identified,<sup>8</sup>
9. the model must be specified completely prior to estimation, i.e., represent a set of hypotheses, and
10. no parameters outside the parameter space.

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<sup>8</sup>

For a discussion of the identification problem in structural modeling, see Bentler and Jöreskog (1985).

As we have discussed previously, the partial least square approach has made most of these statistical requirements obsolete in the present study. In addition, we are not working with a randomized sample, merely a complete population in the present study. Hence, the statistical considerations outlined above do not cause any problems in this study.

#### 8.4.3 Practical Considerations

There are a number of practical considerations that also should be considered in structural modeling. The statistical results may make it difficult to interpret the findings. For instance, Bentler and Chou (1987) recommend that the complexity of the model should be relatively low and only small data sets should be analyzed, up to twenty variables. In the present study, we will use eighteen indicators.

Another practical issue has to do with the omission of key variables, which might result in biased conclusions. A third set of practical considerations deals with problems with the model's fit with the data. Although very interesting and important due to the use of the PLS method, these practical considerations are not applicable in the present study. It should also be noted that we have chosen, a priori, to simplify the model to be estimated in order not to be forced to omit key factors in the re-specifications. For us, it has been a question of matching comprehensiveness and practicality.

This discussion has provided us with the theoretical background of the PLS method. We have also seen that a number of practical and theoretical considerations have, more or less, been fulfilled.

#### 8.5 **Specification and Estimation of Two Models**

The conceptual model illustrated the relatively few relationships to be estimated. As we discussed above, however,

the suggested feedback loop between two of the theoretical constructs forces us to specify two different models. These models should not be seen as alternative but complementary, an aspect which will be discussed further in the last section of this chapter.

The theoretical constructs were operationalized via a number of indicators<sup>9</sup>. Specifically, the "internal push" construct was indicated by the following directly observed variables (measured on 5-point Lickert scales):

- 
1. Degree of internal consensus regarding the cooperative venture project.
  2. Commitment to the cooperative venture by top management.
  3. Commitment to the cooperative venture by the financial function of the firm.
  4. Commitment to the cooperative venture by the product development function of the firm.
  5. Commitment to the cooperative venture by the production function of the firm.
  6. Commitment to the cooperative venture by the marketing function of the firm.
- 

**Exhibit 8-1: Indicators of "Internal Push"**

The "analytical scope" construct was indicated by the following variables:

- 
1. The extent to which the cooperative venture's fit with own strategy was analyzed.
  2. The extent to which the cooperative venture's fit with the partner's strategy was analyzed.
  3. The extent to which the market for the cooperative venture's product was analyzed.
  4. The extent to which the cooperative venture's competitive situation was analyzed.
  5. The extent to which own relevant resources were analyzed.
  6. The extent to which the partner's relevant resources were analyzed.
- 

**Exhibit 8-2: Indicators of "Analytical Scope"**

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<sup>9</sup>

For a discussion of the rationales for choosing these specific indicators, see chapter 7.

The "stakeholder strength" construct was indicated by the following two variables (binary scale):

- 
- 
1. Whether or not the project, in its present form, would have been pursued without the stakeholder's support.
  2. Whether or not the project, in a different form, would have been pursued.
- 
- 

**Exhibit 8-3: Indicators of the "Stakeholder Strenght"**

Finally, the "outcome" construct was indicated by the following variables:

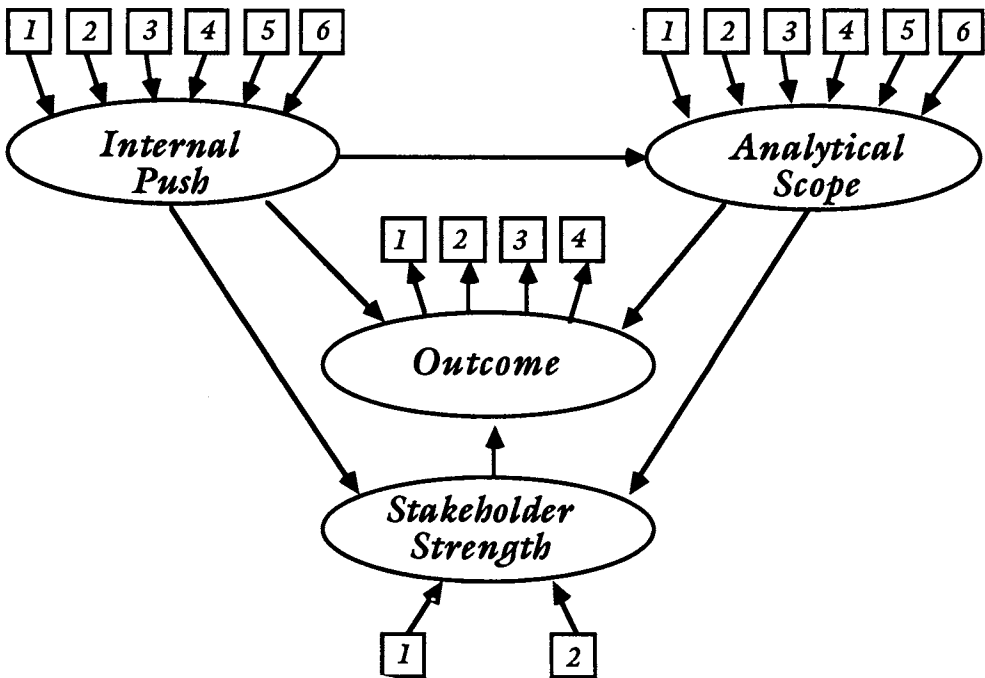
- 
- 
1. General result so far.
  2. Difference between planned versus increased costs.
  3. Difference between planned versus increased revenues.
  4. Personal relationship between main actors in the parent firms.
- 
- 

**Exhibit 8-4: Indicators of "Outcome"**

**8.5.1 The First Model: Specification and Estimation**

The first model specification is outlined in exhibit 8-5. The signs indicate the hypothesized causality of the relationships in the model.





**Exhibit 8-5: Specification of the First Model**

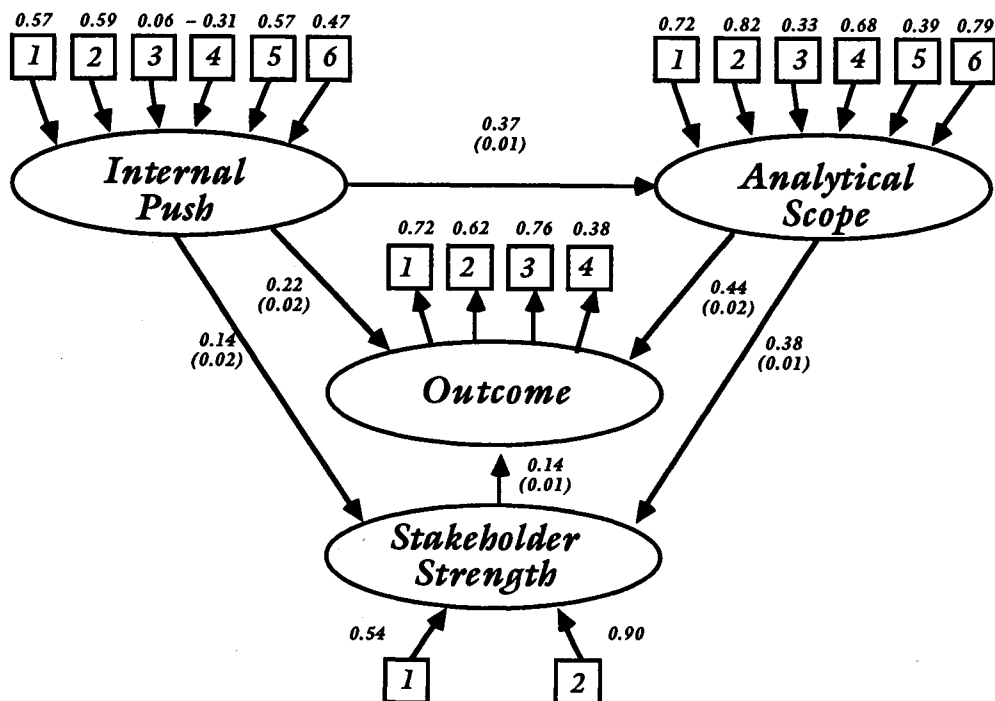
In this model, "internal push" is expected to influence positively "analytical scope" and "stakeholder strength" factors. "stakeholder strength," in turn, is expected to influence "analytical scope." In addition, all three factors are expected to influence outcome directly. This means, for instance, that the expected causal relationship between "internal push" and the outcome construct reflects the fact that outcome, to a certain extent, is determined by the degree of consensus and the degree of commitment among various key personnel in the parent firm.

In order to examine the quality of the latent variables, it is necessary to study the loadings of each indicator and how much of each indicator's variance is accounted for by each theoretical variable, i.e., the communality. The numerical estimate for a loading is equivalent to the simple correlation coefficient between an indicator and the latent variable, which is presented in Appendix 6.

From Appendix 6, we can see that all indicators except one have the expected positive sign. Looking first at the "internal push" construct, the communality for two indicators is very low. This means that these variables' variance is "picked up" by the latent construct to only a very small extent. The indicator with the negative sign, i.e., commitment to the cooperative venture project by the product function in the company, is, consequently, negatively related to "internal push." Thus, in our sample this variable did not add to our initial conceptualization of the theoretical construct commitment. The other three latent variables seem, however, to reflect the underlying indicators relatively well, i.e., their theoretical meaning.

In a PLS estimation, all parameters are expressed in standardized form such that the coefficients can be used as measures of relative importance. When assessing the inner relationships, i.e., between the latent variables, we are confronted with the question of when a coefficient is sufficiently large in order to signal an interpretable influence. As discussed previously, traditional significance tests and confidence intervals for the estimated coefficients between the latent variables in the PLS model cannot be interpreted. Nevertheless, if we view our sample as being drawn from some hypothetical population, we can, without evoking normality assumptions, rely upon Tukey's jack-knife test to construct a distribution of parameter estimates (Dijkstra, 1983). This jack-knifing was accomplished by estimating the parameters sixty-seven times in our dataset of sixty-seven cases, deleting one observation each time. The sixty-seven estimates for the same parameters were then used to compute mean and standard deviation. The coefficients were a priori deemed significant if the coefficients were greater than twice their standard deviation.

The results of the estimation of the model specifications are presented in exhibit 8-6.

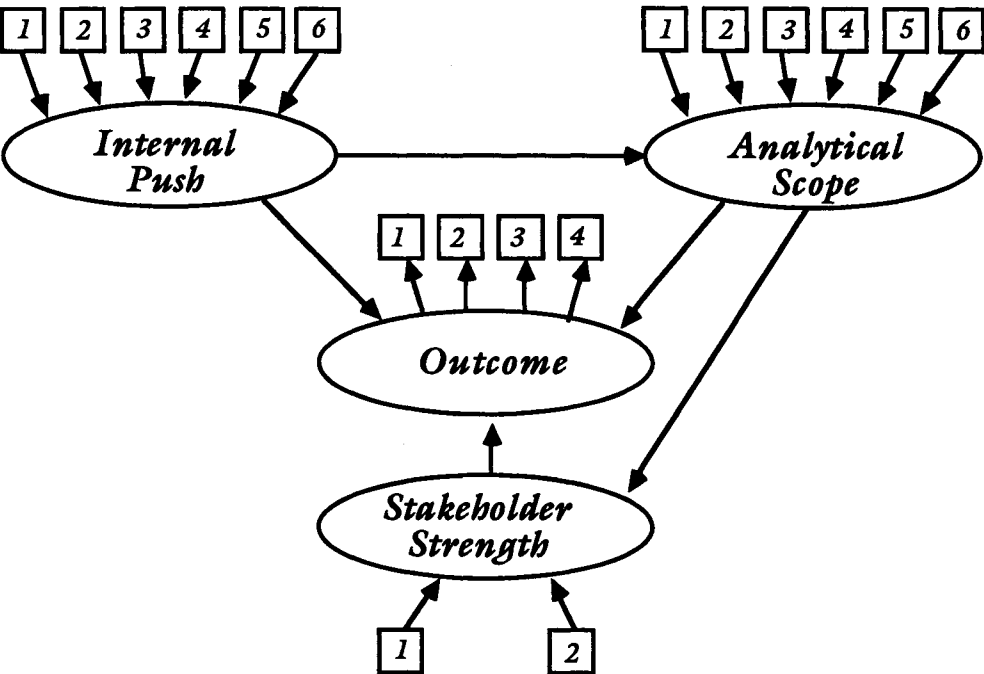


**Exhibit 8-6: Results from Estimation of the First Model**

As we can see from exhibit 8-6, all path coefficients did indeed turn out to be significant according to the jack-knifing test. We can also see that the influence of "internal push" on "analytical scope" is relatively large (0.37), but its influence on "stakeholder strength" is relatively small (0.14). This indicates a relatively small degree of causality from "internal push" to "stakeholder strength." However, the influence of the "stakeholder strength" construct on "analytical scope" is relatively large (0.38). There are also some clear differences when it comes to influences on outcome. The influence of the "analytical scope" construct is twice as high (0.44) as "internal push" (0.22). The influence of "stakeholder strength" is only a third (0.14) of that of "analytical scope." The amount of explained variance in the outcome construct was 40%.

8.5.2 The Second Model: Specification and Estimation

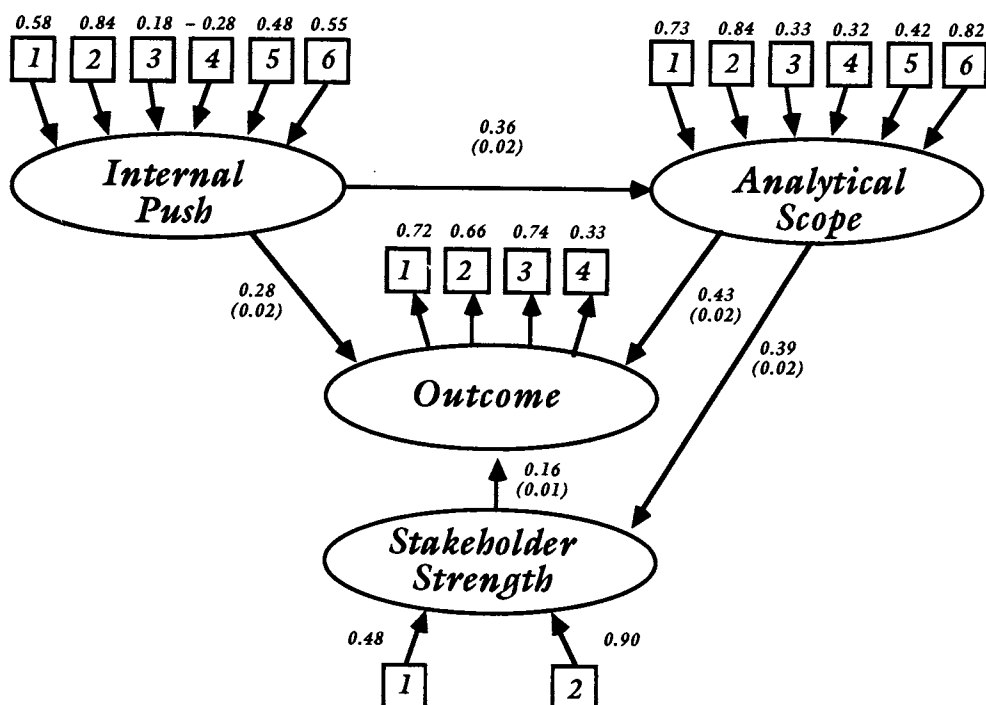
The second model specification is outlined in exhibit 8-7. Again, the signs indicate the hypothesized directions of the relationships in the model.



**Exhibit 8-7: Specification of the Second Model**

The major difference in this model specification is that "analytical scope" is expected to influence "internal push" positively, i.e., in contrast with the first model specification and reflecting the above suggested recursive causal relationship. In addition, the path between "internal push" and "stakeholder strength" has been omitted. Since this path results in a loop between the three theoretical constructs, such a path is neither possible to interpret nor allowed in the model specification.

The results of the estimation of the second model specification are shown in exhibit 8-8.



**Exhibit 8-8: Results from Estimation of the Second Model**

As we can see from Appendix 6, there is no significant difference in the meaning of the latent variables in terms of loadings and communalities from this estimation. Again, all path coefficients were significant according to our jack-knifing test. Not surprisingly, these findings are very similar to those of the first estimation. The influence of "analytical scope" on "internal push" is about the same (0.36) as the opposite relationship as outlined in model 1. Again, the influence of "stakeholder strength" on "analytical scope" is relatively large (0.39). The clear difference remains when it come to influence on outcome. The influence of "analytical scope" is 0.43; but the influence of "internal push" increased to 0.28. The influence of "stakeholder strength" also increased somewhat (0.16), but was still much smaller than that of "analytical scope." The amount of explained variance in the outcome construct increased to 45%.

### 8.5.3 Summary of the Estimations

In general, the estimations of the two model specifications provided similar results in that the path coefficients were approximately the same in both models. The results from the two estimations are summarized below.

Path			Coefficient	Standard Error
<b>Model 1:</b>				
Internal Push	->	Analytical Scope	0.37	0.01
	->	Stakeholder Strength	0.14	0.02
	->	Outcome	0.22	0.02
Stakeholder Strength	->	Analytical Scope	0.38	0.01
	->	Outcome	0.14	0.01
Analytical Scope	->	Outcome	0.44	0.02
<b>Model 2:</b>				
Internal Push	->	Outcome	0.28	0.02
Stakeholder Strength	->	Analytical Scope	0.39	0.02
	->	Outcome	0.16	0.18
Analytical Scope	->	Internal Push	0.36	0.02
	->	Outcome	0.43	0.02

### Exhibit 8-9: Summary of the Two Estimations

The total influence of each factor on the outcome construct in each of the model specifications is summarized in exhibit 8-10.

#### The First Model

Internal Push:	<b>0.46</b> (= 0.22 + 0.37*0.44 + 0.14*0.14 + 0.14*0.38*0.44)
Analytical Scope:	<b>0.44</b>
Stakeholder Strength:	<b>0.30</b> (= 0.14 + 0.38*0.44)

#### The Second Model

Internal Strength:	<b>0.28</b>
Analytical Scope:	<b>0.52</b> (= 0.43 + 0.36*0.28)
Stakeholder Strength:	<b>0.37</b> (= 0.16 + 0.39*0.43 + 0.39*0.36*0.28)

### Exhibit 8-10: Influence on Outcome in the Two Models.

Let us now turn to a discussion of the tentative conclusions we might draw from these findings in this particular set of companies.

## 8.6 Tentative Conclusions

As we recall from chapter 7, the conceptual model specified the suggested direction of the relationships but not the relative strength of these relationships. To address this, the purpose of this chapter was to get an assessment of these relative strengths, which was expected to add significantly to the previous theoretical and empirical findings.

Based on the conceptual model, we have specified and estimated two complementary models of how the theoretical constructs influence each other. The results of these estimations provided similar results, suggesting that we, from a theoretical and practical standpoint, need to judge which model specification best characterizes the relationships. More precisely, the question is to what extent there is a "feedback" loop between the degree of investigations and analyses carried out back to the degree of internal commitment and engagement regarding the cooperative venture. Such a loop was, indeed, expected and was, at least to some extent, verified by the fact that the relationships were of equal size in the two model estimations. We have interpreted this to mean that both model specifications, in their respective ways, illustrate this recursive relationship between the two theoretical constructs - but we cannot be really sure which is the most accurate description.

What is more interesting, however, is the strength of each relationship relative to the others as provided by the PLS algorithm. Even though the direction of the relationships was confirmed, some interesting differences were found. In the first model, i.e., where there was no "feed-back loop", we could see that the influence of "internal push" on "analytical

scope" was much larger than the influence on "internal push" on "stakeholder strength," but of equal size as the influence of "stakeholder strength" on "analytical scope." Hence, "internal push" does, indeed, seem to play a key role as a drive for thorough assessments and investigations in connection with the cooperative venture, specifically regarding partner ability. This can also be interpreted to mean that a stronger internal commitment, to only a limited extent, influenced whether the cooperative venture would have been pursued without the stakeholder's project financing or not. Considering the nature of the population, i.e., that all companies had received project financing from SNI, this is not surprising.

The pattern was similar in the second model. However, as a natural consequence of omitting the path from "internal push" to "stakeholder strength," the coefficient between "internal push" and outcome increased one-fourth over its original value. This is interpreted as illustrating the increased push from "analytical scope" toward outcome - via "internal push," i.e., the very effect of the above discussed feedback loop. When it comes to explained variation in the outcome construct, we can see that this second model specification explains 45% of the variance in the outcome construct, i.e., somewhat more than in the previous model.

The fact that we actually explained this amount of variation in the outcome construct - in terms of the three theoretical constructs only - adds credence to our overall assumption of the importance of such a fundamental aspect of forming a cooperative venture.

This analysis was the second and final quantitative analysis of the database. As we have already mentioned, these analyses have provided useful and inspiring insights into the phenomenon of how the cooperative ventures were formed in our population. However, the simplicity of the model specifications, coupled with the fact that 55-60% of the variance of the outcome construct still remains to be explained, suggests that a number of other issues also play a



role during the formation phase. In addition, it might be difficult to interpret these quantitative findings into a practical meaning. In other words, some questions still remain to be answered. Let us now discuss how to answer these questions.



## CHAPTER 9

# QUALITATIVE ANALYSIS OF THE CONCEPTUAL MODEL: A FRAMEWORK FOR CASE STUDIES

### 9.1 Introduction

We have explored the formation practices of sixty-seven companies by means of both a simple bi-variate and a latent variable path analysis approach. This exploration has included discrimination between the parent companies of "good" and "less good" cooperative ventures, an estimation of the causal relationships between three theoretical constructs in a simplified model for formation of these cooperative ventures, and an explanation of a large portion of the variation in the performance construct in this model. On a cumulative basis, these findings have illustrated that a few fundamental elements of the formation phase, in a certain way, influence each other as well as the subsequent performance of the venture. This was consistent with the theoretical suggestions outlined in chapters 2 and 3, as well as with some of the respondents' experiences as expressed by comments in the questionnaire (see chapter 6).

Despite these hopeful results, some questions still remain unanswered. In particular, we will address three sets of questions. The first set concerns the nature of the relationship between the degree of commitment regarding the cooperative venture ("internal push") and the degree of investigations and analyses carried out ("analytical scope"), i.e., what was referred to as the feedback loop between these

two theoretical constructs. The PLS analysis verified that there, indeed, seems to be some kind of recursive relationship - of equal strength. The problem is, however, to determine the nature of this relationship - is it really recursive, and if so, in what way?

The second set of questions is related to the meaning of the causal relationships between the theoretical variables, i.e., the "path coefficients" arrived at via the PLS estimations. We could see that some of these coefficients were significantly larger than others, indicating a stronger causal direction. However, how do we really interpret the relationships? Are they really causal? What does a higher value really mean? In addition, we might wonder what it really means when we have explained some 40% of the variance in the performance construct.

The third set of questions involves the narrow focus of the empirical study so far. We have previously explained that our purpose was, indeed, to pursue a very focused study, but what are some of the other factors that played a role when these cooperative ventures were formed? Did some of the factors discussed in the bi-variate analysis (chapter 6) play a role that we did not observe? What was SNI's operative role, in addition to providing project financing?

In order to answer these questions, we definitely need more detailed information. Therefore, we made the natural decision to complement the study with an additional qualitative research approach. This chapter presents this additional qualitative research approach, which was operationalized by case studies. The overall purpose of the discussion in this chapter is to provide a logical basis for pursuing case studies as well as a framework for case study analysis.

In the following sections, the framework for our selection of four case studies will be discussed. We will also draw upon Yin (1984) and discuss how we have considered the relevance of these case studies. In the final section, we will draw some tentative conclusions to this approach.

## 9.2 Selection of Cases

The four cooperative ventures were selected from the same population of companies that was studied previously in the questionnaire study. Thereby, it would be possible to compare these companies' formation practices as described by the previous statistical analysis with more detailed information.

The companies were selected mainly on the basis of their "availability," i.e., whether it would indeed be possible to carry out case studies with the blessing of both partner companies. Hence, this practical consideration was very important.

A theoretical consideration did, however, also play a role. Given the distribution of the responses in the questionnaire study, it was possible to see, very broadly, how a "typical" formation process might look - in other words, in a company close to the average, or median, on most variables. Consequently, we might also see some characteristics of an "atypical" cooperative venture formation process, i.e., a company more or less in the tails of the distribution of various variables. Due to confidentiality, it has not been possible to reveal each individual company's questionnaire responses. A thorough study of many individual variables, however, showed that some companies indeed seemed to be typical and others atypical in this respect. This has to do with a number of aspects, including variables regarding background, experience, interaction, investigations, the agreement, and the importance of SNI.

The companies were selected so that pair-wise, at least to some extent, they discriminated in terms of the formation practices described in the questionnaire. Accordingly, cases 1 and 2 represent cooperative ventures where the parent companies' formation practices, in general, were quite typical. In cases 3 and 4, on the other hand, the formation practices seemed to be more "atypical."

We also were interested in relating various formation factors to the outcome of the cooperative venture, along the lines of the previous quantitative analyses. In other words, the companies pair-wise were to have different perceptions regarding the outcome of their respective venture. We selected cooperative ventures that were either "good" or "less good" from the parent companies' perspective. In fact, we chose cooperative ventures where the outcome could be characterized more as "very good" and "very bad"! This was assessed at the time the case descriptions ended, namely mid-1988. It should be noted that these performance assessments, therefore, could have differed from what was indicated in the questionnaires from early 1987. The formation practices discussed in the case studies, on the other hand, should be similar to what was portrayed in the questionnaires.

The cooperative ventures in cases 1 and 3 were, indeed, perceived to have good outcomes at that time. The cooperative venture described in Case 2, on the other hand, had been dissolved; and both partner companies were quite dissatisfied with this evolution. In case 4, too, the cooperative venture had been dissolved; and both partners were dissatisfied with the results. Hence, the two latter cases represent cooperative ventures with bad outcomes, as perceived by the parent companies<sup>1</sup>.

From this theoretical perspective, the cases were selected according to the following matrix:

---

<sup>1</sup> It should be noted that both respondents in case 4 indicated in the questionnaire that they were very pleased with the performance to date. This illustrates the obvious fact that what happens after the formation plays an important role for the outcome. In the present study we have, however, argued that the fundamental elements described in the conceptual model are necessary but not sufficient. Hence, we acknowledge that many other factors do play important roles.

### Formation practices

		Typical	Atypical
Outcome	Good	Case 1	Case 3
	Less good	Case 2	Case 4

#### Exhibit 9-1: Selection of Case Studies

We should note, first, that this categorization is not as robust as exhibit 9-1 might imply and that, second, we must, therefore, be careful in drawing conclusions based on this.

Case 1 describes a cooperative venture between the Swedish company Viak AB and the Norwegian company Terotech AS. The two companies decided to develop a computerized system for technical documentation, to be marketed mainly in the offshore industry. Despite a turbulent environment and many changes in key personnel of Terotech, both parent companies were very pleased with the implementation and performance of the venture. This case study is presented in Appendix 7.

In case 2, the subsidiaries of a large Swedish corporation and a Norwegian corporation formed a separate joint venture company in order to develop and market a new system for incinerating industrial waste. This joint venture had a complicated background involving several other companies and had to be dissolved before the operations began due to both lack of interest in the market, and lack of enthusiasm in the parent companies. This case study is outlined in Appendix 8.

The two companies in case 3 were completely dependent on the cooperative venture idea. As a matter of fact, the Norwegian company, Alter Consult AS, was created to be a cooperative venture partner and to market in Norway the aluminum balconies manufactured by the Swedish partner company, Alnova AB. Due to some problems in the Swedish market, these Norwegian sales were very important for Alnova.

Despite some serious obstacles in their path, the two partner companies were very pleased with the cooperative venture. In fact, it has also evolved into a second phase including other countries in Europe. This cooperative venture is presented in Appendix 9.

Finally, in case 4, the two partner companies formed a cooperative venture only to market each other's garden equipment products in their respective home markets. Nonetheless, the long-term intention was to allow the cooperative venture to evolve into a separate joint venture company including both product development and international market development. The cooperative venture was based on an exceptionally good personal relationship between the two project leaders. When the Swedish partner company suddenly was sold to the Norwegian partner company's main competitor, however, problems soon emerged. The cooperative venture was dissolved; and the Norwegian partner ran into financial difficulties and, finally, filed for bankruptcy. Both partner companies were very unhappy with the performance. This case is presented in Appendix 10.<sup>2</sup>

### 9.3 Relevance Tests

Having chosen to use case studies, our next logical step is to consider some of the criticism levelled at this approach (but not discussed extensively here). A case study should, according to Yin (1984), be tested for relevance in the following four ways:

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<sup>2</sup> It is not unusual to present the case studies as an integrated part of the text in research practice. In Bower (1970), for instance, presented the case studies in the middle part of the book. In our opinion, this might be distracting to the reader. Because we do not want to "force" the case studies on the reader of this dissertation, the four case studies can be found in Appendices 7-10.



- construct validity,
- internal validity,
- external validity, and
- reliability.

In the following four sections we will discuss how these issues were tackled in the qualitative approach in the present study.

#### 9.3.1 Construct Validity

Construct validity implies establishing correct operational measures for the concepts being studied by (a) using multiple sources of information, (b) establishing a potential chain of evidence, and (c) having key informants review the draft (Yin, 1984).

In general, this means that we must select the specific types of changes to be studied, and indeed must demonstrate that the selected measures of these changes do reflect the selected types. In the present study, our purpose was to establish a simple chain of events in the formation practices and relate this to performance.

The data in the case studies were collected through several sources. First, it was possible to obtain a relatively large amount of material regarding each cooperative venture and its parent companies through SNI's files. A potential cooperative venture partner had to provide significant amounts of information to SNI in its formal application for project financing. This information included basic information in the form of memoranda, letters, and other written file materials regarding the cooperative venture idea, background, main actors, the companies, business plans, etc. In addition, SNI's Managing Director was interviewed before the companies were contacted. All pertinent documents, i.e., all those relating in any way to the formation process under study, in SNI's files were examined before the companies were contacted.

Secondly, key people (the participants in the cooperative venture formation process) in each parent company were interviewed. The interview protocol was sent to these people a week before the interview. Both semi-structured in-person and telephone interviews were conducted with the key informants in three of the four cases (cases 1-3). Only telephone interviews were conducted for the last cooperative venture (case 4). We should note that the author had previously been in contact with the project leaders in both companies in case 4. Therefore, access was much better in this case.

Between two and five people were interviewed in each company, totalling sixteen personal interviews. For each case, SNI's Managing Director was personally interviewed two to three times. After reviewing the information, we contacted each informant one to four times via telephone with additional questions. In addition, in three of the four cooperative ventures, outside informants, such as SNI's "investigators," were interviewed. The drafts of each written case study were sent to the key informants in each company for comments and formal approval before completion.

#### 9.3.2 Internal Validity

According to Yin (1984), internal validity is obtained by establishing causal relationships, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships. This can be carried out by means of pattern matching, explanation building, or time-series analysis.

In the present study we wanted to provide a relatively detailed description of the background of the cooperative venture projects, how they were formed, how the partners interacted and reached an agreement, and SNI's role. Also, we wanted to illustrate how the cooperative venture was implemented and evolved over time, as well as the subsequent performance of the venture. By producing such a detailed description, we hoped to find some indications of causal

relationships that might validate the previous quantitative findings. In addition, the case studies represented one phase of the overall research design and were used as a complement to several types of statistical analyses. Through this approach we, thus, might feel more comfortable with questions about whether we have drawn the right inferences and whether the evidence points in the same direction.

#### 9.3.3 External Validity

External validity can be obtained by establishing the domain to which a study's findings can be generalized. Yin (1984) argued that this can be carried out through replication, i.e., comparing with multiple experiments or assessing the logic in multiple case studies.

Since we were working with a particular population of cooperative ventures, this is an important factor to consider in the present research. Therefore, several case studies were carried out, but they come from the same population and are included in the previous quantitative analysis. Hence, we must be careful in generalizing the findings outside these specific settings.

#### 9.3.4 Reliability

According to Yin (1984), we also need to convince the reader that the operations of this study can be repeated with basically the same results, i.e., be reliable. This can be done by using case study protocols and developing a "case study database." In general, the recommendation is to make as many steps as operational as possible.

In the present study, we formalized an interview protocol based on the logic in the questionnaire and supplemented by questions on industry, strategic fit, implementation, and evolution. Hence, all the variables included in the interviews, and thereby in the case illustrations, were operationalized in this protocol.

#### 9.4 Tentative Conclusions

The purpose of this chapter was to provide a basis for pursuing and analyzing case studies. This research approach would logically follow from some of the unanswered questions raised in the previous quantitative analyses in chapters 6 and 8.

We can thus conclude that the case studies need to be analyzed in two different ways. First, each of the eight companies' formation phases should be analyzed in terms of the conceptual model only - in other words, in terms of the eighteen variables elaborated in the PLS analysis, which includes assessments of the relative strengths of the theoretical constructs, how they are related to each other, and their impact on the outcome. This analysis is presented in chapter 10.

The second analysis is an exploratory search of additional factors that seem to be important in the eight companies' formation phase and includes assessments of each factor's relative importance as well as how these factors influenced outcome. This analysis is presented in chapter 11.

In addition to these two types of analyses, a third and final analysis will take a closer look at the interaction pattern between the two parent firms during the formation process - in terms of the various factors discussed previously.

As we can see from the discussion of the relevance of our case studies, Yin's (1984) four criteria have been considered in the present study. Hence, we can conclude that the case studies presented in the present study are indeed relevant. The main thing to remember is, however, that the case studies are an integrated part of the broader research design of the study

## CHAPTER 10

# CLINICAL FINDINGS ON THREE FORMATION CONSTRUCTS

### 10.1 Introduction

In this chapter, each of the eight companies' cooperative venture formation practices, as illustrated in the four case studies, will be discussed in terms of the three theoretical constructs previously elaborated in chapter 9. The purpose of this analysis is to see whether the general pattern in the conceptual model holds if a qualitative assessment is made based on more detailed information in specific cases. Thereby, we hope to better understand the quantitative results and also add a "qualitative" understanding. It should be underscored that the main purpose of this analysis is to examine each factor's potential influence on performance - not on each other.

Following the conceptual model and its three "factors" elaborated on previously, the eighteen indicators served as the basis for the discussion. A (+), (0) or (-) was assigned to each indicator for each company, indicating the direction of a given indicator's influence on a given construct. The cumulative sum of the indicator will be interpreted as a proxy of the overall strength of each theoretical construct. Hence, each indicator will not be weighted. Comparing these strengths with performance, we will also discuss which forces seem to discriminate with respect to the perceived performance construct. First, the strength of "internal push" in the four

case illustrations will be discussed, followed by "analytical scope", "stakeholder strength", and finally "outcome." The discussion is limited to only these three factors and their potential impact on outcome<sup>1</sup>. In the next chapter will identify and evaluate an additional set of formation issues.

## 10.2 Internal Push

The "internal push" was indicated by the following six directly observed variables:

- 
1. Degree of internal consensus regarding the cooperative venture project.
  2. Commitment to the cooperative venture by top management.
  3. Commitment to the cooperative venture by the financial function of the company.
  4. Commitment to the cooperative venture by the product development function of the company.
  5. Commitment to the cooperative venture by the production function of the company.
  6. Commitment to the cooperative venture by the marketing function of the company.
- 

### Exhibit 10-1: Indicators of "Internal Push"

Consequently, we are interested in assessing the degree of consensus in each parent company as well as understanding the extent to which various key persons and organizational functions were committed to the cooperative venture.

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<sup>1</sup>

Due to confidentiality reasons, we cannot report the specific responses as found in the questionnaire. In general, these responses were of, at least, the same direction compared to what was found in our analysis.

### 10.2.1 Case 1: Data Based System for Technical Documentation<sup>2</sup>

The cooperative venture described in case 1 evolved as a means for developing a computerized system and marketing this system on both the Norwegian and Swedish markets. In the Swedish partner company, Viak, two people were involved during the formation practices. The Technical Manager had the initial contacts with the partner regarding a potential cooperation. Moreover, at the second meeting between the parties, the Managing Director also became actively involved in the discussions. Hence, in terms of "internal push" in the formation practices model, top management and the product development function (and to some extent the production function) were involved to a great extent.

Because Viak's Karlstad office is such a small company (38 employees), the Managing Director was, to a great extent, involved in various organizational functions, such as market development of the company's services and financial control. Considering the high degree of internal consensus and the relatively small organization, the cooperative venture idea diffused rapidly in this small organization. Since the formation practices developed smoothly, and since the key people in Viak appeared to be satisfied, we can conclude that the degree of internal consensus and commitment regarding the cooperative venture was relatively high.

In summary, it appears that the "internal push" in the formation process at Viak was relatively strong in general. The degree of internal consensus (indicator 1) was high, top management (indicator 2) and product development (indicator 3) were clearly committed. In addition, other organizational functions played a positive role, but we were unable to assess the extent.

In the Norwegian partner company, Terotech, the cooperative venture idea was also pursued by the Managing Director and the Technical Manager, i.e., the top management and product development (and production) function. The most

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<sup>2</sup> The companies's real names are used in Case 1.

important difference was, however, the significant change in key personnel in this company, including these two key functions. Hence, the degree of commitment to the project, although high in general, was somewhat lower in Terotech compared to Viak.

The project seems to have been pursued by top management and technical management only, to a greater extent than in Viak. As a matter of fact, one of the former Technical Managers stated that these were the only persons involved in the preparations and that they did not want to involve other people in the project until it was more tangible. The motivation was that the company already was involved in a substantial segment of the project, thus indicating that the degree of internal consensus in this company was somewhat lower than in Viak. Hence, other organizational functions were involved to only a limited extent.

This brief discussion has shown that "internal push," as defined by the above six indicators, was relatively strong in both companies, although less so in Terotech. This will be quantified as follows:

Indicators	Viak	Terotech
Internal consensus	+	0
Commitment - top management	+	+
Commitment - product development	+	+
Commitment - production	0	.
Commitment - marketing	0	.
Commitment - financial	0	.
Summary:	3	2

**Exhibit 10-2: "Internal Push" in Case 1**

**10.2.2 Case 2: Industrial Waste Incineration<sup>3</sup>**

The venture described in case 2 was much more complicated than that outlined in case 1. In general, there

<sup>3</sup> The companies' names are disguised in case 2.



was a difference between the two companies in case 2 regarding the strengths of their respective "internal pushes" in the formation practices.

In the Swedish partner company, S-PART, we can see that the Managing Director demonstrated a relatively high degree of commitment to the joint venture project, both when it came to acquiring 50% of the licence and the subsequent joint venture directly with N-PART. The Managing Director of S-PART discussed the joint venture idea with his contact in the parent company who was clearly not initially interested in the project, but, over time, appeared to change his mind (it should be noted that he became a member of the board of the joint venture company). The Head of the Division of S-CONCERN (S-PART's parent company) discussed, and obtained acceptance for, the joint venture with the CEO of his corporation. Hence, the cooperative venture idea was discussed with, and accepted by, the top management in the parent company of the Swedish partner company. On the other hand, it appeared that the joint venture project was pursued by the Managing Director only - as was the case in N-PART. However, this company's resource input was engineering services for product development in a significantly costly joint venture. Even though it is difficult to say to what extent other managers were committed to the project, the other divisions were aware of what was going on but were not interested in the project.

The Managing Director (= Project Leader) of the Norwegian partner company, N-PART, was employed after his company had become involved in the first joint venture with the consulting company (Joint Venture I) and was not interested in the project. Indeed, he stressed that the joint venture was only one of several projects in his company's portfolio. Not even in the case of the new joint venture (Joint Venture II), it seemed as though he was not particularly enthusiastic. As a matter of fact, the joint venture with the Swedish company might have been a means to "save" the entire project, i.e., to shift the overall responsibility to an industrial corporation (= S-PART).

In terms of the formation practices model, consequently, top management commitment was relatively low. The joint venture was pursued by the Managing Director only; and N-PART's two parent companies were not interested in the project at all. Therefore, both from an internal N-PART perspective as well as a parent - subsidiary perspective, the internal consensus was rather low. It has been difficult to assess how committed other managers in the company were over the joint venture. However, it seems that they were not brought into the project at all.

In terms of "internal push" in the formation practices model, we summarize that the commitment of top management (indicator 2) was clearly low in N-PART and high in S-PART. The internal consensus (indicator 1) was low in both partner companies. The commitment of other functions was difficult to judge.

We can summarize the discussion in the following exhibit, illustrating the strength of the activities in the "internal push" construct in the two companies in case 2.

Indicators	S-PART	N-PART
Internal consensus	-	-
Commitment - top management	+	-
Commitment - product development	-	.
Commitment - production	-	.
Commitment - marketing	-	.
Commitment - financial	-	.
Summary:	-4	-2

**Exhibit 10-3: "Internal Push" in Case 2**

#### 10.2.3 Case 3: Aluminum Balconies<sup>4</sup>

In case 3 both companies were very small and the cooperative venture project was pursued by the two entrepreneurs who had established these companies. The Swedish

<sup>4</sup> The companies's real names are used in case 3.

company, Alnova, was established before the project; and the Norwegian company was established as a consequence of the cooperative venture. In general, the Project Leaders in both companies seemed to be equally highly committed and enthusiastic over the cooperative venture idea. Both of them had great personal interest in their respective companies and, thereby, in the cooperative venture formation practices. Hence, the internal consensus regarding the cooperative venture project was high in both companies.

The financial situation in Alnova was rather bad when the cooperative venture idea was initiated. Due to problems with the Swedish sales representative at that time, it was critical for the Managing Director of the Swedish company to find a partner in Norway, thereby rapidly increasing sales. Again, this resulted in both internal consensus as well as high commitment from various managerial functions. For instance, it was natural that the Technical Manager in Alnova was involved in the cooperative venture at an early stage. However, the marketing function in Alnova was organized by a different Swedish company and was, consequently, not involved in the cooperative venture at all.

The Norwegian partner, Altex, was established just before the cooperative venture was initiated, and the operation was pursued by only two people. Hence, all the managerial functions clearly were involved in the cooperative venture planning and formation. We might also expect that the substantial cross-ownership between that two companies further "pushed" their high commitment and internal consensus.

Relating this discussion to the formation practices model, we will assign all applicable indicators with a "+," manifesting the strong "internal push" in these two companies.

Indicators	Alnova	Altex
Internal consensus	+	+
Commitment - top management	+	+
Commitment - product development	+	.
Commitment - production	+	.
Commitment - marketing	.	+
Commitment - financial	+	+
Summary:	5	4

**Exhibit 10-4: "Internal Push" in Case 3**

#### 10.2.4 Case 4: Garden Equipment<sup>5</sup>

The cooperative venture described in case 4 evolved both as a way of gaining access to each other's home market and also as a means for developing a common, more competitive, product line. In the Norwegian company, Norpartner, the Project Leader persuaded the Board not to close down the operations in this particular business area before the cooperative venture, despite bad financial results. Thus, the internal consensus regarding the cooperative venture was low. The Project Leader, however, was obviously determined to continue the operations and actively searched for a potential partner in Sweden. When the potential partner was identified, the degree of internal consensus regarding the cooperative venture in Norpartner increased. The Project Leader was, without a doubt, very committed to, and enthusiastic about, the entire cooperative venture idea. Even though he was the key person in the Norwegian company, the Chairman of the Board also became involved in the project discussions, with however, a lower degree of enthusiasm. Norpartner was a smaller family company where several of the family members had managerial positions, thus, other organizational functions were involved in the cooperative venture formation, at least, to some extent. However, the formation practices were clearly top management driven.

<sup>5</sup> The companies's real names are disguised in case 4.

Looking at the Swedish company, Swedpartner, the cooperative venture idea appeared to have been pursued by the Managing Director only - even though the Board of Directors was informed at an early stage. The Managing Director seemed to have been very enthusiastic over the idea and soon developed very good personal relationships with the Project Leader at Norpartner. We should note that the Project Leader felt there was a high degree of internal consensus regarding the project at Norpartner. Each Project Leaders indicated that the other treated the cooperative venture as his "baby." It is hard to see whether other managerial functions were involved or not.

Returning to our indicators, we can see that, at Norpartner, the degree of internal consensus (indicator 1), at least initially, was low; top management commitment (indicator 2) was high, and commitment by other organizational functions, due to the lack of high internal consensus, was assumed to be neither high nor low.

Summarizing the discussion of Swedpartner's "internal push" in terms of the six indicators, we can see some similarities to Norpartner's situation. The internal consensus (indicator 1) was neither high nor low (passive acceptance!), top management commitment (indicator 2) was high, and the other organizational functions (indicator 3-6) were not committed to either a greater or lesser extent. These findings are illustrated below.

Indicators	Swedpartner	Norpartner
Internal consensus	0	-
Commitment - top management	+	+
Commitment - product development	0	0
Commitment - production	0	0
Commitment - marketing	0	0
Commitment - financial	0	0
Summary:	1	0

**Exhibit 10-5: "Internal Push" in Case 4**

### 10.2.5 Summary: Internal Push

A summary of "internal push" in each company, as discussed above, is presented below:

Indicators	Case 1 Viak/Terotech		Case 2 S-PART/N-PART		Case 3 Alnova/Altex		Case 4 Swed/Nor	
Internal consensus	+	0	-	-	+	+	0	-
Commitment - top management	+	+	+	-	+	+	+	+
Commitment - product development	+	+	-	-	+	.	0	0
Commitment - production	0	.	-	-	+	.	0	0
Commitment - market development	0	.	-	-	.	+	0	0
Commitment - financial	0	.	-	-	+	+	0	0
Summary:	3	2	-4	-2	5	4	1	0

**Exhibit 10-6: Summary of "Internal Push" in Case 1 to 4**

As we see, Alnova, Altex, Viak, Terotech, and, to a limited extent, Swedpartner brought a positive contribution to the formation practices from the cumulative power from the indicators of "internal push." In case 2, on the other hand, there was a strong negative impact from these aspects of the formation practices. In Norpartner, finally, the value was zero, indicating no real impact on the formation practices. Let us now turn to a discussion of "analytical scope" in each company.

### 10.3 Analytical Scope

The "analytical scope" construct was operationalized by the following six variables:

- 
1. The extent to which the cooperative venture's fit with own strategy was analyzed.
  2. The extent to which the cooperative venture's fit with the partner's strategy was analyzed.
  3. The extent to which the market for the cooperative venture's product was analyzed.
  4. The extent to which the cooperative venture's competitive situation was analyzed.
  5. The extent to which own relevant resources were analyzed.
  6. The extent to which the partner's relevant resources were analyzed.
- 

#### **Exhibit 10-7: Indicators of "Analytical Scope"**

Hence, we are interested in understanding how various analyses and assessments, in connection with the cooperative venture formation, were carried out by each company.

##### **10.3.1 Case 1: Data Based System for Technical Documentation**

The two companies in case 1 had had no previous business experience with each other. The Managing Director of the Swedish company, Viak, mentioned that three aspects of the partner company were checked by his team, namely, the ownership structure, the financial situation, and previous and present contracts - in other words, from a strategic, tactical, as well as from an operational, perspective. It should be noted, however, that these investigations appeared to have been rather informal, taking no more than a few days and focusing on finding anything that was negative with the partner. The Viak team also emphasizing that the cooperative venture could be seen as a natural expansion of their own company's activity, indicating a good strategic fit.

In terms of the simplified formation practices model, we might conclude that the first and fifth variables, "fit with strategy" and "the company's own resources" were considered. The second and sixth variables, "fit with partner's strategy" and "partner's resources," seem to have been covered in that the partner company was studied in general. On the other hand,

the market and competitive situations seemed to have received relatively little attention from Viak.

In general, the Norwegian partner company, Terotech, appeared to perform fewer investigations of the cooperative venture project and the partner company. That the Swedish company had been established some sixty years earlier and was on the OTC list of the Stockholm Stock Exchange were obviously viewed as guarantees of seriousness toward the cooperative venture project. A second factor that seemed to have played a significant role in the strength of the Norwegian company's "analytical scope." It was the assumption that Viak, through the cooperative venture, had a significant strategic interest in securing access to the North Sea offshore market. The first Project Leader in the Norwegian company, on the other hand, stressed the importance of his personal experiences from previous joint ventures and that his company had drawn upon that knowledge. Hence, the investigations carried out in the Norwegian company might have been focused much more toward certain issues that, due to previous experience, were considered to be key in the formation of a cooperative venture.

In terms of the formation practices model, we might conclude that Terotech did cover the issue of "strategic fit" and "the company's own resources" (indicators 1 and 5) in that they explicitly mentioned that the cooperative venture represented a natural expansion within the company's major business area and that the cooperation would improve their computer competence. As we can see from the above discussion, the extent of the analysis of the partner (indicators 2 and 6) seemed to have been relatively low. As was the case in Viak, the analyses of the market and the competitive situation (indicators 3 and 4) also seemed to have been relatively low.

The discussion of "analytical scope" in the two companies in case 1 may be summarized and quantified as follows.



Indicators	Viak	Terotech
Fit with the company's own strategy	+	+
Fit with the partner's strategy	+	0
Analysis of the market	0	0
Analysis of the competitive situation	0	0
Analysis of the company's own resources	+	+
Analysis of the partner's resources	+	0
Summary:	4	2

#### **Exhibit 10-8: "Analytical Scope" in Case 1**

##### **10.3.2 Case 2: Industrial Waste Incineration**

In Case 2, the situation was somewhat more complicated. Most of the two companies' investigations were carried out when the cooperation was formalized through the first joint venture, i.e., Joint Venture I. As we mentioned earlier, the Managing Director (= Project Leader) in the Norwegian company seemed to have a limited interest in the joint venture as such. We should note that Norpartner had concluded that it was necessary to incorporate an additional industrial partner into the joint venture. They also seemed to be pleased over the Swedish company's interest. Indeed, the owners of Joint Venture I stressed that they were pleased with the opportunity to cooperate with this particular Swedish company. We should also note that representatives from the Norwegian companies, together with the Managing Director of Swedpartner, met with the Head of the Division of Swedpartner's parent company.

As was the situation in case 1, the Swedish partner company was both well-known within the industry and well-established. The Norwegian decision makers also felt that the project, as well as the industry per se, appeared to be of relatively great interest to the Swedish company. Taken together, these facts might have made the Managing Director of the Norwegian company less interested in performing various assessments of the potential partner company. Thus, it seemed

as though very few assessments and investigations regarding the Swedish company were carried out in the Norwegian company.

When the Managing Director of Swedpartner found out that it was possible to acquire a part of the license upon which the joint venture was based, he contacted the other parties to secure their agreement. He met with his future partners five times to discuss the potential acquisition. On the other hand, he noted that he already knew his potential partners quite well due to previous business contacts. He and his partners stressed that the project appeared to be of great strategic importance to the Norwegian company. Therefore, he did not perform any specific assessments or analyses of these companies.

The situation did not change when the second joint venture was established, i.e., a joint venture directly between Swedpartner and Norpartner. This was a reconstruction of the previous joint venture in that the consulting company's share was acquired by Norpartner. The partners did not perform any additional assessments or investigations.

Turning to the formation practices model, we can see from the above discussion that both companies did cover the "self analytical" aspect of the indicators, i.e., variables 1 and 5. Both partners mentioned explicitly that the partner company was not analyzed, for various reasons. Hence, "fit with partner's strategy" (indicator 2) and "the partner's resources" (indicator 6) were not covered. As with the companies in case 1, it is difficult to see what particular analyses were carried out by the companies themselves.

Indicators	S-PART	N-PART
Fit with the company's own strategy	+	+
Fit with the partner's strategy	-	-
Analysis of the market	.	.
Analysis of the competitive situation	.	.
Analysis of the company's own resources	+	+
Analysis of the partner's resources	-	-
Summary:	0	0

**Exhibit 10-9: "Analytical Scope" in Case 2**

### 10.3.3 Case 3: Aluminum Balconies

The cooperative venture described in Case 3 had a somewhat more uncomplicated history, since it evolved as a means for the Swedish company Alnova to market its product in Norway. Hence, we can understand that both Project Leaders underscored the good strategic fit of the cooperative venture relative to both companies.

The Swedish company's Managing Director (= Project Leader) was referred by a banker friend to a Norwegian person (who later became the Managing Director of the Norwegian partner company) to perform a marketing survey. The Swedish company did not carry out any particular analyses or assessments of the potential sales partner at that time. Neither did it perform any analyses of the market or the competitive situation - this was to be carried out by Altex. Based on the positive results of this marketing survey, it was decided to establish the Norwegian company, the sales agreement, and the substantial cross-ownership between the two companies. This cooperative venture as such, emerged as a consequence of the need for further product development and the subsequent capital constraints in the Swedish company. However, neither of the Managing Directors of the two companies appeared to have made any additional assessments or investigations of the cooperative venture project or each other at this stage.

In terms of the six indicators, we might summarize the discussion as follows. The good strategic fit of the cooperative venture relative to each parent company (indicator 1) seems to have been understood by both companies - and also seen from the partner company's perspective. Altex performed market and competitive situation analyses, however, prior to the cooperative venture formation as such. This can probably be explained by the fact that no such additional analyses were needed during the formation practices. In our terms, indicators 3 and 4 were relatively high. As far as we can see, analyses of the company's own resources as well as the

partner's resources (indicators 5 and 6) were not carried out. We can argue, of course, that these types of analyses were unnecessary in this specific case due to the relative smallness of the two companies. The strength of each indicator in "analytical scope" is summarized below.

Indicators	Alnova	Altex
Fit with the company's own strategy	+	+
Fit with the partner's strategy	+	+
Analysis of the market	.	+
Analysis of the competitive situation	.	+
Analysis of the company's own resources	.	.
Analysis of the partner's resources	.	.
Summary:	2	4

#### **Exhibit 10-10: "Analytical Scope" in Case 3**

##### **10.3.4 Case 4: Garden Equipment**

Arriving at case 4, we can see that its cooperative venture appeared to have been of a more "traditional" type than that outlined in case 3. The parent companies made preliminary contact at a trade fair, and it soon turned out that there were complementary competencies and expectations between the two. In addition, the two Project Leaders instantly developed excellent personal contacts.

When it came to assessments and investigations, the Norwegian Project Leader mentioned that checking the book value of the Swedish company, he emphasized the importance of this company being a part of a well-known industrial group of companies. Taken together, these factors might explain the relatively low interest in performing various analyses and investigations regarding the cooperative venture. Such assessments were, however, carried out in Norpartner, namely by the Chairman of the Board. He conducted, at least on paper, extensive analyses of the potential market, etc. This was, on the other hand, in close connection with the application for SNI financing.

The Project Leader in Norpartner indeed reflected on how the cooperative venture would strategically fit with his company. He also seemed to have considered the strategic fit of the cooperative venture in the partner company, however, not in the context of this company's parent company. Hence, indicators 1 and 2 were positive. The number of assessments performed was neither small nor large. Hence, indicators 3-6 will be assigned a "0."

Also, the Swedish Project Leader stated that he performed only a limited investigation, such as checking the Norwegian company's annual reports and making some enquiries about its general reputation, etc. Instead, he stressed the cooperative venture was based on the good personal relationship between the two Project Leaders. It also seems as though the Swedish company did not participate in any of the assessments of the market and the competitive situation regarding the cooperative venture. The Managing Director did mention that he felt that the venture fitted well in Norpartner's strategy and that they had interesting products. Any analyses or investigations were obviously not carried out. Hence, in terms of "analytical scope" in our simplified formation model, we can see that analysis of the fit with the company's own strategy (indicator 1) was carried out but analyses of the fit with partner's strategy (indicator 2) was not carried out. Neither were any other analyses were carried out (indicators 3-6).

We conclude that the "analytical scope" construct was relatively low in both companies' formation practices in case 4, which is summarized below.

Indicators	Swedpartner	Norpartner
Fit with the company's own strategy	+	+
Fit with the partner's strategy	-	+
Analysis of the market	.	0
Analysis of the competitive situation	.	0
Analysis of the company's own resources	.	0
Analysis of the partner's resources	.	0
Summary:	2	4

**Exhibit 10-11: "Analytical Scope" in Case 4**

### 10.3.5 Summary: Analytical Scope

Summing up and simplifying our discussion of "analytical scope" of the cooperative venture formation practices in Case 1 to 4, we can illustrate the situation in terms of the following exhibit:

Indicators	Case 1 Viak/Terotech		Case 2 S-PART/N-PART		Case 3 Alnova/Altex		Case 4 Swed/Nor	
Fit with the company's own strategy	+	+	+	+	+	+	+	+
Fit with the partner's strategy	+	0	-	-	+	+	-	+
Analysis - market	0	0	.	.	.	+	.	0
Analysis - competitive situation	0	0	.	.	.	+	.	0
Analysis - company's own resources	+	+	+	+	.	.	.	0
Analysis - partner's resources	+	0	-	-	.	.	.	0
Summary:	4	2	0	0	2	4	0	2

**Exhibit 10-12: Summary of "Analytical Scope" in Cases 1 to 4**

### 10.4 Stakeholder Strength

As we discussed earlier, "stakeholder strength" has been indicated by the two variables noted below. A positive "stakeholder strength" indicates greater dependence on SNI financing.

1. Whether the project, in its present form, would have been pursued without SNI support or not.
2. Whether the project, in a different form, would have been pursued without SNI support or not.

**Exhibit 10-13: Indicators of "Stakeholder Strength"**

It should be noted that we will discuss only the importance of SNI financing for each parent company in this section. (SNI's other roles will be discussed in a subsequent chapter.)

#### 10.4.1 Case 1: Data Based System for Technical Documentation

In case 1, the cooperative venture agreement was signed before SNI was contacted. Hence, the formation of the cooperative venture as such was apparently not dependent on SNI financing. However, SNI's Managing Director said that the Swedish consultant had previously mentioned that he was involved in this cooperative venture project, i.e., he was aware of the project and had indicated SNI's potential interest in providing project financing.

When it came to the importance of SNI financing for this cooperative venture as such, the partner companies were very explicit about their reasons for applying: (1) goodwill for the product on the market and (2) internal goodwill for the cooperative venture as such within the company's own organization. The SNI investigators discussed the importance of SNI's participation. They determined that the Swedish company, Viak, would develop a variation of the project even if SNI financing was not obtained. On the other hand, they indicated that it was likely that the Norwegian company, Terotech, would not join the cooperative venture without SNI financing. This was partly due to the somewhat constrained financial situation in Terotech and its parent company. The latter issue would be verified by Terotech's Managing Director's disappointment in obtaining a loan instead of royalty based project financing.

Taken together, these factors indicate the relatively great importance of SNI financing for the cooperative venture in Terotech, and the relatively low importance of SNI financing in Viak. In terms of our formation practices model, this means that the project might have been pursued in its present form in Viak, even without SNI financing. Thus, indicator 1 is neither high nor low. On the other hand, the

project would probably have been pursued in a different form within Viak, thus, indicator 2 is relatively low, manifesting low dependence on SNI financing.

In Terotech, the project would not have been pursued, even in a different form, without SNI support. Hence both indicators should be relatively strong, demonstrating greater dependence on SNI financing. The discussion is summarized below:

Indicators	Viak	Terotech
1. Pursued without financing - present form	0	+
2. Pursued without financing - different form	-	+
Summary:	-1	2

**Exhibit 10-14: "Stakeholder Strength" in Case 1**

**10.4.2 Case 2: Industrial Waste Incineration**

The situation was somewhat different in case 2, where SNI was contacted in an earlier phase of the cooperative venture formation. The Managing Director of the Swedish company, S-PART, knew about SNI's operations, and made the initial contact with SNI before he signed the letter of indent regarding the direct cooperation between his company and the Norwegian company through Joint Venture I. Hence, SNI's potential project financing seemed to have been relatively important to S-PART's participation in the joint venture. As a matter of fact, SNI's Managing Director mentioned that it was obvious that, having learned of SNI's advantageous project financing, the Swedish company's Managing Director primarily wanted to obtain it for his company. From our perspective, it seems as though the joint venture would not have been pursued in any form without SNI support. Hence, both indicators should be positive, signifying a strong dependence on SNI financing.



The Norwegian company, N-PART, was in a different situation, in that it was already involved in Joint Venture I and was looking for an additional partner. Even though the Managing Director of the Norwegian company readily approved the idea of SNI financing, it is difficult to see how his company's participation in Joint Venture I and II could be tied to SNI financing as such. On the other hand, the investigators argued that the project was in an initial phase and that the companies were awaiting a solution of the project financing. This could indicate that SNI financing was also important for N-PART. We have chosen to regard the SNI financing as important for the project in its present form and as neither high nor low in a different form.

Summing up case 2, SNI financing, i.e., the "stakeholder strength" was relatively important to the Swedish company and somewhat less important to the Norwegian company.

Indicators	S-PART	N-PART
1. Pursued without financing - present form	+	+
2. Pursued without financing - different form	+	0
Summary:	2	1

#### **Exhibit 10-15: "Stakeholder Strength" in Case 2**

#### **10.4.3 Case 3: Aluminum Balconies**

In case 3, the formation of the cooperative venture and the SNI financing seemed to be quite interrelated. The first agreement between the two companies, the sales agreement, was signed before SNI was even contacted. However, when the two parties needed additional project financing to develop the product further, a banker friend suggested the SNI financing. Due to the great market potential, coupled with Alnova's emerging problems with its sales representative in Sweden, and constrained financial situation, SNI financing

seemed to have been very important. As a first source of project financing, it was easier to obtain additional project financing from traditional sources of capital. Indeed, the investigators stressed that the parties' inability to obtain SNI financing would result in serious negative effects on other financiers of the Swedish company.

The financing was also essential for the Norwegian partners beginning market development in Norway. Seen together, these factors indicated that SNI financing was of great importance to both companies, i.e., "stakeholder strength" was positive for both companies, as summarized below.

Indicators	Alnova	Altex
1. Pursued without financing - present form	+	+
2. Pursued without financing - different form	+	+
Summary:	2	2

#### **Exhibit 10-16: "Stakeholder Strength" in Case 3**

##### **10.4.4 Case 4: Garden Equipment**

In Case 4, the parties had discussed the cooperative venture idea before they contacted SNI. The Swedish company, Swedpartner, was part of a well-known, financially solid, industrial group of companies. Hence, the initial impression might be that this company was not particularly dependent on whether SNI financing was granted to the cooperative venture project. On the other hand, Swedpartner did have some profitability problems as well as difficulties in developing competitive products. This indicates that the Managing Director considered it important to obtain relatively cheap project financing, i.e., from SNI, since this probably would make his situation look somewhat better in the eyes of the parent company. This was not, however, mentioned by the

investigators. In terms of our model the cooperative venture, at least to some extent, would have been pursued without SNI support, i.e., indicator 1 is high and indicator 2 is low.

Turning now to the situation in the Norwegian company, Norpartner, the investigators stressed the vital importance of SNI financing, mainly due to this company's weak financial situation in general. We should also note that the Norwegian company's Managing Director did have internal problems in initiating (and pursuing) the cooperative venture, due to low profitability. These factors, seen together, manifest the relatively high importance of SNI financing in the Norwegian company. Hence, we can assume that the cooperative venture would have been pursued without SNI financing, only in a very different (reduced) form (indicator 1 was positive and indicator 2 was neither positive nor negative).

Indicators	Swedpartner	Norpartner
1. Pursued without financing - present form	+	+
2. Pursued without financing - different form	-	0
Summary:	0	1

#### Exhibit 10-17: "Stakeholder Strength" in Case 4

#### 10.4.5 Summary: Stakeholder Strength

Summing up and simplifying our discussion of "stakeholder strength" in the cooperative venture formation practices illustrated in Cases 1-4, we portray the situation as follows:

Indicators	Case 1		Case 2		Case 3		Case 4	
	Viak/Terotech		S-PART/M-PART		Alnova/Altex		Swedpartner/	Norpartner
Present form	0	+	+	+	+	+	+	+
Different form	-	+	+	0	+	+	-	0
Summary:	-1	2	2	1	2	2	0	1

#### Exhibit 10-18: Summary of "Stakeholder Strength" in Cases 1 to 4

As we can see, most of the companies were quite dependent on SNI financing. In particular, we see that SNI financing was most important for the companies in case 3, S-PART, and for Terotech. Viak, on the other hand, was less dependent on SNI financing. Let us now turn to a discussion of how each parent company perceived the outcome of the cooperative venture.

### 10.5 Outcome

The "outcome" construct was defined in terms of the following variables:

- 
1. General result so far.
  2. Difference between planned versus increased costs.
  3. Difference between planned versus increased revenues.
  4. Personal relationship between main actors in the parent companies.
- 

#### Exhibit 10-19: Indicators of "Outcome"

##### 10.5.1 Case 1: Data-Based System for Technical Documentation

Even though the operations described in case 1 had not yet resulted in any sales so far, there is no question that both partner companies regarded the cooperative venture as a success. The major argument seem to be that the product had become better than expected at less cost than originally planned. The relatively low costs for actual product development were verified by the quantitative data presented by the two companies.

Relating the outcome discussion to the construct in the formation practices model, we can conclude that the perceived general result so far (indicator 1) is high. As we can see from the case illustration, the planned costs were higher than the outcome, thus giving a high value to indicator 2. Considering the delays in product development, we can conclude

that the sales outcome, i.e., nothing, was less than expected. Hence, indicator 3 is low. On the other hand, we might argue that this was a cheap way for Viak and Terotech to increase their know-how - hence, a criterion quite different from financial outcome measures. Finally, the personal relationships (indicator 4) had been very good.

Despite the significant changes in key personnel in Terotech, the good personal relationships were emphasized by the two project teams as an important success factor. In addition, it seemed as though both companies, to some extent, had obtained another "synergy effect" through the cooperative venture in that they were able to secure additional orders for related activities.

In terms of our model, the general result so far (indicator 1) was high; the planned costs and revenues (indicators 2 and 3) were the same as for Viak, i.e., high and low respectively, and finally, the personal relationships (indicator 4) were good. Hence, we can conclude that the cooperative venture described in case 1, was successful from the perspective of both parent companies. We should note, however, that the cooperative venture is continuing in a second phase, i.e., market development, and it has not been possible to assess the success of this continuation.

Indicators	Viak	Terotech
General result so far	+	+
Planned vs. increased costs	+	+
Planned vs. increased revenues	-	-
Personal relationships	+	+
Summary:	3	3

#### **Exhibit 10-20: "Outcome" in Case 1**

#### **10.5.2 Case 2: Industrial Waste Incineration**

In contrast to the situation in the previous case, the partners in case 2 agreed on that their joint venture was a

complete failure for a number of reasons: decline in prices, lack of interest from the Norwegian partner, strategic conflicts in the Swedish company's organization, etc.

More specifically, the Managing Director in N-PART seemed to base his negative judgment of the outcome on the fact that the joint venture never actually developed a product, i.e., a complete system for waste incineration. We should note that he did not regard the project as a failure from a financial perspective. In terms of our model, we might conclude that the general result so far (indicator 1) was very bad, as was the difference between planned versus increased revenues (indicator 3). On the other hand, we can see from the case illustration that the costs never exceeded the planned amount (indicator 2); thus the difference was low. Finally, it was difficult to assess the personal relationships between the actors in the two parent companies (indicator 4). At least, they did not seem to be bad, but, on the other hand, they did not seem to be particularly good either.

The Managing Director of the Swedish company, on the other hand, did emphasize his company's financial loss. Of course, he was also disappointed that they never managed to develop a complete system. Notwithstanding, he said that they, theoretically, could restart the joint venture operations at a later stage. Hence, the general result so far (indicator 1) was negative, the difference between planned versus increased costs (indicator 2) was positive as such for the joint venture (S-PART's ownership loss was a different matter), the difference between planned versus increased revenues (indicator 3) was negative, and finally, the personal relationship (indicator 5) was neither bad nor good.

In summary, there is no doubt that the joint venture was seen as a failure from both parent companies' perspectives, even though they based this opinion on somewhat different criteria.

Indicators	S-PART	N-PART
General result so far	-	-
Planned vs. increased costs	+	+
Planned vs. increased revenues	-	-
Personal relationships	0	0
Summary:	-1	-1

**Exhibit 10-21: "Outcome" in Case 2**

**10.5.3 Case 3: Aluminum Balconies**

Moving to the situation in case 3, both Project Leaders stated that the cooperative venture was a great success - despite significant difficulties in their way. Since the Swedish company was based completely on only one product, the fact that this product was actually developed and sold was indeed seen as an important success criterion. Another criterion that was frequently referred to was the good personal relationship between the two Project Leaders. This was further underscored by the fact that the two companies have applied for SNI financing for the second phase of the cooperative venture.

The two companies looked very similar in terms of our outcome construct. Hence, the general result (indicator 1) was good, the difference between planned and increased costs (indicator 2) was small, the revenues were delayed but satisfactory (making indicator 3 neither high nor low) and finally, as discussed above, the personal relationship between the actors (indicator 4) was very good. The discussion is illustrated below.

Indicators	Alnova	Altex
General result so far	+	+
Planned vs. increased costs	+	+
Planned vs. increased revenues	0	0
Personal relationships	+	+
Summary:	3	3

**Exhibit 10-22: "Outcome" in Case 3**

#### 10.5.4 Case 4: Garden Equipment

Prior to the unexpected sale of the Swedish partner, the general result of the cooperative venture in case 4 appeared to be quite good for both partner companies. Sales of each other's products had been initiated, development of a common product line had started, and the parties had agreed on extended licensing production in Sweden. The costs were reasonable and the personal chemistry between the Project Leaders was excellent.

After the sale, however, the situation gradually worsened, resulting in the dissolution of cooperative venture and the bankruptcy of the Norwegian company. In general, therefore, we might conclude that the final result of the cooperative venture was indeed rather bad for both companies. As a consequence of the merger of the activities in Sweden, the Norwegian company's sale of the Swedish company's products in Norway declined, causing financial problems. Hence, seen from the Norwegian company's perspective, the financial result of the cooperative venture was bad. On the other hand, both Project Leaders stressed that the personal relationship between the two of them was very good. However, in this context it might be noted that the Managing Director of the Swedish company, in an early phase, developed a very bad personal relationship with the Chairman of the Board in the Norwegian company. Also, the Swedish Managing Director left his position before the sale was announced. Hence, it cannot be concluded that the personal relationships between the actors were good during the entire cooperative venture period. In our model's terminology, we have indicated that the personal relationship (indicator 4) was neither good nor bad.

Looking back on the cooperative venture, the difference between planned and increased costs (indicator 2) was bad, as was the difference between planned versus increased revenues (indicator 3). Also, the result in general (indicator 1) must be regarded as bad. These results are summarized below.



Indicators	Swedpartner	Norpartner
General result so far	-	-
Planned vs. increased costs	-	-
Planned vs. increased revenues	-	-
Personal relationships	0	0
Summary:	-3	-3

Exhibit 10-23: "Outcome" in Case 4

#### 10.5.5 Summary: Outcome

We might summarize our discussion of how the parent company perceived the outcome of the cooperative venture as follows.

Indicators	Case 1		Case 2		Case 3		Case 4	
	Viak/Terotech		S-PART/N-PART		Alnova/Altex		Swedpartner/Norpartner	
General result	+	+	-	-	+	+	-	-
Costs	+	+	+	+	+	+	-	-
Revenues	-	-	-	-	0	0	-	-
Personal	+	+	0	0	+	+	0	0
Summary:	3	3	-1	-1	3	3	-3	-3

Exhibit 10-24: Summary of the Outcome Construct in Case 1 to 4

Based on the above discussion of each formation practices force and the subsequent outcome of the cooperative venture, we will now discuss how these factors might be related to each other in terms of the conceptual model.

#### 10.6 Relationships between the Three Theoretical Constructs

In the following section, we will discuss the relationship between formation factors only as pictured in the case studies and will compare these findings with the conceptual model. Hence, we are not discussing the factors' influence on outcome. This is carried out in the next section.

The overall analysis in this chapter resulted in the following findings:

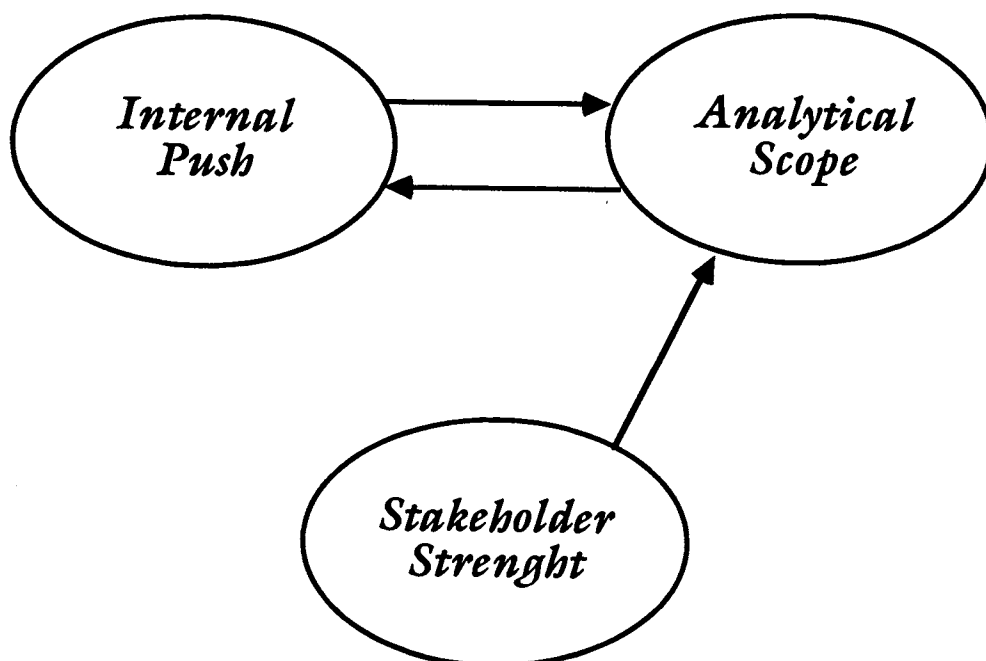
Case	Partner	Internal Push	Analytical Scope	Stakeholder Strength	Outcome
1	Viak	3	4	-1	3
	Terotech	2	2	2	3
2	S-PART	-4	0	2	-1
	N-PART	-2	0	1	-1
3	Alnova	5	2	2	3
	Altex	4	4	2	3
4	Swedpartner	1	0	0	-3
	Norpartner	0	2	1	-3

**Exhibit 10-25: Strength of the Three Constructs and Outcome**

Looking first at Viak in case 1, we can see that "analytical scope" was somewhat "stronger" than "internal push." "stakeholder strength" was, on the other hand, slightly negative. It seems as though the decision makers in Viak became somewhat more enthusiastic after learning about the full potential of the product on the Norwegian offshore market. This might indicate a feedback loop from analysis to commitment which is consistent with the model. Since SNI was contacted after the agreement was actually signed, it is hard to see that the importance of SNI financing was influenced by the internal commitment in Viak, i.e., no support for a link from "internal push" to "stakeholder impact." Even though SNI's role was not as strong per se for Viak, the organization had some influence when it came to investigations. Hence, there was a relatively weak influence from "stakeholder strength" to "analytical scope," which was consistent with the conceptual model.

Summing up our discussion of the relative influences of the three factors, we can see that the conceptual model in general seem to fit with the formation process in Viak. However, the weak link in the model, i.e., between "internal

push" and "stakeholder strength," was not supported, which is consistent with the second model estimated in chapter 8. These findings are illustrated in exhibit 10-26:



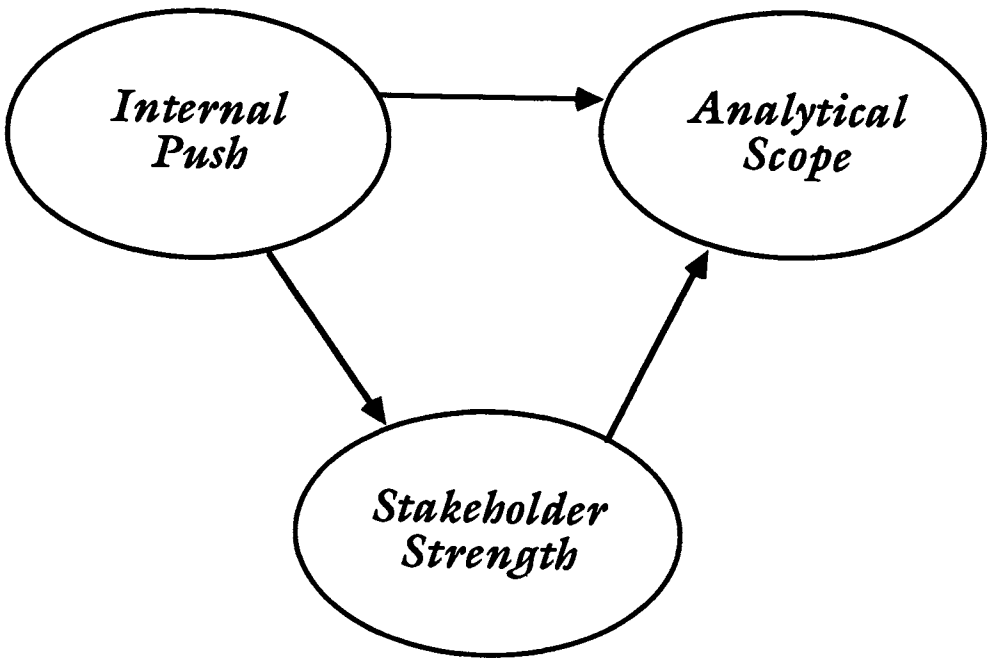
**Exhibit 10-26: Relationship between the Three Theoretical Constructs in Viak**

In Terotech, both "internal push" and "analytical scope" were weaker than in its partner company. Hence, the "push" provided by these theoretical constructs was relatively weaker in all respects. The link from commitment and investigation appeared to be relatively weak. It is also difficult to see that the degree of investigations would have resulted in more commitment. Hence, there is no support for the recursive link between commitment and investigation, as portrayed in the conceptual model.

SNI did, on the other hand, have a significant influence in this company. There was clearly an influence from the degree of commitment and engagement on the importance of SNI financing, perhaps even larger than was illustrated in the conceptual model and operationalized in the first model

estimated in chapter 8. SNI's impact on the degree of investigations was similar to Viak's case.

Summing up our discussion on the relative influences of the three factors in Terotech in case 1, we can see that the conceptual model, in general, seemed to fit as an simplification of the company's formation process. However, we could find no feedback loop from investigation to commitment. On the other hand, the link between "internal push" and "stakeholder strength" seemed to have been relatively stronger compared to the situation in Viak.



**Exhibit 10-27: Relationship between the Three Theoretical Constructs in Terotech**

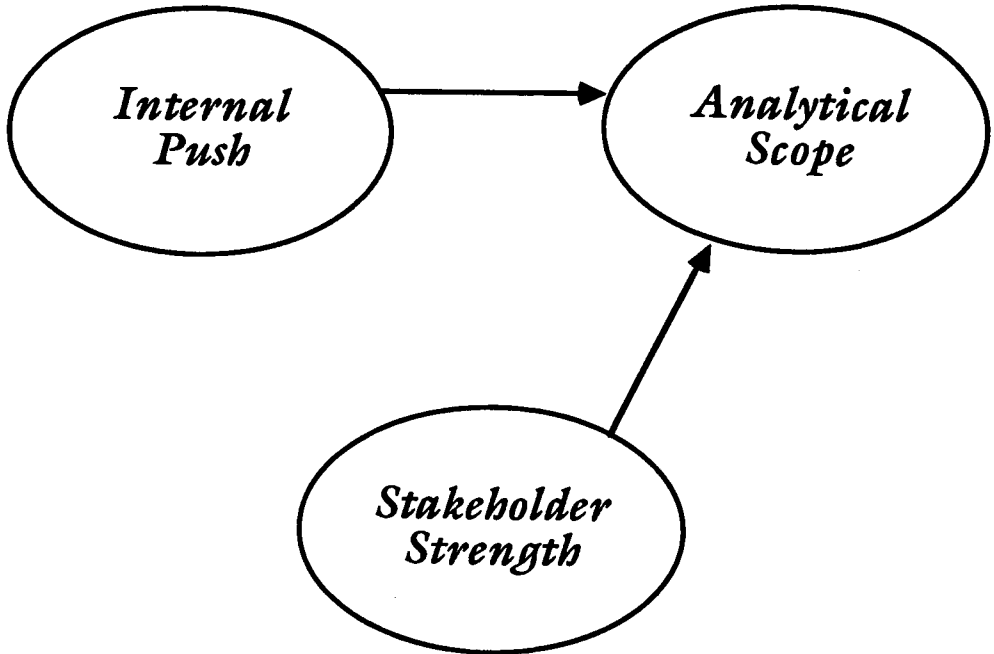
The situation for the two companies in case 2 seemed to be very similar. "Internal push" was negative in both companies, indicating a significant lack of enthusiasm, engagement, and internal consensus regarding the cooperative venture. "Analytical scope" was neither negative or positive,

indicating that few investigations and analyses were conducted.

It seems likely that the low degree of investigations in both companies was the result of the low levels of enthusiasm and commitment. Even though this would imply a negative influence from "internal push" to "analytical scope" per se, the pattern in the conceptual model was supported - since "internal push" was negative. It is, however, difficult to find support for the conceptual model suggested in the feedback loop from "analytical scope" to "internal push."

The link from internal enthusiasm and commitment to the importance of SNI as a source of project financing is difficult to find, which is consistent with the low coefficient in the conceptual model. SNI was indeed a prerequisite for participation in the venture for S-PART, and somewhat less in N-PART, but we could not see that the low degree of commitment decreased the importance of this project's financing. SNI did, however, influence the extent of investigations carried out, but only to some extent, and to a lesser extent in N-PART. Hence, the link from "stakeholder strength" to "analytical scope" was supported.

Summing up our discussion of the relative influences of the three factors in both companies in case 2, we can see that the conceptual model, in general, does not seem to fit the companies' formation processs. The main differences are that we did not find support for the feedback loop between "analytical scope" and "internal push." Nor did we find support for the link between "internal push" and "stakeholder strength." The other suggested relationships were supported, however.



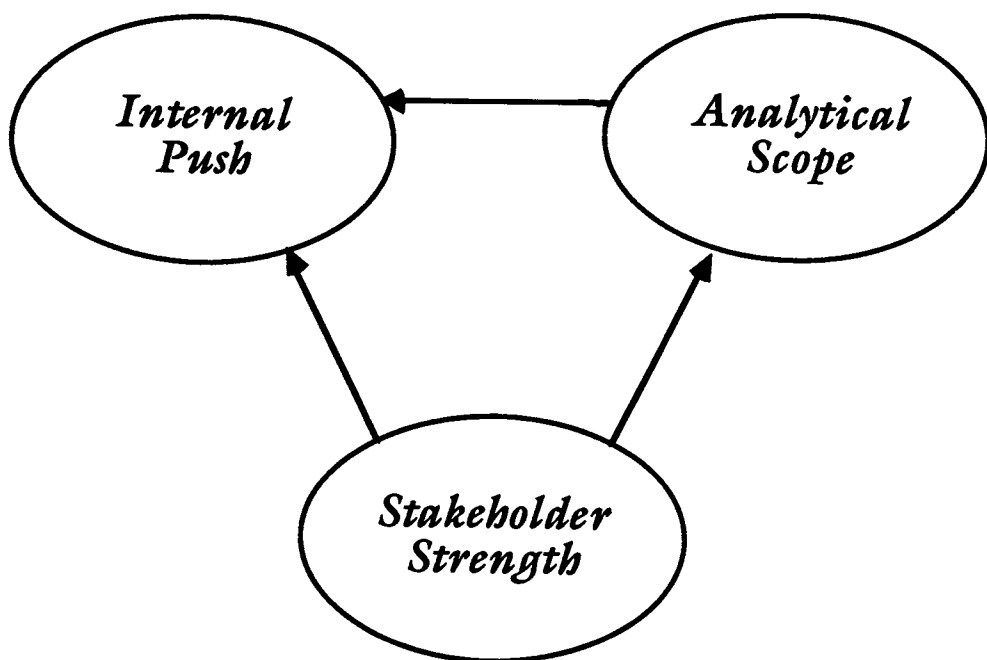
**Exhibit 10-28: Relationship between the Three Theoretical Constructs in S-PART and N-PART**

Turning to case 3, we can see that the value of "internal push" is larger than "analytical scope" in Alnova. This can be interpreted to mean that the levels of enthusiasm and commitment were so high that very few analyses were actually carried out. Hence, the relatively strong link between "internal push" and "analytical scope" in the estimated conceptual model was not supported. However, over time we see that the decision makers in Alnova became more and more committed to and enthusiastic about the cooperative venture. This would support our notion of a feedback loop from "analytical scope" to "internal push" - if the enthusiasm resulted from new investigations.

SNI did indeed play an important role in this cooperative venture. The high levels of internal commitment and enthusiasm clearly seem to have influenced the importance of SNI as a source of financing. Hence, we find support for the suggested

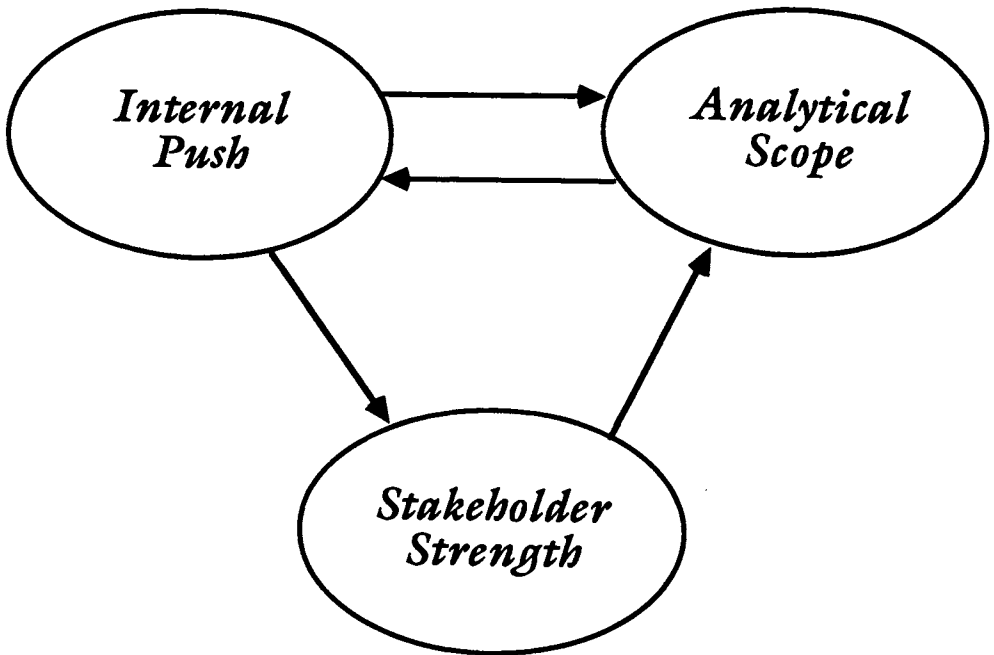
link between "internal push" and "stakeholder strength." Also, since SNI was so important as a source of financing, the organization also seemed to have influenced the extent of the investigations carried out in Alnova. Hence, the link between "stakeholder strength" and "analytical scope" was also supported.

Summing up our discussion of the relative influences of the three factors in Alnova in Case 3, we see that the conceptual model seemed to fit the company's formation process. The main difference was that we did not find support for the suggested strong link from "internal push" to "analytical scope." Instead, the pattern suggested in the second model estimated in chapter 8 seems to be a more accurate description regarding this matter. All other suggested relationships were supported, however. This is illustrated in exhibit 10-29.



**Exhibit 10-29: Relationship between the Three Theoretical Constructs in Alnova**

In Altex, the situation differed only slightly from that of its Swedish counterpart. In this company, "analytical scope" and "internal push" were equally strong, indicating that more analyses were carried out than in its partner company. Hence, we find support for the suggested link from "internal push" to "analytical scope," i.e., as was suggested by the first model estimated in chapter 8. We might also suspect that the investigations, indicating the large potential of the product, resulted in high levels of commitment and enthusiasm for the cooperative venture. Hence, we find also support for the feedback loop from "analytical scope" to the "internal push." In all other aspects of the conceptual model, the formation process was similar to that in Alnova. The formation process in Altex is illustrated below.



**Exhibit 10-30: Relationship between the Three Theoretical Constructs in Altex**

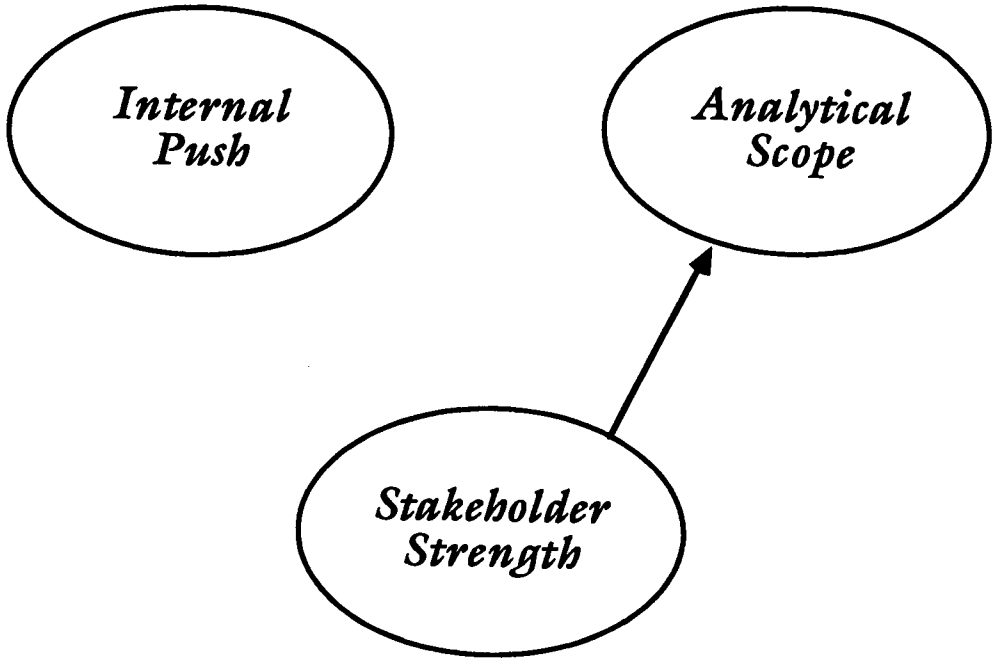
The situation was quite different in Swedpartner in case 4. The values of all three theoretical constructs were very low, indicating both relatively low internal enthusiasm,



commitment, and consensus regarding the cooperative venture. We did not see any causal relationship at all between "internal push" and "analytical scope." Hence, this might be explained by the fact that the values of both these theoretical variables were very low, i.e., there was very little "drive" from these factors in the formation process.

We did not see that the degrees of internal commitment and enthusiasm influenced the importance of SNI financing, i.e., the link between "internal push" and "stakeholder strength" was not supported. Even though SNI financing was not very important for Swedpartner, the organization played an active role in ensuring that some investigations were carried out. Hence, the link between "stakeholder strength" and "analytical scope" was supported.

Summing up our discussion of the relative influences of the three factors in Swedpartner in case 4, we see that the conceptual model did not fit the company's formation process particularly well. The main difference was that we found support for only one of the suggested links, namely, between "stakeholder strength" and "analytical scope." However, there might have been a link between "internal push" and "analytical scope." Due to the low values of these factors, however, this is difficult to verify. The formation process in Swedpartner is illustrated in exhibit 10-31.



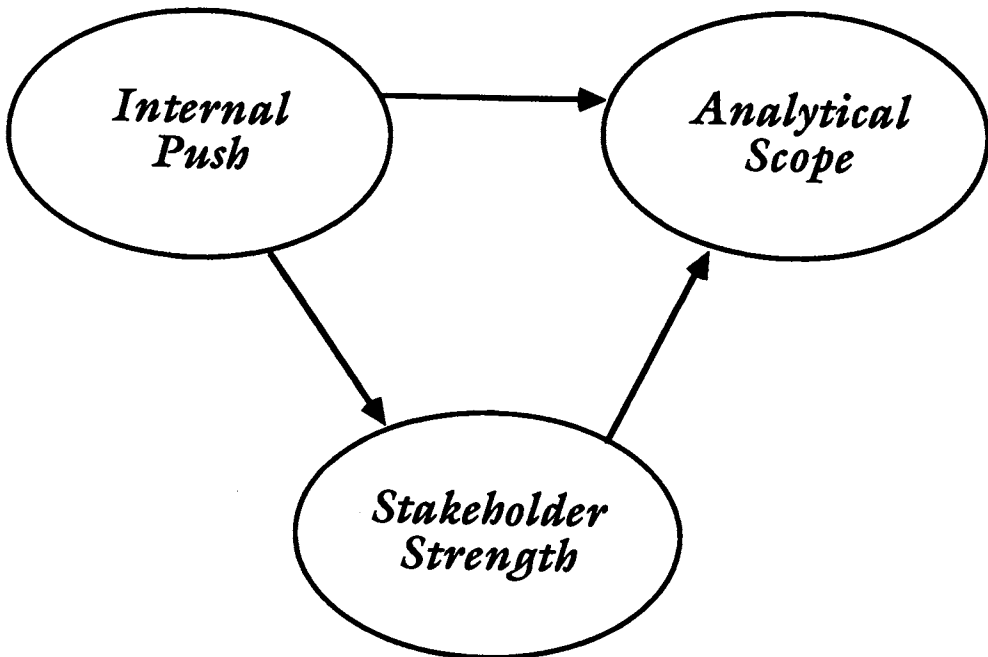
**Exhibit 10-31: Relationship between the Three Theoretical Constructs in Swedpartner**

In Norpartner in case 4, the situation was somewhat different. "Analytical scope" was larger than the "internal push." This makes sense since we see that the decision makers in this company carried out all the investigations. It also seems reasonable that these investigations, at least to some extent, were a product of the initial commitment to and enthusiasm about the cooperative venture. Hence, we found support for the link between "internal push" and "analytical scope." However, due to the way these investigation were carried out, it is difficult to see if there was a feedback loop the other way around. Hence, this link was not supported.

In this case, the importance of SNI financing seems to have been supported by the internal commitment and enthusiasm. SNI was probably the only way for this company to pursue the venture. Hence, the link between "internal push" and "stakeholder strength" was supported. SNI also played a role in demanding the feasibility study, thereby influencing the

extent of the investigations carried out and supporting the link between the stakeholder factor and the "analytical scope."

Summing up our discussion of the relative influences of the three factors in Norpartner in case 4, we see that the conceptual model, in general, did fit the company's formation process quite well. The only difference was that we found no support for the suggested feedback loop from "analytical scope" to "internal push." The formation process in Norpartner is illustrated in exhibit 10-32.



**Exhibit 10-32: Relationship between the Three Theoretical Constructs in Norpartner**

Let us now turn to a discussion of how each of the theoretical constructs seems to have influenced outcome.

#### **10.7 Relationship between the Three Theoretical Constructs and Outcome**

In this section we will discuss how the three theoretical constructs seem to discriminate with respect to the performance measure. In other words, we will see whether each construct's influence on outcome was consistent with the conceptual model. In this model each theoretical construct had a different but positive influence on outcome.

From the summary in Exhibit 10-25, we see that "internal push" was positive in all the companies where the outcome was perceived to be good. In the two companies in case 2, where the outcome was bad, this force was negative. This is an indication of a lack of internal drive from commitment and engagement for the cooperative venture. In case 4, where the outcome was also bad, the strengths of these forces were 0 and 1 respectively, i.e., not negative but very weak.

In the PLS analysis of the first model the direct strength of "internal push" was 0.22 and the indirect strength was 0.16, measured in terms of beta coefficients. In other words, a positive increase in "internal push" with one increased the outcome construct 0.38 units. It seems as though our findings are consistent with this, if we can interpret the low - but not negative - values of the companies in case 4 as an indication of low "internal push." The companies in the other two cases, i.e., where the outcome was good, had stronger values for "internal push." This is indeed consistent with our conceptual model.

The situation seemed to be similar for the "analytical scope." In general, there was a strong positive push in the companies in cases 1 and 3, i.e., where the outcome was very good. In case 2, the value was 0 for both companies; and in Case 4 the values were 0 and 2 respectively. In other words,

the strength of this "force" in the cooperative ventures with bad outcomes was lower than in the ventures with good outcomes. In the PLS analysis, we found that "analytical scope" had a large positive direct influence on the outcome construct (0.44 in the first model), i.e., a higher value than the total effect of the "internal push." Hence, as was the case for "internal push," the strength of "analytical scope" seemed to discriminate with respect to the outcome construct. However, we must interpret the low - but not negative - values of the companies in case 4 as an indication of low "analytical scope."

Turning to the role of SNI as source of financing, we cannot see any strong consistent differences with respect to the outcome construct. In the PLS analysis, we found that "stakeholder strength" had a positive, but limited (0.14), impact on the outcome construct. Hence, this relationship seemed to have been too weak to be observed in our case studies. On the other hand, SNI indeed played an important role as the source of financing for several of the companies in our case studies. As a matter of fact, we might argue that none of the four cooperative ventures per se would have been brought to bear if SNI had not provided project financing. This is, however, not particularly surprising given the nature of our sample and population.

## **10.8 Fit with Selection Criteria**

In this section we will briefly discuss how the case studies fit with the matrix model presented in chapter 9.2. According to this model, the companies in case 1 carried out typical formation practices with a good outcome, the companies in case 2 carried out atypical formation practices with a bad outcome, the companies in case 3 also carried out atypical formation practices but with a good outcome, and finally, the companies in case 4 carried out atypical formation practices with a bad performance.

The companies in case 1 did indeed carry out typical formation practices, in the sense that they had high scores on both "internal push" and "analytical scope" as well as a good outcome. As can be seen from the previous section, the conceptual model also seemed to be supported in this companies. Hence, this is in accordance with the selection model.

The pattern is not as clear for the companies in case 2. The "internal push" construct was, in fact, negative and "analytical scope" scored zero. Because a typical formation process involves consistently high or low scores on both factors, this can be interpreted as manifesting a more atypical formation practice - not the typical type that was a priori assigned to these companies. In general, these companies also supported the causal pattern in the conceptual model, at least to some extent. Given the fact that the outcome was negative, we might conclude that this case did not fit the selection model.

The companies in case 3 did not fit with the selection model. These companies showed a good outcome and scored high on both "internal push" and "analytical scope," indicating typical - not atypical - formation process. In line with our previous interpretation, this is in contrast with the selection model, where these companies were supposed to carry out atypical formation practices. We can also note that these two companies, in general, lend credence to the causal pattern in the conceptual model.

Turning to case 4, finally, the situation seemed to follow the selection model. The two factors were weak in both companies, i.e., in this sense atypical, and the outcome was bad in both cases. This might indicate there was not enough "push" from either of the two factors in these formation processes. This was also indicated by these companies' causal pattern in the conceptual model.

This discussion is summarized in exhibit 10-33, where two of the case studies have been repositioned in the selection model, according to the discussion above (case 2 and 3).

Formation practices		
		Typical                  Atypical
Outcome	Good	Case 1 Case 3
	Less good	Case 2 Case 4

#### Exhibit 10-33: The Companies' Fit with the Selection Model

We should stress that this interpretation of "typical" and "atypical" formation practices is quite weak and, therefore, should be translated with caution. We must, therefore, be careful in drawing conclusions based on this classification.

### 10.9 Tentative Conclusions

The purpose of this chapter was to see whether the general pattern from the conceptual model would hold if a qualitative assessment was made based on more inclusive information in four case studies. In other words, we hoped to understand better what the quantitative results had suggested by adding a "qualitative" understanding. This involved the relationship between the three theoretical constructs as well as these constructs' influence on outcome.

In the PLS analysis we found that the direct influence of "analytical scope" on outcome was much larger than the other two constructs. In our discussion, we strictly followed this model in terms of its indicators and have made an effort to provide more "meat on the bone" for each indicator and thereby each theoretical construct.

The overall conclusion is that the simplified causal pattern in the conceptual model seemed to hold. There was some support for all the links in the conceptual model outlined in

chapter 7. Not surprising, however, the model was not supported in all its parts for all eight companies. As we can see from the "individual" models in Exhibits 10-26 to 10-32, the pattern differed significantly between the companies. This illustrates one of the major pitfalls of drawing conclusions from isolated case studies - a sole description might come up with a representation that might not be generalized at all. In the present study, on the other hand, these individual interpretations are made on the basis of statistical analyses. In addition to this overall support for the conceptual model, at least three conclusions can be drawn.

The first conclusion is that there seemed to be an ongoing interaction between commitment and enthusiasm for the cooperative venture and the investigations and analyses being carried out. This further underscores conclusions from Aharoni (1966), Bower (1970), Barwise et al. (1988), and Haspeslagh (1988) regarding other types of formation processes.

The second conclusion involves the importance of these factors as such as well as the importance of their interaction. It seems as though these fundamental factors indeed seemed to make a difference in the strong implications for the subsequent outcome of the ventures. Consequently, this supports our initial notion of the importance of the formation process as well as the results from the previous quantitative analyses. Again, this also underscores what has been discussed in the literature on other types of formation processes.

The third conclusion concerns SNI's role in the formation process. In the perspective of the conceptual model, SNI's role was limited to - through its financial importance - insisting on more investigations and analyses. This was also observed in the case studies. It is very likely that none of the ventures would have been created in the first place if SNI had not provided project financing. Given this fact, however, it is still difficult to determine the real importance of SNI for the outcomes as such. The weak link between "internal push" and "stakeholder impact," also supported in some of the case studies, might indicate a more "cognitive role" of this



external stakeholder - to quietly supervise and support the ventures.

The formal model for selecting the case studies was supported for the companies with "typical" formation practices and a good outcome (cases 1 and 4) but not for the companies with "atypical" formation practices and a good outcome (case 3) and the companies with "typical" formation practices and a bad outcome (case 2). This has to do with the simple fact that the classifications as such did not hold. In other words, our a priori classifications were not particularly "true." This illustrates the difficulties of such narrowly defined selection criteria.

Since the conceptual model was not disconfirmed by the case studies, we might conclude that it provided a valid overall picture of how the cooperative ventures were formed in our population - seen in terms of the three theoretical constructs only. Even though the conceptual model might capture some critical events in the formation process, we can also see from the case studies that a number of other issues seemed to play important roles in the process as well as the subsequent implementation and outcome. One way of determining what the conceptual model can contribute to an understanding of the cooperative venture formation process is to focus on those aspects which could not be explained in terms of the three forces. In other words, what "residual activity" was not accounted for? In the next chapter, therefore, ten such additional factors will be identified from the case studies and, we hope, add more to our understanding of how cooperative ventures are formed.



## **CHAPTER 11**

# **CLINICAL FINDINGS ON ADDITIONAL FORMATION ISSUES**

### **11.1 Introduction**

In this chapter we will supplement the previous analysis of the case studies with a discussion of additional formation issues, through which we hope to enhance our understanding of how cooperative ventures are formed and which factors that are most important. This is in contrast with the discussion in chapter 10, where our main purpose was to identify the additional factors that were important with respect to performance only, i.e., not looking at how these issues influenced each other.

In the following sections, seven such additional issues will be discussed for each of the eight companies' formation processes.

### **11.2 Seven Additional Issues**

Seven additional issues have been identified from the case studies (appendices 6-9) as having played an important role in the companies' internal formation process.

1. SNI's role as the catalyst,
2. common objectives,
3. fit with the parent company's strategy,

4. personal interest,
5. internal communication,
6. SNI's role in the investigations,
7. changes in key personnel

We will assess the importance of these issues to each company's formation process by assigning iii, ii, or i. An iii would mean that a specific issue was present to a large extent in the formation process; an ii would indicate a smaller extent; and an i would mean that this issue played was not present in the formation process. After these assessments, we will discuss the aggregated effect of these issues and evaluate which of them discriminate between good and bad performance.

#### 11.2.1 SNI's Role as Catalyst

The first issue has to do with SNI's role in the initial phase of the cooperative venture.

In case 1 an outside consultant, to some extent, played a role in bringing the partners together as well as introducing the SNI concept. This consultant clearly had closer ties to the Swedish company than to the Norwegian company. In general, SNI's role as the catalyst appeared to have been relatively important for this cooperative venture, although more so for the Swedish company.

In case 2, SNI had no role at all as a catalyst. We should remember, however, that the joint venture as such was initiated at an early stage, even before the Swedish party's entrance. SNI was contacted at a relatively late stage.

SNI seems to have played the most important role as the catalyst in case 3. The Managing Director actively took part in the early phase of the formation process in both companies and helped the parties to form a cooperative venture out of sales cooperation.

In case 4, SNI was contacted by the Norwegian party at an early stage, although the organization did not seem to have

been a factor as such, the fact that SNI existed probably had an important catalytic effect in this case. The above discussion is summarized in exhibit 11-1.

Issue	Case 1		Case 2		Case 3		Case 4	
	Viak Terotech		S-PART	N-PART	Alnova	Altex	Swed	Nor
SNI as a catalyst	iii	iii	i	i	iii	iii	ii	ii

**Exhibit 11-1: SNI's Role as Catalyst in Cases 1 to 4**

#### 11.2.2 Common Objectives

The second additional issue identified concerns the partners' common objectives regarding the cooperative venture: whether the two companies indeed understood and were willing to give up some of their strategic resources to each other, with the potentially for experiencing some constraints in the future - in order to fulfill the cooperative venture objectives (Lorange, 1987; Harrigan, 1985; 1986).

In case 1 the degree of common objectives was relatively high in both parent companies. This cooperative venture was initiated as a means of applying an old technology to a new set of products as well as penetrating the offshore market. Both companies expressed, in general, the same view.

In case 2, on the other hand, the degree of common objectives was low. The Swedish partner felt that the cooperative venture was a means for increasing short-term sales of its components, whereas the Norwegian partner wanted to see a long-term development of the incineration system. This was also N-PART's intention before S-PART's appearance. Hence, the objectives were quite disparate.

In case 3, the two partners had a high degree of common objectives regarding the cooperative venture, namely, to develop and market aluminum balconies in Norway. Although there was a significant involvement in the subsequent operations with a third party, whose objectives were rather

unclear, this did not affect the two partners' original common objectives.

In case 4, the Norwegian partner argued for a joint venture company. The Swedish partner, on the other hand, was not interested in this mode of cooperation, wanting, instead, to test an initial form of cooperative venture and, thereafter, to decide whether or not to go ahead with a joint venture company. Hence, the degree of common objectives was not particularly high, at least on a short-term basis. However, the partners agreed on the long-term objectives, i.e., to develop the cooperation further into a joint venture for marketing on the international market.

The above discussion is summarized below:

Issue	Case 1		Case 2		Case 3		Case 4	
	Viak	Terotech	S-PART	N-PART	Alnova	Altex	Swed	Nor
Common objectives	iii	iii	i	i	iii	iii	ii	ii

**Exhibit 11-2: Common Objectives in Case 1 to 4**

### 11.2.3 Fit with the Parent Company's Strategy

The third issue is related to the previous two and is concerned with whether the cooperative venture indeed fit in with the parent companies' strategies or not. This has been underscored as an important prerequisite for cooperative venture success by Killing (1983) and Lorange and Roos (1987). We define strategic fit as the degree to which the proposed cooperative venture is congruent with the company's current goals and objectives and the definition of its strategic thoughts. This definition is analogous to Day and MacMillan's (1986) definition of a corporate venture's corporate fit. In other words, it stresses the need to see the cooperative venture as an element of the two parent companies' separate strategies.

Both parent companies in case 1 were consultant/engineering companies providing various technology-based services. Viak's operations involved technical engineering services in three business areas. The company's activities involved development of new applications of new technologies, marketing specific engineering services based on these applications, implementation of these applications, and follow-up after market support activities. The cooperative venture evolved as a segment of the operations in the smallest of the three business areas, namely, the digital maps. The technology used in the cooperative venture was based entirely on the technology developed previously in this business area. The two companies were to cooperate to develop further and adapt Viak's technology into the new product. The venture would also result in some coordination of market development in both Sweden and Norway. Hence, the cooperative venture involved a link with Viak's market development activity -in a complementary fashion. Hence, the strategic fit was good in Viak.

For Terotech the cooperative venture was a part of the largest business area, namely engineering and consultant services. However, the cooperative venture had a different status in this company. The first Technical Manager in the Norwegian company indicated that the technology used in the cooperative venture would improve his company's "high-tech" image, thus representing a somewhat new strategic direction for the company. From a value chain perspective, Terotech's activities were very similar to its Swedish counterpart: engineering services and market development on the North Sea offshore market and some after-market support activities. The cooperative venture was to be linked mainly with Terotech's product development, where the company appear to have been "strongest," and also , to some extent, with the market development activity. Hence, the project was clearly within Terotech's business activities, i.e., the strategic fit was good.

In case 2, S-PART was the subsidiary and sales representative of a large Swedish multinational corporation, which already manufactured equipment for the particular industry. S-PART's operation involved market development, sales and distribution of its parent company's products in Norway. The company was directly involved in neither product development nor manufacturing. On the other hand, S-PART was, to some extent, involved in these activities - through its parent company. Hence, S-PART's input into the joint venture, i.e., equipment and market development competence, seemed to have been a natural way for the company to expand in the industry. In addition, S-PART's parent company was about to terminate another international collaborative arrangement, which might have facilitated its involvement in Joint Venture II. Hence, the strategic fit was relatively good.

The Norwegian partner company, N-PART A/S, was an engineering and consultant company with a large share of its turnover in this particular industry. Its operations involved the development of engineering services, market development in Norway, engineering services, and after market support activities. The company was not involved in manufacturing. N-PART's input into the joint venture was primarily engineering competence in order to develop further and adapt the equipment manufactured by S-PART's parent company in Sweden. Hence, the joint venture had a relatively good strategic fit with the company's strategy.

The cooperative venture described in case 3 is somewhat different from the others. The Swedish company, Alnova, was based on one sole innovation; and the Norwegian company, Altex, was established as a means for marketing the product in Norway. Both companies were also closely related to each other through a cross-ownership arrangement. Since the product - developed and sold through the cooperative venture - was the only product in both companies, there is little doubt that the strategic fit was good for both companies.

The cooperative venture described in case 4 occurred in an oligopolistic situation. Swedpartner's operations included



product development, manufacturing, market development, distribution, and after-sales support, i.e., a large part of the value creation chain. It was relatively well known that the company had difficulties in developing new and competitive products. The cooperative venture was indeed linked to this activity and was based on the idea of both gaining access to each other's home markets and pooling the two companies' resources into the development of a new and competitive common product line. Hence, Swedpartner's input into the cooperative venture was in both product development and market development. This fit well with the company's strategy.

Of Norpartner's three business areas, one was involved in the cooperative venture. At that time, the company was experiencing some difficulties with this particular area. Even though the company was stronger in product development compared to its Swedish partner, the Project Leader in the Norwegian company explained that there were two options for his company: either to initiate an extensive product development plan or to focus on international market development. Another alternative, obviously discussed by the Board of Directors, seemed to have been to close down this particular business area. The company's input into the cooperative venture was product development and market development. These activities fit well with the strategy at that time, given the decision to continue the activities in the business area.

The above discussion is summarized in exhibit 11-3.

Fit issue	Case 1		Case 2		Case 3		Case 4	
	Viak Terotech		S-PART N-PART		Alnova Altex		Swed Nor	
Strategic fit	iii	i	iii	iii	iii	iii	iii	iii

**Exhibit 11-3: Fit with Parent Company Strategy in Cases 1 to 4**

#### 11.2.4 Personal Interest

The fourth issue regards the extent to which the main actors in the partner companies had a personal interest in the success of the cooperative venture. This issue involves human resource management in cooperative ventures. The question is whether the key personnel assigned to deal with the formation and implementation of the cooperative ventures had a personal interest in the future success of these operations. This issue has been emphasized as an important factor by Killing (1983), Harrigan (1985), and Lorange (1986), among others.

The technology used in the cooperative venture in case 1 had, to a large extent, been developed by the Technical Manager (i.e., the Project Leader) in the Swedish company. He explained that he was very pleased with the fact that this technology could be applied to new areas through the cooperative venture. Hence, we might expect that he had a personal interest in the success of the operation. In addition, when Viak's share of the cooperative venture was transferred to a subsidiary, Viak Interface, the Technical Manager obtained a smaller equity stake in this company, adding further to his personal interest in the future success of the cooperative venture.

In the Norwegian company the situation was completely different. Due to the turbulent environment in the offshore industry, none of the Project Leaders remained long. As a matter of fact, one of them explained that qualified personnel in this industry had become "mercenaries," who quickly moved from one assignment to another. Hence, we conclude that the Project Leaders' personal interest in Terotech was limited to that of a normal employer - employee situation.

The Swedish Project Leader in case 2 initially took great interest in the cooperative venture, where he also became the Chairman of the Board. Even though his interest seemed to have diminished over time, we argue that his personal interest during the formation process was higher than that of his counterpart in the Norwegian partner company. The Norwegian Project Leader was relatively uninterested in the project per

se and felt that his and his company's roles were relatively limited. Hence, his personal interest was relatively low.

Considering the small size and ownership structure of the two parent companies described in case 3, the personal interest of the two Project Leaders were indeed very high. The cooperative venture was the major project in the two companies; and both people had significant personal equity stakes at risk.

The Project Leader in the Norwegian company described in case 4, seemed to have had a relatively large personal interest in the success of the cooperative venture, as his business area would indeed become a significant part of the total operation of the company. Also, he was a member of the owner family. The Swedish Project Leader, i.e., the Managing Director, also seemed to have had a relatively great personal interest in the cooperative venture, which was a means for his company to increase its line of products and also expand internationally - without large investments in product development. Hence, this would significantly improve the company's competitive position.

The above discussion is summarized in exhibit 11-4.

Issue	Case 1		Case 2		Case 3		Case 4	
	Viak	Terotech	S-PART	N-PART	Alnova	Altex	Swed	Nor
Personal interest	iii	ii	iii	i	iii	iii	iii	iii

**Exhibit 11-4: Personal Interest in Case 1 to 4**

#### 11.2.5 Internal Communication

The fifth issue relates to how communication regarding the cooperative venture functioned within each parent company's own organization. There was a lack of discussion of these aspects in the cooperative venture literature. However, there are several analogies to other aspects of managerial decision-making processes which could be brought to bear on

our understanding of this dimension. Lorange (1980), for instance, discussed how the interactive patterns in a planning process might shape the evolution toward a commitment to a strategic decision. Hrebriniac and Joyce (1984) discussed the role of interaction patterns in implementing a strategic program. Others have discussed how horizontal interaction in an organization, across organizational boundaries, might impact decisions (McCann and Galbraith, 1981).

In the Swedish company in case 1, the cooperative venture was handled by the Technical Manager and the Managing Director in the local branch office. The internal communication within this branch office functioned well; and there was good contact with their head office. In Terotech, on the other hand, the cooperative venture was in the hands of many people during the formation process. One of the General Managers also said that he did not want to involve other functions in the company during the formation of the cooperative venture. Hence, this might indicate that the internal communication, except between the Managing Director and the Technical Manager, was not particularly well developed. This was also the situation between the company and its parent company.

In S-PART in case 2, the internal communication seemed to have been relatively poor. The General Manager in the Swedish company was committed to the joint venture concept; but he did not communicate with other functions in his company or with his superior in the Swedish parent company. Hence, the internal communication was relatively poor in general. The situation was relatively similar in the Norwegian partner company, where only the General Manager was committed to the project and the degree of internal communication was low in general.

Turning to case 3, the situation was completely different in that the degree of internal communication indeed was high. Again, the size of the two companies combined with their large personal interest might have more explanatory power in this case. As a matter of fact, the Project Leaders made all the key decisions during the initial stages of the cooperative

venture formation in close cooperation with the Board of Directors.

In case 4, there was a significant difference between the two companies in this respect. After the initial hesitation in the Board of Directors, the degree of internal communication became better in the Norwegian company. The Chairman of the Board in Norpartner actually became involved in the formation process at a relatively early stage. The Swedish Project Leader, i.e., the Managing Director, on the other hand, was the only person involved in the discussions; and his contacts with the Board as well as with his parent company were relatively bad.

The above discussion is summarized in exhibit 11-5.

Issue	Case 1		Case 2		Case 3		Case 4	
	Viak Terotech		S-PART N-PART		Alnova Altex		Swed Nor	
Internal communication	iii	ii	i	i	iii	iii	ii	i

**Exhibit 11-5: Internal Communication in Cases 1 to 4**

#### 11.2.6 SNI's Role in the Investigations

With the sixth issue, we return to the role of the outside stakeholder, i.e., SNI. We have already recognized that SNI can have a number of different roles - such as being a catalyst - in addition to being a source of financing. This issue concerns SNI's role as an advisor and helper during the investigation phase and, therefore, as a driving force in the formation process - in other words, (1) the extent to which SNI had a role in the delineation of adequate investigations and assessments of the rationale for the business concept, strength of competition, customer needs, partner ability, etc, and (2) in terms of the conceptual model over the formation process, the extent to which SNI contributed to the "investigation factor" of the formation process.

The feasibility study in case 1 was carried out by an outside consultant who also had certain ties to the Swedish company. Even though this study was partially financed by SNI, the organization played only a limited role in either the investigations, or the evaluation phase.

In case 2, SNI had no role as helper during the investigation phase. We should remember that the joint venture had already been initiated before SNI was contacted and that all check-ups and investigations were carried out prior to this contact.

In case 3 SNI actively took part of the formation process in both companies and, in general, played the most important role as "helper." In addition to helping the parties form a cooperative venture from a sales cooperation, SNI's help was important during the investigations and check-ups, including the formalization of the agreement.

In case 4 SNI was relatively active in general during the whole formation process and seemed, at least some extent, to have been a source of knowledge and experience in the investigations and check-ups. It was, however, the companies themselves, and in particular the Norwegian partner, that carried out the feasibility study.

The above discussion is summarized in exhibit 11-6.

Issue	Case 1		Case 2		Case 3		Case 4	
	Viak	Terotech	S-PART	N-PART	Alnova	Altex	Swed	No
SNI as help with investigations	ii	ii	i	i	iii	iii	ii	i

**Exhibit 11-6: SNI's Role in the Investigations in Case 1 to 4**

#### 11.2.7 Changes in Key Personnel

The last of our additional issues identified has to do with changes in key personnel, relevant to the cooperative venture, in the parent companies during the formation process. We might expect that if these key personnel in the formation

process, for any reason, withdraw, it might have a decisive impact on the continuing process. The number of people involved may also have an impact on the formation process. While the key people must clearly be involved, it may be that the involvement of too many people turns out to be counter-productive, fragmenting the commitment-building (Lorange and Roos, 1987).

In our case studies the only company that suffered from many changes in key personnel was the Norwegian company in case 1. Clearly, these changes not only fragmented that entire formation process but probably also significantly delayed it. In the other companies there were no such changes. We should note that, to our surprise, many of the formation processes were characterized by the "sole involvement" of the Project Leader. Normally, we would not expect this to work.

The above discussion is summarized in exhibit 11-7.

Issue	Case 1 Viak Terotech		Case 2 S-PART N-PART		Case 3 Alnova Altex		Case 4 Swed Nor	
Changes in key personnel <sup>1</sup>	iii	i	iii	iii	iii	iii	iii	iii

**Exhibit 11-7: Changes in Key Personnel in Case 1 to 4**

#### 11.2.8 Summary

In our discussion we have followed the same simple principle in evaluating these additional issues as in the previous discussion of the strength of the theoretical formation process constructs (see chapter 10), i.e., the +, 0, and - signs. In order to compare these findings with the previous ones, we have also included the direction of each formation construct for each company in terms of the same

<sup>1</sup> It should be noted that we have interpreted this issue to mean that a low degree of changes in key personnel is positive. The measurements have been changed accordingly.

signs as used in the present analysis. Consequently, this does not account for the "strength" of each factor. For purposes of comparison we have also used the same aggregated outcome measure as in the previous analysis. These findings are summarized in Exhibit 11-8. We have also included the results from the analysis of the three theoretical constructs in chapter 10.

COMPANY	ADDITIONAL FORMATION ISSUES							THEORETICAL CONSTRUCTS			Outcome
	1	2	3	4	5	6	7	Internal Push	Analytical Scope	Stakeholder Strength	
Viak	iii	iii	iii	iii	iii	i	iii	+	+	-	+
Terotech	iii	iii	ii	ii	ii	ii	i	+	+	+	+
S-PART	i	i	iii	iii	i	i	iii	-	0	+	-
N-PART	i	i	iii	i	i	i	iii	-	0	+	-
Alnova	iii	iii	iii	iii	iii	iii	iii	+	+	+	+
Altex	iii	iii	iii	iii	iii	iii	iii	+	+	+	+
Swedpartner	ii	ii	iii	iii	ii	ii	iii	+	0	0	-
Norpartner	ii	ii	iii	iii	i	ii	iii	0	+	+	-

**Exhibit 11-8: Additional Issues, Theoretical Constructs, and Outcome**

### 11.3 Tentative Conclusions

The main purpose of this chapter was to analyze the importance of some additional formation issues in each of the eight companies' formation processes. In our discussion we followed the natural flow of events, decisions, and actions that might occur when forming a cooperative venture. We began to look at SNI's role as a catalyst, whether the partners indeed had common objectives, and whether the cooperative venture fit with their strategies. Furthermore, we assessed the degree to which the key personnel had a personal interest in the venture, how communications functioned within and between the companies, and SNI's role in the investigations. Finally, we looked at changes in key personnel and the coverage of the cooperative venture agreement.



At least three general findings from this analysis can be underscored. The first is that the seven additional issues seemed to make a difference between the companies. There are relatively more i signs in cases 1 and 3, compared to cases 2 and 4. If we take the performance measure into account, it seems as if the direction of the additional issues, in general, discriminated with respect to outcome.

The second general finding is that the additional issues seem to complement the conceptual model previously elaborated on only to some extent. The pattern outlined above is similar to what was found for the previously elaborated three theoretical factors. In fact, SNI's role as the catalyst (issue 1) is related to "stakeholder strength", and common objectives (issue 2), fit with the parent company's strategy (issue 3), personal interest (issue 4), and internal communication (issue 5), are all related to the "internal push" construct. SNI's role in the investigations (issue 6) is related to our "analytical cope" construct. It is only changes in key personnel (issue 7) that cannot be clustered into our three theoretical construct. Hence, the three theoretical constructs might be seen as useful simplifications, capturing the essence of the formation process of the companies in our population.

The third general finding is that the additional issues discussed above seem to be related to each other in a complex way. Hence, it is difficult to see that the formation process is a sequential process consisting of distinct, consecutive steps. Instead, this process seems to consist of several overlapping "sub-processes."

In addition to these three general findings, a number of specific findings on the issues and their importance for performance emerge. The following three of the seven additional issues seem to discriminate with respect to outcome.

First, SNI's role as a catalyst (issue 1) seemed to have made a difference in our cooperative ventures. In those cooperative ventures that performed well, i.e., cases 1 and 3,

SNI played a role as a catalyst. In those cooperative ventures that failed, SNI played only a limited role as a catalyst (case 4) or no role at all (case 2). This probably has to do with the nature of the sample and that these cooperative ventures were formed at a relatively early phase in SNI's development. Hence, we might expect that the companies that were believed by SNI's Managing Director to be fruitful, received significant attention from SNI, which, in turn, facilitated the subsequent implementation and operations.

The second issue that discriminates with respect to outcome is the question of common objectives regarding the cooperative venture (issue 2). The pattern is exactly the same as for SNI's role as a catalyst. In other words, in those cooperative ventures that performed well, i.e., cases 1 and 3, the parent companies had a high degree of common objectives regarding the cooperative venture. In those cooperative ventures that failed, the degree of common objectives was very low (case 2) or at least not high (case 4). This supports previous findings that the fact that the agreement of both companies on the short-term and long-term purposes is a vital pre-condition for cooperative venturing (Lorange, 1987).

The third issue that seems to discriminate with respect to performance is the matter of internal communications (issue 5). This indeed functioned in the two companies in case 3 as well as in Viak in case 1. In all the other companies, the internal communication did not function satisfactorily. The only exception was the 0 score on this issue in Terotech, which, at least, was not negative.

The issues that, on the other hand, did not seem to discriminate with respect to the outcome were:

1. fit with the parent company's strategy,
2. personal interest, and
3. changes in key personnel.

In addition, it seems as if SNI's help in the investigations was important for only the two small companies

in case 3. In the other companies SNI did not play such an active role.

The question of strategic fit is indeed one of the fundament of a cooperative approach. This should, consequently, be seen as a "control variable" for a cooperative venture. If the venture is not within the parent company's strategy, it is difficult to see how it will survive. This finding supports previous research findings by Lorange and Roos (1987) and many others.

The next two issues regards behavioral aspects of the formation process. We might expect that a high personal interest would make a difference in the cooperative venture's subsequent performance. This could also be the case for changes in key personnel. However, this was not the case in the cooperative ventures in our case studies. For instance, consider the situation in Terotech in case 1. The cooperative venture formation process "consumed" no less than three Managing Directors and three Project Leaders, and, consequently, the personal interest from these key persons was limited. On the other hand, the situation was stable in the Swedish partner company and, coupled with a high level of personal interest, this company had a great patience with the situation throughout the formation process. The fact that there was a high degree of personal interest for the cooperative venture in both companies in case 4, where the result was poor, indicates that this factor is not by itself a determinant of success. When it comes to changes in key personnel, we can see that there were very few such changes in general in our case studies.

In summary, this relatively simple analysis has revealed that a number of additional issues play roles when forming these cooperative ventures. These factors seem, however, to be of differing importance. We should note that we have discussed each issue only as isolated from the others, i.e., indeed a uni-dimensional perspective. Our purpose in this chapter was not to portray the relationships between these issues - this will be discussed in the next chapter.

One of our main findings was that the pattern of the additional seven issues was similar to the pattern of the three theoretical constructs. To some extent, consequently, these three theoretical constructs indeed seemed to capture the fundamentals of the managerial process of forming a cooperative venture, at least in our population.

## CHAPTER 12

# CLINICAL FINDINGS ON INTERACTION PROCESSES

### 12.1 Introduction

In the previous two chapters, we discussed the nature of each company's formation process first in terms of the three fundamental theoretical constructs of the conceptual model, and later in terms of a number of additional formation factors. These discussions have been based on the individual company's perspective only. This was also the major theme of the study; that there are some fundamental elements in each company's formation process that, by themselves, influence subsequent outcome of the venture.

In this chapter we will follow-up on the discussion in chapter 2 regarding interaction processes between the parent companies; the purpose is to add a dyadic dimension to the cooperative venture formation process. As pointed out earlier, these processes are also assumed to be of importance but are, however, not the main focus of the dissertation.

In chapter 2, we briefly outlined Mattsson's (1988) framework for interaction processes terms of exchange processes and adaptation processes. The exchange processes could be either of a social and business nature or concern information only. Adaptation processes are related to modification of products, production, or organizational routines. The nature of these interaction processes are important for the relationship between the partners - their

mutual orientation. We argued earlier that this simple framework is valuable for characterizing organizational interaction between two partners forming a cooperative venture. The overall rationale for this discussion was that, in addition to the nature of each company's internal formation process, the nature of these interaction processes are of importance for forming successful cooperative ventures.

Another aspect of the interaction processes can be derived from the cooperative venture contract. This contract is expected to represent a thorough conceptualization of future technological and market related opportunities and threats. Legal considerations should, however, not be overplayed. Cooperative ventures work only when people want them to work. For the purpose of the present study, this will be a matter of covering in the agreement the various tasks and working relationships that need to be delineated in order for the cooperative venture to run smoothly. This may involve issues of task delineation; resource input commitments; how planning, control, and other management processes are to be delineated; how potential conflicts are to be handled; and so on.

The agreement may also attempt to capture the degree of detail desired, so that an agreement actually covers what was intended. In many decision-making situations, it has been found that, in addition to unfavorable interaction processes, cognitive limitations of the decision makers may lead them to believe that they agree on different things than actually turns out to be the case. In other situations, the perceptual "frames" among the decision makers differ so that they in fact "disagree" on what they agree on, even though their intention was not to do so. Other situations involving dissonance between intended and realized contractual agreements may stem from the fact that executives may be trapped in a certain frame of reference due to past practices and successes and thereby cannot "unfreeze" themselves to see the circumstances around the agreement in different ways (Mintzberg, 1973; Lorange and Nelson, 1987). In sum, the completeness of an

agreement may attempt to capture both the substantive points that need to be covered and a manager's cognition regarding these issues. Hence, we expect that a relatively high degree of adequacy in the coverage of the cooperative venture agreement, to some extent, reflect a form of mutual orientation. On the other hand, it might be argued that an incomplete contract is an indication of favorable interaction processes, i.e., there is no need to formalize an "excellent cooperation." However, in this chapter we will consider this to be a very short-term and dangerous business attitude. Therefore, a contract that covers all the necessary bases might be seen as an indication of favorable interaction processes and is, therefore, expected to contribute positively to the formation process<sup>1</sup>.

The purpose of this final analytical chapter, consequently, is to explore the interaction processes between the parent companies as described in the four cases studies in appendices 7-10. In the following, we will discuss the components of the two interaction processes, the contract as well as whether there were any signs of changes in the mutual orientation. This discussion will result in a summary of the four cooperative ventures and their respective outcome, which will help us to draw some tentative conclusions regarding the importance of such interaction processes in the context of previous findings.

## **12.2 Case 1: Data Based System for Technical Documentation**

### **12.2.1 Exchange Processes**

From the very beginning, the formation of the cooperative venture between the Swedish company, Viak, and the Norwegian company, Terotech, was very much dependent on

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<sup>1</sup> In chapter 7, we found that there was a difference in the nature of the formal agreement between parent companies in "good" versus "less good" cooperative ventures.

personal contacts and personal chemistry between the two companies' team. From the case we learnt that the main actors in each company became good friends and informally met on a number of occasions during the whole formation process. However, there were some periods of stress due to the frequent change of project leaders in Terotech. In spite of these changes, the people in the project teams clearly became good friends. Hence, the social exchange processes were relatively frequent and of a nature that was favorable for forming the cooperative venture.

As an integrated part of the discussion and negotiations, the two parties carried out a number of professional business meetings, often including the outside "catalyst," Mr. Bäckman. These meetings were carried out on an ongoing and relatively frequent basis. The discussions were often very uncomplicated, and regarded mainly how to obtain a fruitful match between development of the software package and the market demand and future aspirations. Hence, we can conclude that also the business exchange processes in case 1 were of a favorable nature.

An important factor when forming this cooperative venture was that both partners shared information. Viak had the main responsibility for technological development, but Terotech was also responsible for developing part of the system. Hence, it was necessary for Viak to share with Terotech some of its know-how. On the other hand, because the Norwegian market was the most interesting, Terotech had to share some information regarding its offshore marketing know-how to Viak. An indication of this was that both partners together participated in a number of trade fairs and marketing arrangements. Hence, the information exchange processes in this case were frequent, and, indeed, of a favorable nature.

Another indication of the nature of the exchange processes is how the communication regarding the cooperative venture, as such, functioned between the parent companies. In case 1, the communication between the partner companies functioned well. The only drawback was the insecurity deriving



from the frequent shifts in key personnel in the Norwegian company. The partners met on several occasions and carried out extensive letter and telephone contacts. The key people participated in all meetings, and the partners made efforts to develop contacts on several organizational levels. In addition, several of the key people became good friends.

### 12.2.2 Adaptation Processes

The cooperative venture was based on Viak's existing technology for digital maps. This digital map technology was modified to fit with the requirements of a computerized system for technical documentation. However, it was not necessary to modify existing products and systems in Viak. For Terotech, on the other hand, the cooperative venture technology, to some extent, represented a new type of activities. Terotech core business was closely related to offshore maintenance and the venture mainly concerned software development. Therefore, it was necessary to partly modify the company's competence in these areas. It became also necessary to modify the whole concept over time, mainly due to the rapid improvements in computer technology. This can be illustrated by the decision to switch from minicomputers to personal computers, even though both partners had the same mini computer, which initially was considered a major pre-requisite for the venture. Hence, both partners did adapt parts of their production system and production facilities in the context of the cooperative venture.

The major change in overall routines was the decision to form Viak Interface, a subsidiary to Viak that would be the direct responsibility for the venture. In this subsidiary, the project leader in Viak became Managing Director and minority owner. This shift represented, indeed, a major modification of organizational routines in Viak with regard to the cooperative venture. This was agreed upon but it is obvious that the Terotech team was not particularly happy about this solution. They implicitly expressed an "the closer to Viak the better"

attitude, and the subsidiary represented a step away from this. Hence, to Viak this adaptation was favorable, while the partner company felt that this was somewhat negative to the cooperation.

The situation in Terotech was very different. The venture was seen as one of many projects with a formal project leader, where the project leader changed several times during the formation process. Hence, there was no particular modification of organizational routines triggered by the cooperative venture project.

#### 12.2.3 The Contract

The following issues were covered in the contract between Viak and Terotech:

- purpose of the cooperation,
- other potential projects,
- brand names,
- management and control routines,
- marketing,
- sharing of deliveries,
- sharing of costs,
- protection of core know-how,
- elimination of competition,
- transfer of the agreement,
- validity of the agreement, and
- conflict resolution.

As can be seen from the case descriptions, three important issues positively differentiated the cooperative venture contract in case 1 from the agreements in the other cases. The first issue was that the partners specified the question of brand names. This was not surprising, however, given the nature of the cooperative venture, i.e., a traditional "technology-market" venture. Hence, this issue was most important in this specific cooperative venture. Second,

the partners covered the matter of protection of the "black box." Again, we might argue that this was most important in this type of cooperative venture, i.e., technology/market. Third and finally, the contract made a difference in that the problem of a potential transfer of the agreement was addressed. This had to do with a parent company's future intentions of transferring the responsibility of the cooperative venture to a subsidiary, which subsequently occurred. In total, the coverage of the cooperative venture contract in case 1 was good, which will be interpreted as one of several indications of that the interaction processes between the two companies were favorable.

### **12.3 Case 2: Industrial Waste Incineration**

#### **12.3.1 Exchange Processes**

The whole process of forming the joint venture between S-PART and N-PART, was indeed very complicated. There were extensive contacts between various partners, but the two direct partners communicated only to a limited extent when forming Joint Venture II. As mentioned previously, the Norwegian company played a more passive role in this formation process than its Swedish counterpart. On the other hand, the person representing the company that had invented the incineration system concept indeed played an important role throughout the process. However, he was not a direct partner.

In the previous chapters we have seen that the internal conditions during the formation process in case 2 was quite complicated and even unfavorable, in both companies. We found very few signs of extensive social interaction between the key people. However, S-PART's acquisition of 50% of the licence - upon which the cooperative venture was based - would probably not have occurred without the combination of social and business interaction between the two Managing Directors in question. In fact, these two key people were well acquainted with each other. However, unlike in case 1 we did not see any

notable social interaction between the key people in the two companies that were the direct cooperative venture partners.

#### 12.3.2 Adaptation Processes

The purpose of the joint venture was to further develop a specific technique of waste incineration and market the end product - a complete incineration system. From S-PART's perspective, this meant being parent company to a small joint venture company, consisting of only a few persons. Given the fact that S-PART's was basically a marketing company for its Swedish parent firm, there was no need to modify any of its marketing routines. The only impact the joint venture had on managerial routines was that the Managing Director of S-PART became Chairman of the Board in the joint venture company. Also, only a few resource persons from S-PART were needed in order to support the joint venture. Hence, there were few modifications of the Swedish partner's organizational routines.

From N-PART's perspective, this was one of several projects. Even if the company formally had 50% of the equity in the joint venture, the general opinion was that it was S-PART that would "pull the cart" - resources from the Norwegian company would only be used when so was specifically required. The managerial consequence was that very few people in N-PART was involved in the joint venture. In fact, it seems that the only managerial consequence was that the Managing Director became member of the Board of Directors of the joint venture.

#### 12.3.3 The Contract

The following issues were covered in the joint venture contract in case 2:

- motives for the cooperation,
- legal rights,
- marketing activities,

- R & D activities,
- organization,
- restriction of competition,
- financing,
- right of first refusal,
- expansion of the equity base, and
- changes in the agreement.

We can see that the partners addressed the questions of financing and future expansion of the capital base as well as the organizational structure. Again, this might have to do with the fact that the cooperation was pursued in the joint venture form and that one partner was to become the majority owner over time. Also, creating a new separate entity requires an organizational setting, which was not the case in the other cooperative ventures. Another issue that discriminates this agreement from the others was that it was specified up-front how changes in the agreement could have been made. The issue of brand names was partly covered in the marketing clause, in that all marketing of the system were to be channeled through the joint venture. Hence, the brand name would belong to the joint venture, not the parent companies. We also note that the issue of protection of core know-how was not mentioned at all. On the other hand, the core know-how had already been, or was to be, transferred to the new separate entity. Thus, the coverage of the contract was good in case 2.

## **12.4 Case 3: Aluminum Balconies**

### **12.4.1 Exchange Processes**

The cooperative venture described in case 3 is somewhat different from the others, in that it evolved from a sales agreement. The venture came to existence in a relatively early phase of the Swedish partner company's life. There were indeed a number of social contacts throughout the formation of the cooperative venture. Several of those described in the

case concerned personal contacts on the Swedish side in order to develop the new product, i.e., the aluminum balcony. Moreover, the initial contacts between the two key persons originated from a banker friend of the Swedish Managing Director of Alnova, and can be derived from their mutual interest in soccer! We see from the case description that most of the subsequent, quite extensive, contacts between the partners were very much a combination of business and social contacts.

In general, communications appeared to have functioned well. There was an extensive interaction during the entire formation process, and due to the close geographical proximity - some twenty kilometers - the key people met numerous times. In fact, the two key people became good friends.

#### 12.4.2 Adaptation Processes

It is evident that this cooperative venture was based on a significant adaptation of the Norwegian company to the venture activities. In fact, the Norwegian partner company was formed as the cooperative venture partner. Hence, all operations were in a sense set up to fit with the venture. For the Swedish partner the cooperative venture represented the most promising marketing channel - Norway had turned out to be the most interesting market. The existing product line of balconies, i.e., both the product and the manufacturing, was extensively modified to fit with the local conditions in Norway.

The organizational routines were changed accordingly in both companies. The cross-ownership arrangement resulted indeed in more coordinated operations and, therefore, in more coordinated management processes. Accordingly, the exchange of information regarding the venture was extensive.

In summary, a number of adaptation processes took place during this formation processes. In fact, there was a, more or less, total mutual orientation between the partners - a logical consequence of how the cooperative venture was set up.

#### 12.4.3 The Contract

The following issues were covered in the cooperative venture agreement between the partners in case 3:

- marketing activities,
- restriction of competition,
- duration and cancellation,
- terms of payment and deliveries
- product specification,
- deliveries, and
- conflict resolution.

This contract was an adapted and ameliorated sales agreement. The partners stressed that their purpose was to make an uncomplicated agreement, which might explain why so few issues were covered. The initial question was to represent and market the Swedish company's product in Norway. Hence, a new product was (initially) not developed and, thereby, the issue of brand names was not relevant. Given the temporarily severe problems with a third party in the cooperative venture, however, we do not consider the agreement "safe" enough.

### 12.5 Case 4: Garden Equipment

#### 12.5.1 Exchange Processes

As discussed in chapters 10 and 11, the cooperative venture formation process described in case 4 was mostly driven by the two Project Leaders only. These two had extensive exchange of information regarding the venture, including their future plans for letting the venture evolve into a separate entity. In general, they had a good communication between them during the formation process and these interactions were quite frequent and were of both a social and business nature. The Project Leaders met on several

occasions and also developed a mutual trust and friendship over time. However, these good contacts occur only at the top levels in the two companies.

#### 12.5.2 Adaptation Processes

For the Swedish company the cooperative venture represented an opportunity to develop further an interesting business area, with minimal investments. Due to the cross-marketing of each other's products, the venture required significant modifications of the production orientation of the company. It is difficult to see to what extent there were significant changes in the organizational routines.

In the Norwegian partner company the adaptation processes were greater compared to its partner. The specific business area constituted some 50% of the total activities and, therefore, the venture resulted in significant modifications in the operations. The product assortment was adapted to what could be marked in Sweden, and the organizational structure was also changed to fit with the venture operations.

In summary, we can see that there were much more adaptation processes in the Norwegian partner company compared to the Swedish partner.

#### 12.5.3 The Contract

The following issues were covered in the cooperative venture contract in case 4:

- specification of activities,
- duration,
- pricing policy,
- terms of payment and deliveries
- geographical areas,
- copying of products,
- customer questions,
- sales promotion,



- information to parent companies,
- product development,
- export cooperation,
- management committee,
- termination, and
- conflict resolution.

We can point to two important issues that differentiated this agreement from the others: the question of specification of geographical areas in which to be active as well as the matter of providing information to each other. Hence, several important, possible future conflict areas were addressed. With regard to brand names we should note that it was a matter of representing and marketing each other's products in each other's home markets. Hence, this issue was not relevant for the cooperative venture as such.

In spite of the information clause, the Swedish partner company was sold to the Norwegian partner company's major competitor - without prior notice. In addition, the agreement was of a "letter-of-intent type" and extended only to two pages of text. In other words, despite the inclusive approach to the cooperative venture agreement, it did not really cover the issues that were addressed.

## 12.6 Summary of Interaction Processes

The above discussions can be summarized as follows:

Interaction Process	Case 1	Case 2	Case 3	Case 4
Exchange Processes	+	-	+	0
Adaptation Processes	+	-	+	+
Contract	+	+	-	-

**Exhibit 12-1: Summary of Interaction Processes in Cases 1 to 4**

We have seen that the exchange and adaptation processes between the two parent companies during the formation process in case 1 were of a favorable nature. These favorable conditions resulted in a gradually mutual orientation towards each other. Both companies learnt more about each other over time, their knowledge of the product increased, and their understanding of each other's interests also increased. This can be illustrated by the Norwegian Project Leader's statement that his company learnt a lot from the project. On the other hand, the "preparation to interact" factor - in Mattsson's (1988) terminology - was somewhat counter-acted through the rapid change in key people in Terotech. In total, however, the companies seemed well prepared - in terms of both the product and cooperative attitude - to pursue this venture.

On the other hand, the interaction processes between the two partners in case 2 were not particularly favorable. There was virtually no preparedness to interact, very little knowledge of what was going on in each company with respect to the joint venture, and confusion regarding what were the other partner's interests.

The organizational interaction processes were quite extensive when the cooperative venture in case 3 was formed, resulting in a high degree of mutual orientation. Given the nature of this venture, that is, the Norwegian partner company was basically created for this purpose, however, this is not surprising. This also resulted in a high degree of mutual orientation - in several dimensions. The only weak spot in this cooperative venture is the relatively loosely formulated contract.

The most obvious example of sole involvement during the interaction process can be seen in case 4. Both exchange and adaptation processes were relatively favorable, however, between the two Project Leaders only. Coupled with a weak contract, these interaction processes indicate that the mutual orientation between the two companies was rather weak.

## 12.7 Tentative Conclusions

In this chapter we have discussed interaction processes between the parent companies forming the four cooperative ventures outlined in Appendices 7-9. The main purpose was to add to the previous analyses of aspects of the formation process occurring within each parent company only, i.e., adding a dyadic perspective.

Based on Mattsson's (1988) framework for interaction strategies in a network sense, we have discussed exchange processes and adaptation processes between the companies. In addition, we viewed a good cooperative venture contract as an indication of favorable organizational interaction during the formation process.

The overall finding from this discussion is that the interaction processes seem to reflect the nature of the internal formation process, as discussed in previous chapters. In case 1, it is clear that, in an iterative manner, the adaptation processes were a result of the exchange processes - leading to good personal relationships, and an explicit and comprehensive contract. As we can recall, the internal formation process was favorable in both parent companies in this cooperative venture. In case 2, on the other hand, the internal formation process was quite unsatisfactory in both parent companies. In this chapter, we found that the interaction processes also were unfavorable - in spite of an adequate contract. Also in case 3, good internal conditions coincided with favorable interaction processes. Case 4, finally, represents an example where the interaction processes were quite favorable between the two Project Leaders only. However, this would not be the case if we would analyze these processes on the level of the companies per se. Again, the internal formation process factors were, in total, not particularly favorable in this case. In total, the findings points at the interaction processes were favorable in those cooperative ventures where the outcome was good, and unfavorable in those ventures where the outcome was bad.

These four case studies do, of course, not provide an adequate basis for drawing conclusions about the relationships between interaction processes and outcome. However, we feel that the nature of such processes indeed seems to be a part of the necessary but not sufficient pre-conditions for successful cooperative venturing. Hence, it is a question of making sure that the internal formation process factors discussed and the interaction processes are favorable. Accordingly, this will provide a better basis for coping with subsequent both internally and externally derived problems.

## CHAPTER 13

# FORMATION OF COOPERATIVE VENTURES: A SYNTHESIS

### 13.1 Introduction

The purpose of this dissertation has been to identify, explore, and explain the elements of the cooperative venture formation process and how these elements influence each other and subsequent outcome. In order to fulfill this purpose, we first discussed some of the existing literature on cooperative ventures and drew analogies from the strategy formation literature. We then described the database used and how the study was designed. As a first analytical step, we identified which individual formation variables seemed to discriminate between parent companies in "good" versus "less good" cooperative ventures.

From the literature review and the initial analyses, a conceptual model emerged incorporating three fundamental theoretical constructs that were expected to picture the core of how the cooperative ventures in this database were formed. This model was subsequently statistically evaluated, resulting in assessments of relative strength for each factor's influence.

In order to better understand, as well as complement, these quantitative results, we presented a framework for four case studies of eight companies' formation practices. These case studies were first analyzed in terms of the conceptual model only, thoroughly evaluating each of the theoretical

issues for each of the eight companies' formation processes. Thereby, we could picture each company's formation process in terms of the conceptual model, arriving at a number of different "individual" models of the formation phase. These models were subsequently compared with the conceptual model with respect to both relationships between the formation issues and influence on outcome.

It was obvious that a number of other issues, in addition to the fundamental theoretical issues, could also play potentially important roles when these four cooperative ventures were formed. In a second type of clinical analysis, therefore, we identified and discussed the influence of ten such additional issues. This "residual analysis" made up the final analytical step in the study.

In addition to these analyses of the internal factors in the formation process, we also discussed interaction processes between each pair of parent companies, and the extent to which we could observe a mutual orientation of the partners.

The purpose of this final chapter is to synthesize the findings and, thereby, provide an adequate answer to the research question as well as indicate some potential areas for further research within this field. We will begin with a discussion of the findings from the above-mentioned quantitative and qualitative analyses. Each set of findings from the analytical phases will be summarized briefly and will be related to foregoing findings as well as to what we found in the literature, which will result in a number of conclusions. These conclusions will emerge into a discussion of the four sets of contributions that this study provides.

### **13.2 Findings and Conclusions**

In this section the findings will be summarized, and conclusions will subsequently be drawn. We will discuss the population of the companies studied, the characteristics of the "best" companies, the core elements of the formation

process, and what the different findings from the analyses of the case studies suggested.

### 13.2.1 The Population

First of all, we should note that we have elaborated on a specific population of Swedish and Norwegian cooperative ventures only, receiving partial project financing from the Swedish-Norwegian Industrial Development Fund, a bilateral governmental venture capitalist. As was seen in chapter 5, these cooperative ventures were all relatively young; and the parent companies were indeed relatively satisfied with the outcome so far. We should also note that most - not all - of the companies in the sample formed the cooperative venture with another company from the same population.

The vast majority of the cooperative ventures were instruments for product and/or market development. Hence, one partner typically provided the technology and the other party the marketing competence or market access, or both partners provided both types of inputs. The general characteristics of the companies in our population were that they had very little experience with cooperative ventures but knew their partners from before. The companies seemed to have been focused on pursuing a cooperative approach as such and showed no tendencies for a "go it alone" attitude. They carried out a relatively large degree of investigation of the premises of the cooperation; but not all the potentially important issues were covered in the agreement. However, the agreement was formalized so that it would be advantageous to both partners, again an indication of a cooperative spirit. SNI's role was to provide project financing and, thereby, reduce the risk involved in the cooperative ventures. The companies were very pleased with SNI's administration.

In their INSEAD study of 839 collaborative agreements, Hergert and Morris (1988) found that the largest share (38%) of these agreements were formed to engage in joint product development, often between rivals. A smaller share (8%) was

formed for joint marketing. Hence, the present population of cooperative ventures differs somewhat with respect to purposes from this sample of European collaborative agreements. Otherwise, besides the role of SNI, the geographical setting, and the high success rate, we do not see other important characteristics that intuitively make this population of cooperative ventures extraordinary.

### 13.2.2 The Best Companies

By relating each individual formation variable to a perceived outcome criterion, a profile for the parent companies in "good" versus "less good" cooperative ventures emerged. These groups of companies differed in several dimensions. We can see that the former type of parent companies had a more "cooperative" approach toward the venture. These companies also put more efforts into gathering necessary information regarding the venture possibilities as well as covering more issues in the agreement. In general, these companies' cooperative ventures were formed to create competitive advantages in terms of access to new technologies and markets - not through restructuring and decreasing costs. So far, the emerging findings were well within our expectations. Some characteristics, however, were not in line with these expectations. The learning effect in cooperative venturing, an issue that has been underscored extensively in the literature, did not discriminate between the companies in our population<sup>1</sup>.

The respondents' experiences, as described in chapter 6, supported the overall notion of the importance of doing a good job beforehand in each parent company as well as underscoring the necessity of favorable interactions. A relatively unexpected set of comments, however, concerned the precaution when it came to staffing the venture, which seems to be the over-ruling "general background" issue. Although underscored

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For instance, see Lyles (1988).



by Lorange (1986), this is not discussed further in this dissertation. It was also surprising to find so many comments on the importance of carefully monitoring the agreement even though they were well in line with the previous findings.

In summary, some interesting characteristics of parent companies in more successful cooperative ventures indeed emerged through this relatively simple analysis. These characteristics are well within our expectations that the formation practices, in general, do make a difference. In other words, the initial findings do indeed support our initial knowledge of the pre-venture design phase, as reported by Lorange and Roos (1987; 1989).

### 13.2.3 The Core of the Formation Process

By providing us with measures of the strength of the relationships in the conceptual model, the subsequent PLS estimation added further to our understanding of how these cooperative ventures were formed. The general finding from this analysis was a support of the assumptions outlined in the conceptual model, i.e., that all suggested causal relationships seem to exist. Another conclusion is that there is an ongoing dynamic interaction between the degree of commitment to and engagement in the cooperative venture and the degree of investigations and analyses carried out - not a simple progression from one to the other. In their study of the structure of unstructured decision processes, Mintzberg et al. (1976) concluded that the dynamics between their "routines" were probably one of the most characteristic features of decision processes that are strategic. Based on our findings, therefore, we conclude that such dynamics between the degree of commitment and engagement, on the one hand, and degree of investigations, on the other, manifest the strategic nature of forming a cooperative venture. Another conclusion is that the more "rational" factor, i.e., degree of investigations and analyses, seemed to have twice as much direct influence on how well the cooperative venture will

perform, compared to the more "behavioral" factor, i.e., degree of commitment and engagement. However, this difference decreases significantly if we also consider the indirect effects on outcome via the other factors in our simplified model.

We can also conclude that SNI's role was to insure that necessary investigations were indeed carried out. We can also see that the degree of commitment and engagement, to some extent, influenced how important SNI was to each cooperative venture. A weak influence from the strength of SNI as a source of project financing to outcome suggests that SNI per se had a positive influence on the cooperative ventures. This might be explained by the fact that all the companies indeed received project financing and that these companies felt that this was important. Also, SNI's objective was to participate in projects where its project financing, as such, was crucial for the formation of the cooperative venture<sup>2</sup>. This imply a bias in our sample, and, therefore, we must be careful in interpret the findings.

The fact that a large amount of the variation in the outcome variable can be explained by the model specification - by our three theoretical constructs only - supports our conclusion that these three factors picture some of the most important aspects of the formation phase. In connection with the last issue, a final, but not surprising conclusion from the PLS analysis is that there must be other issues also influencing theoretical constructs and accounting for, at least, some of the remaining variation in the outcome construct.

#### 13.2.4 Clinical Findings

One of the main purposes of the clinical analyses of the case studies was to get a qualitative interpretation of each of the variables in the conceptual model. At least three

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<sup>2</sup> A fuller discussion of SNI is provided in in chapter 5.

conclusions can be drawn from this analysis, attempting to complement what has already been said.

First, the relationships suggested in the conceptual model were not verified in all the individual companies in the four case studies. On a cumulative basis, however, all the relationships seemed to be present. The conclusion is, therefore, that the conceptual model was not disconfirmed by the case studies.

A second conclusion is that the clinical findings underscored the interaction between more "behavioral" and more "rational" aspects of the formation phase. This was illustrated by studying all the indicators of our theoretical constructs.

Finally, the case study analysis also illustrated the importance of each issue for the outcome of the cooperative venture. That is, the more "complete" the formation phase, the better the chances of success. We can indeed see that the nature of the formation phase made a difference - even though this phase was portrayed in only a few theoretical constructs. Hence, these three issues seem to be very strong per se.

The analysis of seven additional issues revealed less than we had expected. However, two conclusions can be drawn that might add to our discussion. The first is that we found relatively many additional issues, both rational and behavioral in nature; most of these issues have previously been discussed in the literature. Without studying the relationships among these issues we feel that the mere number of issues as such underscores the complexity of the formation process.

The second conclusion was that very few of these issues were important in the sense we assessed them, i.e., discriminating power against the outcome construct. In that sense these issues did not really add that much to the initial conceptualization of the formation process, i.e., in terms of the three theoretical constructs. We have previously seen that four of these seven additional issues are related to the theoretical construct "internal push," one to "analytical

scope," another to "stakeholder strength." Only one of the seven additional issues could not be related to the theoretical constructs.<sup>3</sup> Hence, we might interpret this by saying the additional issues are mainly ingredients, or parts, of the three theoretical constructs outlined in the conceptual model.

The discussion of the interaction processes between the parent companies revealed that these might be dependent on the internal formation process issues discussed above. In general, these were consistent with the favorable or unfavorable nature of such internal formation processes in each company. Hence, in addition to the nature of the internal formation processes we will consider the interaction process dimension as also being a necessary but not sufficient prerequisite for successful cooperative ventures.

### 13.3 An Internal and Interactive Process

This study has illustrated that the formation of a cooperative venture definitely is not a simple, unitary event. Rather, it is an outcome of complex rational and behavioral processes over some period of time. Thus, a natural conclusion is that such a process is difficult both to describe and to study. In the present study we tried to overcome these difficulties by using different and complementary research methods.

The overall conclusion from our study is that the nature of the formation process seems to make a difference. Despite our detailed study of the companies in this population, but considering some of this study's limitations, we must be careful in drawing causal inferences between the formation practices and the subsequent outcomes. What we can say, however, is that the "best" companies had a more complete formation phase, in terms of both the theoretical constructs

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<sup>3</sup> See chapter 11.

and the seven additional formation process issues. This can be interpreted to mean that a thorough formation phase, including at least the rational and behavioral issues covered in this study, is a necessary but not sufficient condition for cooperative venture success. Such a thorough formation phase will give the company a better basis from which to cope with internal and external damaging forces during the implementation phase - issues we have not dealt with here. Thereby, the likelihood for a satisfactory outcome will be increased, regardless of what the outcome criteria are.

#### 13.4 Generalizability

Having presented the main conclusions of this study, we now turn to a discussion of how these conclusions may be generalized. We will provide four clues that might help the reader in this respect.

The first clue has to do with inferences between the sample and the population. This is the normal question to ask in quantitative research. In this study, the quantitative analyses were carried out on a large proportion of the population as such. Hence, we have argued that the sample, in fact, characterizes the complete population. Consequently, the question is not to make inferences between the sample and the population, but rather between this specific population and other populations.

This brings us to the second clue, namely, the question of how unique this population's specific settings are. The population consisted of seventy-four Swedish and Norwegian companies of various sizes, ages and industries. Sweden and Norway share the Scandinavian peninsula, thereby having similar geographical conditions. In addition, the two countries have similar political and cultural backgrounds and similar rank by Hofstede's (1984) cultural clusters. However, there are relatively large differences in industry structure, regarding orientation, size of the companies, and degree of

internationalization. These differences are likely to influence the strategies of management<sup>4</sup>.

The population is unique in that all companies have received project financing from a specific bi-lateral venture capitalist. The question is, thus, how important these settings are and whether similar settings can be found in other parts of the world.

A third clue has to do with the methodological approach in this study. As explained in greater detail in chapter 4, quantitative and qualitative research approaches have been used in a complementary way. Hence, while we might have been studying a very specific population methodology-wise, we have made an effort to do a thorough job.

This brings us to the final clue, namely, the question of the reliability of the measurements. As also explained in greater detail in chapter 4, the questionnaire was pre-tested and sent to the key people directly involved in the formation of the cooperative ventures. In addition, we had the full institutional support of SNI's official participation in the study.

### **13.5 Implications and Contributions**

Given the results and the generalizability of these, what are the implications and contributions of this study? In our opinion, five sets of implications and contributions should be mentioned: to strategy theory, to cooperative venture theory, to methodological thinking, to managers, and to supra-national policy making. In the following sections, these sets will be discussed briefly.

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See Lorange and Roos (1989a) for a fuller discussion of these differences and their implications.

### 13.5.1 To Strategy Theory

This study illustrates a strategy formation process, i.e., the strategic decision to form a cooperative venture. From the review of the strategy literature in chapter 3, we can see that several other examples of strategy formation processes have been researched, such as foreign investment processes, resource allocation processes, and acquisition processes. Consequently, this study can be seen as a contribution to studies of managerial processes within, and to some extent, between companies. We believe that more knowledge of such organizational and managerial processes will become more and more important in the context of the "paradigm shift" alluded to in chapter 1.

### 13.5.2 To Cooperative Venture Theory

This is a study of cooperative ventures. As we can see from the literature review in chapter 3, many, often macro-oriented, aspects of cooperative ventures have been researched. We can also see that very few authors have studied managerial processes in connection with cooperative ventures - even fewer have studied such processes that have to do with establishing a cooperative venture. Hence, this study contributes detailed insights into a phenomenon that only recently is starting to attract authors within this field<sup>5</sup>. In addition, our study concerned cooperative ventures between both smaller and larger companies. Hence, this is also different from much of the previous research, which is often based on larger corporations only.

We have also elaborated on the interaction processes between the partners forming cooperative ventures, by using a framework from buyer-seller relationships. We feel that it is useful to use such well-developed concepts from other

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For instance, Lorange and Roos (1987, 1989); Contractor and Lorange (1988); and Schaan and Navarre (1988).

disciplines, e.g., marketing research, in the strategy and business policy field.

### 13.5.3 To Research Methodology

A third contribution of this study concerns research methodology in this type of research. As we can see from the literature review, many of the widely accepted theories are based on clinical analyses of sometimes only one or a few case studies. Considering the extreme "specific settings" of some of these cases, it is impressive that these theories have had such an impact on the scientific community. On the other hand, we can see from the methodological discussion in chapter 8, that new statistical methods have become available and are also widely used in research, offering new opportunities to elaborate on "theoretical variables."

In this study we have argued for and pursued an approach involving several methods in a complementary way. Our purpose has been to narrow down successively the research question. We began with a survey that was to provide a firm basis for further elaborations - both quantitative and qualitative. This is a different approach from the more traditional "single-case-then-survey" type of approach. In our opinion, the approach used in the present study offers less risks for pre-determinating the phenomenon being studied - given a thorough understanding of the literature. This might be illustrated by the "individual" conceptual models that were derived for each of the companies in the case studies. If we had based our survey on the findings from only one such case study, our statistical results might have been misleading. Of course, this regards the depth of the particular case study. As we demonstrated in chapter 11, a broader perspective provides more, but not always relevant, information.

Another implication has to do with the use of a specific method, namely PLS<sup>6</sup>. This particular method has just received

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<sup>6</sup> See chapter 8.



attention in the strategy research. Lorange, Fornell, and Roos (1989) drew analogies from marketing research and argue for the use of this method in strategy formation research - in combination with more traditional quantitative and qualitative methods<sup>7</sup>. An example of such an approach is provided by Day, Roos, and Yip (1989), who explore the industry structure-strategy-performance paradigm in a global consumer product industry. In our opinion, the use of these types of "second-generation multivariate methods" in strategy research will increase in the future in both descriptive and prescriptive research.

#### 13.5.4 To Managers

When it comes to the usefulness of the findings for practitioners dealing with cooperative venturing, four sets of implications can be offered.

The first implication concerns the tentative conclusions that were drawn from our incomplete review of the cooperative venture literature, namely, that the general attitude in much of the literature is "competitive" in nature. Given the nature of a cooperative venture, we found this very surprising. In this study, we have shown that a more cooperative attitude during the formation process is an important prerequisite for a fruitful cooperative venture, i.e., what Lorange (1988) has labeled "win-win" cooperative strategies. This is particularly important in the context of the evolutionary pattern of cooperative ventures discussed in chapter 2.

Returning to our empirical findings, we have shown that the managerial processes in connection with cooperative venture formation are indeed an important factor for subsequent outcome. In turn, this general finding suggests that this aspect is also important for the implementation phase. One implication of this is to make sure that the managers responsible for negotiating and forming a cooperative

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See also the discussion in chapter 3.

venture have sufficient time and resources to be able to do a good job.

Third, we have shown that two fundamental aspects are particularly important in this managerial process, namely the degree of internal commitment and engagement and the degree of investigations and the degree of analyses and investigations carried out. This implies that the managers responsible for forming a cooperative venture, as well as for supervising the formation, must understand the importance of creating a positive, creative, and "win-win" type of internal cooperative climate on several organizational levels for such commitment and investigations to be carried out fruitfully. This will facilitate subsequent interactions between the two companies.

Based on the cumulative findings from the questionnaire study and the case studies, the third set of implications can be presented as a more detailed "mental checklist" for managers contemplating forming a cooperative venture. As we will see, most of these issues can be related to the three theoretical constructs in our conceptual model:

- Do we and the partner have common objectives with the cooperative venture - in the short-term and in the long-term?
- Does the cooperative venture fit with our and the partner's strategy - in the short-term and in the long-term?
- Do the managers directly involved in the formation phase have a true stake in the success of the cooperative venture?
- How do communication work within our company?
- Are we willing to adapt our products, production processes or managerial processes to what is required in the context of the venture?
- How does interactions with our partner work?
- Are we willing to work for a mutual orientation of our company towards the cooperative venture, thereby, allowing for a gradual building up of trust?
- Do we expect changes in key personnel?

- Have we carried out adequate investigations regarding the cooperative venture activities, the environment, and the partner?
- What is our success criterion - does the partner agree?
- Is the coverage in the cooperative venture contract sufficient? Can we "put it in the drawer" and forget about it until a conflict arises?
- Have we specified future potential competitive conflicts?
- What are the opportunities and requirements for potential stakeholders?

Our belief is that if managers in a company include at least these considerations in their formation activities, the cooperative venture will be based on a firm ground. Thereby, implementation will be facilitated and one can more easily solve problems arising during the implementation phase. In other words, the likelihood for subsequent success will increase.

#### 13.5.5 To Supra-National Policy Making

A final set of implications has to do with the role of organizations such as SNI. Three issues can be mentioned in this context. First of all, it is clear that the "SNI-type" of venture capitalist can, indeed, play important roles for guiding bilateral industrial cooperation as such. Second, such an organization can play several important roles in addition to providing project financing. Some of these roles might include acting as a catalyst, being a valuable source of professional experience for the cooperative venture partners, and also requiring commitment and investigations, i.e., analogous to the fundamental constructs of the formation process discussed in this study. However, it seems reasonable to assume that, in order to play these roles, such organizations must be of the unbureaucratic structure that SNI represents.

In the context of the European integration in 1992, these findings might have implications for the role of the existing efforts in, for instance, EUREKA. Also, if other countries outside the EEC want to increase their bi- or multi-lateral industrial cooperation, SNI might be an example of a successful instrument.

### 13.6 Where Do We Go From Here?

In addition to the "standard type" of recommendations for follow-up research, such as the necessity for developing and testing the findings by using other samples, settings, and longitudinal data, we will offer five suggestions for research in connection with the topic of this study.

A first issue is to compare cooperative venture partners, i.e., pursuing a multiple informant approach. Thereby, we might be able to see, for instance, how many dissimilarities can be tolerated before the formation phase eventually ends or results in a badly prepared cooperative venture.

A second approach might be to evaluate in greater detail the role of the formation process for the implementation practices - in other words, the intermediate phase between formation and outcome that we have omitted in this study. It might be possible to trace some difficulties and successes in the implementation phase back to the formation phase.

A third research question might be to elaborate further on differences in management approaches to cooperative venture formation, in particular between different cultural settings. This might help us to understand how to cope with such differences the formation practices.

Our fourth suggestion has to do with the nature of our theoretical construct. Since these turned out to be of such importance, we think it would be worthwhile to elaborate further on these. More precisely, we might consider the pattern of the interaction between these constructs. The formation process might be an ongoing interaction between the

behavioral dimension "initiation" and the more rational dimension "investigation." Given the cooperative context, this interaction does not only occur inside the organization, but, by definition, passes through the organizational boundaries. The question is, however, what does the pattern look like? Where does the process begin and end, and what is its importance? What are the implications for commitment and trust building?

Finally, our fifth suggestion for future research is to incorporate more of interaction processes, into conceptualization of formation processes. Of course, this is particularly important when discussing cooperative strategies. This also suggests more of cross-fertilization of know-how from several research disciplines, for instance, adaptation of knowledge about buyer-seller interaction processes into research on cooperative strategies.



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# APPENDIX 1

## SHORT SUMMARY OF RESEARCH ON COOPERATIVE VENTURES

Issue	Author
Reasons for Formation	Harrigan (1985) Harrigan (1986) Killing (1983) Root (1988) Contractor and Lorange (1988) Buckley and Casson (1988) Afriyie (1988) Boston Consulting Group (1985) United Nations (1978) Stopford and Haberich (1978) Berg, Duncan, and Friedman (1982)
Types of Cooperative Ventures	Harrigan (1985) Killing (1983) Contractor and Lorange (1988)
Performance	Harrigan (1985; 1988) Kogut (1987) Killing (1983)
Joint Venture Formation	Lorange and Roos (1987; 1989)
Management of Cooperative Ventures	Killing (1983) Schaan (1985) Lorange (1985) Schaan and Beamish (1988) Koot (1988) Håkansson and Johansson (1988)

<b>Trends and Life Cycles</b>	Hergert and Morris (1988) Gomes-Cassers (1985) Berg and Hoekman (1988) Kogut (1988)
<b>Cultural Implications</b>	Stopford and Wells (1972)
<b>Joint Ventures in LDCs</b>	Beamish (1985) Oman (1988) Lecraw (1984) Tomlinson (1972)
<b>Impact on R&amp;D</b>	Harrigan (1985) Hladik (1985) Vickers (1985) Pfeffer and Nowak (1976) Lorange and Håkanson (1988)
<b>Structure of Joint Ventures</b>	Hladik (1988) Harrigan (1988) Walker (1988)
<b>Cooperative Ventures with Japan</b>	Tyebjee (1988) Graham (1988) Pucik (1988) Abegglen (1982) Electronic Business (March, 1984)
<b>Learning from Joint Ventures</b>	Lyles (1988)

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## **APPENDIX 2**

### **Letters to the Respondents**

X  
X  
X  
X  
X

Forskningsprojekt: "Hur uppnå framgångsrika SNI-baserade projekt?"

Institutet för Internationellt Företagande vid Handels-högskolan i Stockholm kommer att i samarbete med Svensk-Norsk Industrifond genomföra ett forskningsprojekt om SNI-baserade samarbetsprojekt. Syftet är dels att ge de industriella parterna ökad kunskap om och nya insikter i praktiskt samarbete, dels att förbättra möjligheterna till skapandet av nya framgångsrika svensk-norska samarbetsprojekt.

Projektet börjar i januari 1987 och pågår till juni 1987 och omfattar samtliga SNI-projekt. Tyngdpunkten i studien kommer att ligga i att undersöka fasen före ett formellt samarbetsavtal, men även i möjligaste mån igångsättningen och genomförandet. Synpunkterna från "SNI Samarbetsdag" på Kämpsten den 4-5 december samt resultaten av en vid IIB pågående mindre studie av tre SNI-projekt ligger till grund för utformandet av ett frågeformulär. För att detta skall vara utformat på bästa sätt, kommer det att testas på några pilotprojekt. Frågeformuläret kommer att sändas ut till de som arbetar med projekten under februari och följs därefter upp med telefonintervjuer eller besök.

Resultaten kommer att presenteras på ett SNI-seminarium under försommar 1987. Deltagarna får dessutom en rapport som sammanfattar resultaten av de analyser som gjorts.

All information kommer att behandlas konfidentiellt och kommer i den fördiga rapporten inte att kunna kopplas till det enskilda företaget. Konfidentialiteten gäller såväl mot samtliga utomstående som gentemot SNI.

Stockholm, 7 januari 1987

Peter Lorange  
Professor

Johan Roos  
Research Associate



## SVENSK-NORSK INDUSTRIFOND

SNI



Dato: 23. februar 1987 AB/005/9/ms

FORSKNINGSPROSJEKT: "HUR UPPNÅ FRAMGÅNGSRIKA SNI-BASERADE PROJEKT?"

De ca. 30 industrielle samarbeidspartnere som var tilstede ved "SNI SAMARBEIDSDAG" i Sigtuna 4.-5. desember 1986 uttrykte positiv interesse for å medvirke til SNI's arbeid med praktisk samarbeidskunnskap.

Vi har gitt oppdrag til Institute of International Business (IIB) ved Handelshögskolan i Stockholm om å gjennomføre ovennevnte forskningsoppdrag. Det vil bli ledet av professor Peter Lorange som i år er tilknyttet Handelshögskolan i Stockholm, og utført av forskningsassistent Johan Roos. Vedlagt oversendes en orientering fra IIB om forskningsprosjektet.

Basis for prosjektet er et spørsmålsformular fra IIB til deltagerne i SNI-prosjektene, som om kort tid blir sendt Dem i henhold til ovenstående navneliste.

Forskningsprosjektet retter seg for en stor del mot forberedelses- og planlegningsarbeidet i SNI-prosjektene, og legges opp som en undersøkelse også blant topplederne i samarbeidsforetakene.

Allerede tirsdag 26. mai 1987 vil De kunne møte professor Peter Lorange på Hotel SAS Arlandia (Stockholm) og få del i de foreløpige resultater. Nærmere invitasjon kommer vi tilbake til.

Vi håper på Deres positive medvirkning ved besvarelse av spørsmålene fra IIB, slik at forskningsprosjektet kan gi nyttige resultater for oss alle.

Med vennlig hilsen  
SVENSK-NORSK INDUSTRIFOND

*Atle Bye*  
Atle Bye  
adm. direktør

Vedlegg

---

Postadresse:	Besøksadresse:	Telefon:	Telex:	Telefax:
Postboks 344 Sentrum, N-0101 Oslo 1.	Skippergt. 31, Oslo (Inngang: Bleikop Gunneruagtl.)	(02) 42 67 30	71812	(02) 42 67 30 42 69 35 etter kontortid
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## **APPENDIX 3**

### **The Questionnaire**



**STOCKHOLM SCHOOL OF ECONOMICS**  
Institute of International Business

**Strikt konfidentiellt.**

**Inga uppgifter ur denna enkät kommer att publiceras eller omnämnas så att enskilda företag kan identifieras.**

Professor Peter Lorange

Forskarassistent Johan Roos

**1. Bakgrundsfakta**

**1.1 Företagets namn och adress:**

\_\_\_\_\_

\_\_\_\_\_

Grundat år: \_\_\_\_\_

Telefon: \_\_\_\_\_

**1.2 Ert namn:**

**Befattning i företaget:**

\_\_\_\_\_

\_\_\_\_\_

**1.3 Var god precisera om Ert företag är en koncern, en division, enhet eller affärsområde etc. (Denna definition på "Ert företag" kommer att gälla i hela enkäten.)**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**1.4 Var god ange omsättning och vinst för "Ert företag". (Tusentals kronor)**

**1986**

**1985**

Omsättning \_\_\_\_\_ tkr \_\_\_\_\_ tkr

Vinst (rörelseresultat efter avskrivningar och finansiella kostnader och före skatt).

\_\_\_\_\_ tkr \_\_\_\_\_ tkr

- 1.5 Var god ange de tre största produkt- eller tjänsteområden som "Ert företag" är verksamt inom:

Område	% av total försäljning
1. _____	_____
2. _____	_____
3. _____	_____

- 
- 1.6 Hur stor andel (%) av "Ert företags" totala försäljning är utlandsförsäljning?

Export: \_\_\_\_\_ %      Tillverkning i utlandet: \_\_\_\_\_ %

- 
- 1.7 Inom vilket eller vilka produkt- eller tjänsteområde(n) finns Ert svensk/norska samarbetsprojekt?

- 
- 1.8 Hur stor andel (%) utgör detta/dessa produkt/tjänsteområden totalt av "Ert företags" totala verksamhet (om ej listat under punkt 1.5) ?

- 
- 1.9 Vilken marknadsandel (%) har "Ert företag" på samarbetsområdet (1.8)?  
(Ge en uppskattning även om ni inte vet exakt).

I hemlandet: \_\_\_\_\_ %

I partnerlandet: \_\_\_\_\_ %

---

## 2. Bakgrund till projektet

### 2.1 Vem genererade det ursprungliga projektförslaget?

- ☐ "Ert företag"      ☐ Er partner      ☐ Gemensamt av både "Ert företag och Er partner"
- ☐ Annan, nämligen: \_\_\_\_\_

### 2.2 Hur kan projektet relateras till "Ert företags" viktigaste affärsidé?

- ☐ Förstärkning av existerande verksamhet  
☐ Led i en produktdiversifiering  
☐ Annat, nämligen: \_\_\_\_\_

### 2.3 Övervägde Ni överhuvudtaget att genomföra projektet i egen regi?

- ☐ Ja, nämligen: \_\_\_\_\_
- ☐ före första kontakten med partnern.  
☐ efter första kontakten med partnern.
- ☐ Nej

### 2.4 Hur medverkade olika funktioner i "Ert företag" i förberedelse- och planeringsarbetet? (Försök svara även om Ni inte är helt säkra).

	Mycket engagerade			Inte alls engagerade	
	1	2	3	4	5
Företagsledningen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ekonomifunktion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Produktutveckling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Produktionsfunktion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marknadsfunktion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Koncernledning i moderbolaget (om tillämpligt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Kommentarer: \_\_\_\_\_

\_\_\_\_\_

- 2.5 Hur stor var enigheten **internt** om att driva detta som ett svensk-norskt samarbetsprojekt i "Ert företag" respektive hos partnern?  
(Försök svara även om Ni inte är helt säkra).

	Mycket stor			Mycket liten	
	1	2	3	4	5
"Ert företag":	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnern:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 3. Tidigare erfarenheter av samarbetsprojekt och av partnern

- 3.1 Vilka typer av samarbetsprojekt har "Ert företag" medverkat i under de senaste två åren?

	Ungefärligt antal				
	0	1	2-5	6-10	> 10
Samägt bolag med en annan part	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Icke tidsbundet formellt samarbetsprojekt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tidsbundet formellt samarbetsprojekt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samarbete utan formellt avtal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annat, nämligen: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 3.2 När hade en representant från "Ert företag" den första kontakten med Er partner om detta projekt?

- ☐ Mindre än 6 månader före avtalet
- ☐ 6-12 månader före avtalet
- ☐ 1-2 år före avtalet
- ☐ Mer än 2 år före avtalet

- 3.3 Har Ni tidigare haft affärskontakter med Er partner, t ex kund, leverantör eller i andra samarbetsprojekt?

- ☐ Ja, nämligen på följande sätt: \_\_\_\_\_
- \_\_\_\_\_
- ☐ Nej

#### 4. Alternativ och val kring samarbetsprojektet

- 4.1 Hur många alternativ till Er(a) nuvarande samarbetspartner **diskuterade** Ni internt för att klarlägga projektmöjligheterna?

\_\_\_\_\_ st diskuterades.

---

- 4.2 Hur många av dessa **kontaktades** för att diskutera samarbetsmöjligheterna?

\_\_\_\_\_ st kontaktades.

---

- 4.3 Vilka alternativa samarbetsformer diskuterades med Er nuvarande partner? (Ange alla former som diskuterades).

Valt alternativ

<input type="checkbox"/> Samägt bolag	<input type="checkbox"/>
<input type="checkbox"/> Icke tidsbundet formellt samarbetsprojekt	<input type="checkbox"/>
<input type="checkbox"/> Tidsbundet formellt samarbetsprojekt	<input type="checkbox"/>
<input type="checkbox"/> Samarbete utan formellt avtal	<input type="checkbox"/>
<input type="checkbox"/> Annat, nämligen: _____	<input type="checkbox"/>
_____	<input type="checkbox"/>
_____	<input type="checkbox"/>

---



**4.4 Hur stor betydelse hade nedanstående för valet av samarbetspartner, respektive hur nöjd är Ni med utfallet i dagens läge?**

[illegible]

4.5 Har Ni internt i "Ert företag", som en del av planerings- och förberedelsearbetet inför samarbetsavtalet, gjort följande:

		Klart ja				Klart nej			
		1	2	3	4	5			
1)	Formulerat målsättning för projektverksamheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2)	Analys av projektets anpassning till Ert företags strategi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
3)	Analys av projektets anpassning till <b>partnerns</b> strategi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
4)	Analys av markanden för projektets produkter eller tjänster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
5)	Analys av konkurrenssituationen inom projektets produktområde	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
6)	Analys av egna resurser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
7)	Analys av partnerns resurser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Kommentarer: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 5. Samverkan med partnern

5.1 Hur omfattande har "Ert företag" kontakter med partnern **generellt** sett varit i förberedelse- och planeringsarbetet fram till och med **samarbetsavtalet**?

Detta var:									
Mycket omfattande					Mycket begränsade				
1	2	3	4	5	1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.2 Ungefär hur många gånger **träffades** representanter för "Ert företag" och partnern under förberedelse- och planeringsarbetet fram till och med **samarbetsavtalet**?

Inte alls	1-3 gånger	4-8 gånger	> 8 gånger
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.3 Hur många personer från Ert företag var aktivt medverkande i

I Förberedelse- och planeringsarbetet internt: \_\_\_\_\_ st

II Samarbetsförhandlingarna med partnern: \_\_\_\_\_ st

5.4 Använde Ni juridisk hjälp eller konsult vid förhandlingarna med Er partner, och vad uppskattar Ni i så fall kostnaderna för denna hjälp till?

Intern juridisk hjälp: ☐ Ja ☐ Nej

Extern juridisk hjälp: ☐ Ja, kostnaderna var ca: \_\_\_\_\_ ☐ Nej

Konsulthjälp: ☐ Ja, kostnaderna var ca: \_\_\_\_\_ ☐ Nej

5.5 Upprättades ett "letter of intent" före det slutgiltiga samarbetsavtalet?

☐ Ja

☐ Nej

5.6 Hur lång tid tog det **från** första kontakten med partnern **till** godkänd SNI-ansökan?

\_\_\_\_\_ månader

5.7 Hur har de mänskliga relationerna fungerat mellan parterna?

Mycket bra

Mycket dåligt

1 2 3 4 5  
☐ ☐ ☐ ☐ ☐

## 6. Överenskommelsen

6.1 Omfattar samarbetsavtalet och andra klara **formella** överenskommelser, som blev resultatet av planerings- och förberedelsearbetet, följande:

	Ja	Nej	Vet ej
1) Regler för tillsättande av <b>projektledare</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Regler för tillsättande av <b>styrgrupp</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Principer för ersättning och annan <b>belöning</b> för projektets personal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Långsiktig <b>planerings</b> rutin inom ramen för projektet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) <b>Budgeterings</b> rutiner för projektet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Former för beslutsfattande vid <b>utökning</b> av projektets verksamhet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Regler för fördelning av <b>försäljningsrättigheter</b> på för närvarande ej utvecklad marknad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8) Regler för begränsning av partners tillgång av egen <b>know-how</b> (t ex marknads-kunnande, varumärke, viss teknik etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Former för att hantera <b>ägarskiften</b> etc hos partnern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Former för bevakning av projektets <b>konkurrenser</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11) Rutin för bevakning av <b>marknaden</b> för de produktområden projektet omfattar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12) Rutin för <b>budgetuppföljning</b> /kontroll	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13) Former för åtgärder vid <b>konflikter</b> mellan parterna	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14) Former för <b>upplösning</b> av samarbetet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.2 Hur **detaljerat** tycker Ni **samarbets-/konsortieavtalet** med Er partner är?

För detaljerat		Lämplig grad		För oprecist
1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.3 Vilka andra avtal omfattar Ert **samarbetsprojekt**?

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

4) \_\_\_\_\_

6.4 Täcker **samarbets-/konsortieavtalet**, vare sig det är för **precist** eller för **detaljerat**, den **typ av frågor** som Ni **avsåg** att täcka?

Täcker precis det vi avsåg att täcka					Täcker inte alls det vi avsåg att täcka
1	2	3	4	5	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6.5 Hur **ekonomiskt fördelaktigt** bedömer Ni att **samarbets-/konsortieavtalet** är generellt?

	Starkt fördel- aktigt		Lika		Starkt ofördel- aktigt
Hittills:	1	2	3	4	5
för Ert företag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
för partnern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I framtiden, inom 2 år:					
för Ert företag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
för partnern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I framtiden, efter 2 år:					
för Ert företag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
för partnern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 6.6 Har Ni medvetet utelämnat vissa aspekter/faktorer ur samarbets-/konsortieavtalet, och hur skulle Ni i så fall karaktärisera orsaken till utelämnandet?

		Orsak:			
		Känsligt	Glömska	Taktik	Annat
1)	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2)	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3)	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4)	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 6.7 I efterhand, vilka faktorer skulle Ni vilja förändra i avtalen?

Haft med:

Tagit bort:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Ej gjort så precisa:

Preciserat ytterligare:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- 6.8 Har Ni brutit delar av avtalen?

☐ Ja, nämligen: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

☐ Nej

**6.9 Har Er partner brutit delar av avtalen?**

☐ Ja, nämligen: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

☐ Nej

**7. Resultat och erfarenheter**

**7.1 Vilka typer av kostnader orsakade av projektet (i vid bemärkelse), anser Ni vara mest betydelsefulla?**

	Stor betydelse			Ingen betydelse	
	1	2	3	4	5
Direkta ekonomiska	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Förlorade möjligheter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Förseningar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dåligt rykte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Förlorad kontroll	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Förlorad kompetens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tidsförbrukning, projektledaren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tidsförbrukning, övrig personal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Annat, nämligen: \_\_\_\_\_

\_\_\_\_\_

**7.2 Hur stor skillnad anser Ni det vara mellan planerade kostnader/intäkter och utfallet hittills?**

	Stor positiv skillnad		Ingen skillnad	Stor negativ skillnad	
	1	2	3	4	5
Kostnader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intäkter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**7.3 Har Era erfarenheter under projektets gång lett till förändringar i:**

	Stor förändring			Ingen förändring	
	1	2	3	4	5
1) Projektets målsättning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) "Ert företags" strategi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Projektets anpassning till "Ert företags" strategi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) "Ert företags" budgeterade resursinsats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) Er partners budgeterade resursinsats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Annat, nämligen:					
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

**7.4 Hur tycker Ni samarbetsprojektet generellt sett gått och hur tror Ni det går i framtiden?**

	Mycket bra			Mycket dåligt	
	1	2	3	4	5
Hittills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I framtiden, på kort sikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I framtiden, på lång sikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Samarbetsprojektet är upplöst					

---

**7.5 Hur skulle enligt Er mening projektet generellt gått, om det skulle ha drivits helt i "Ert företags" regi?**

	Mycket bättre		Lika	Mycket sämre	
	1	2	3	4	5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Projektet hade inte blivit av.					

---



7.6 Om samarbetsprojektet **inte** lett till önskat resultat, vilka är de viktigaste orsakerna? (Rangordna från 1-3 där 1 är viktigast)

\_\_\_\_\_ Tekniken, pga \_\_\_\_\_

\_\_\_\_\_ Marknaden, pga \_\_\_\_\_

\_\_\_\_\_ "Personkemin", pga \_\_\_\_\_

\_\_\_\_\_ Samarbetet som sådant, pga \_\_\_\_\_

\_\_\_\_\_ Annat, nämligen: \_\_\_\_\_

---

7.7 Även om projektet **inte** lett till önskat resultat, vilka positiva/värdeskapande effekter har projektet medfört för "Ert företag"

---

7.8 I vilka avseenden har projektet gått bra?

---

7.9 Vilka är de tre viktigaste lärdomarna Ni fått av detta samarbetsprojekt?

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

---

## 7.10 Ytterligare synpunkter och kommentarer:

## 8. Svensk-Norsk Industrifond (SNI)

## 8.1 Kände "Ert företag" till SNI före detta projekt?

☐ Ja, på följande sätt: \_\_\_\_\_

☐ Nej

## 8.2 När kontaktades SNI för första gången med anledning av detta projekt?

☐ Före samarbetsförhandlingarna med partnern

☐ Under samarbetsförhandlingarna med partnern

☐ Efter överenskommelse om samarbete med partnern

☐ Annat, nämligen: \_\_\_\_\_

## 8.3 Hur stor betydelse hade följande orsaker till att koppla in SNI på projektet?

	Betydelse för valet:					Hittills är vi:				
	Stor		Ingen			Mycket nöjda		Missnöjda		
	1	2	3	4	5	1	2	3	4	5
Hjälp med att finna en partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samarbetsrådgivning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskminskning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SNI-finansiering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goodwill pga SNI-medverkan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Annat, nämligen: \_\_\_\_\_

---

**8.4 Skulle projektet ha genomförts utan SNT's medverkan?**

I sin nuvarande form:

☐ Ja☐ Nej

I annan form:

☐ Ja☐ Nej

---

**8.5 Hur uppfattade Ni SNI-huvudutredarens arbete under projektvärderingen?**

Mycket bra

Mycket dåligt

1

2

3

4

5

☐☐☐☐☐

---

**8.6 Hur har samarbetet med SNT's administration fungerat?**

Mycket bra

Mycket dåligt

1

2

3

4

5

☐☐☐☐☐

---

**8.7 Hur överensstämde detta med Era förväntningar?**

Mycket väl

Inte alls

1

2

3

4

5

☐☐☐☐☐

---

**8.8 Vad skulle SNI ytterligare kunna tillföra Er med anledning av Ert samarbetsprojekt?**

---



## APPENDIX 4

### BASIC FACTS ON THE COMPANIES IN THE STUDY

Turnover (MSEK)	Export (%)	Employees (no.)	Industry	Type of Venture
37	70	65	Other manufacturing	P + M
703	50	1700	Other manufacturing	
N/A	0	4	Information technology	P + M:
28	0	62	Information technology	both
182	70	260	Electronics	P + M:
250	23	465	Electronics	both
44	65	53	Automobile components	P + M:
450	60	75	Automobile components	both
80	0	85	Engineering	P + M:
10000	80	15000	Food engineering	JV 50/50
13	0	38	Construction engineering	P + M:
150	0	150	Offshore engineering	both
128	0	60	Information technology	P + M
20000	N/A	30000	Aero transportation	
500	90	1000	Automobile components	P + M
16000	95	17500	Automobile	
N/A	N/A	N/A	Fish farming	P + M:
N/A	N/A	N/A	Engineering	JV 66/34
N/A	N/A	N/A	Other manufacturing	P + M
N/A	N/A	N/A	Offshore	
235	10	350	Other manufacturing	P + M
17000	75	14000	Automobile	

N/A	N/A	N/A	Offshore	P + M:
N/A	N/A	N/A	Shipping	JV 50/50
0.3	0	8	Information technology	P + M:
8.8	0	55	Information technology	both
N/A	N/A	N/A	Information technology	P + M:
N/A	N/A	N/A	Automobile	both
23	0	18	Constructions	P + M:
12	0	10	Constructions	JV 70/30
5200	N/A	8700	Other manufacturing	P + M:
9100	N/A	16300	Other manufacturing	both
425	0	662	Cosmetics	P + M:
325	4	380	Medical equipment	
N/A	N/A	N/A	Other manufacturing	P + M:
N/A	N/A	N/A	Other manufacturing	both
N/A	N/A	N/A	Offshore	P + M:
N/A	N/A	N/A	Offshore	JV 70/30
N/A	N/A	2600	Automobile components	P + M:
N/A	N/A	18000	Automobile	both
N/A	N/A	N/A	Electronics	P + M:
N/A	N/A	N/A	Electronics	JV 80/20
N/A	N/A	N/A	Offshore engineering	P + M:
N/A	N/A	N/A	Offshore engineering	JV 80/20
0.60	N/A	1	Information technology	P + M
703	50	1700	Other manufacturing	
15	0	15	Construction	P + M
2	21	2	Construction consulting	
N/A	N/A	N/A	Information technology	P + M:
25	10	25	Information technology	both
N/A	N/A	N/A	Electronics	P + M:
4000	50	7000	Electronics	both
60	N/A	N/A	Electronics	P + M
32	30	63	Electronics	
N/A	15	60	Other manufacturing	P + M
8	0	6	Other manufacturing	

## APPENDIX 5

### RESULTS FROM THE SURVEY OF FORMATION PRACTICES

#### Background

The following questions and answers concerned the general background of the cooperative venture within the parent company.

**1. Who generated the original cooperative venture idea?**

Frequency	Response
21	Your company
13	Your partner
25	Together by both partners
8	Other

The cooperative venture idea was to a large extent generated by both partners together. In eight cases, however, the idea was generated from some outside source.

**2. How can the project be related to your company's most important business idea?**

Frequency	Response
41	Strengthening of existing business
16	A step in a product diversification
10	Other

The cooperative ventures in the study represented, to a large extent, a strengthening of the parent companies'

existing businesses, not a diversification. In this context, it might be useful to return to the fact that the vast majority of Hergert and Morris's (1988) collaborative agreements were formed for the purpose of joint product development. As mentioned previously the cooperative ventures in our database were formed for either of two main purposes - product development and market development. Typically, however, one partner company provided the technology and the other the market access, i.e., not joint product development. Whether this represented a strengthening of the existing businesses is not totally clear.

**3. Did you consider pursuing the cooperative venture within your own company?**

Frequency	Response
25	Yes
42	No

Approximately 2/3 of the companies in the study did not consider pursuing the cooperative venture as a "go it alone" type of project. These companies, consequently, seem to reflect a true "cooperative thinking" from the very beginning of the project.

**4. To what extent were various organizational functions committed to/participating in the formation practices?**

	Very committed				Not at all	
	1	2	3	4	5	N/A
Top management	34	21	6	3	1	2
Economy	9	5	16	16	11	10
Product development	32	15	5	4	1	10
Production	5	9	11	10	17	15
Marketing	26	13	5	5	8	10



It is clear that in these cooperative ventures, the top management, product development, and marketing functions were the organizational functions that were most committed to and engaged in the venture project. The economy and production functions, on the other hand, were significantly less active. This might, of course, reflect the purpose of most cooperative ventures in the population, namely, product development and market development.

From Chapter 3, we learned that the internal hierarchical "initiation forces" are important. In our respondent companies, these forces were driven by the three key organizational functions, given the purpose of the cooperative ventures.

**5. To what extent was there an internal consensus to pursue this project as a Swedish-Norwegian cooperative venture?**

	Very large 1	2	3	4	Very small 5	N/A
In your company	41	18	3	1	0	4
In partnercompany	35	18	6	1	1	6

We can see that, in general, the internal consensus regarding the cooperative venture was perceived to be high in both one's own and the partner companies. This can also be regarded as an important factor in the initial drive for cooperative venturing. In fact, we might expect that this fact is a major prerequisite to create a cooperative venture successfully.

Previous Experience

The following questions and answers concerned previous experiences of cooperative ventures and of the partner.

1. Which types of cooperative ventures has your company participated in during the last two years?

	Approximate number:					N/A
	0	1	2-5	6-10	>10	
Joint venture	23	9	14	1	2	18
Cooperative venture:no time limit	15	8	16	2	4	22
Cooperative venture:time limit	13	5	20	3	8	18
Cooperation without agreement	16	6	16	3	8	18

Many respondents did not answer this question. It seems, however, that the companies had no or very limited experience of cooperative venturing. If they had experience, most had been involved in two to five cooperations. The experience factor was not discussed in our literature survey. As indicated in Appendix 1, however, these issues have been researched by Lyles (1988) and others. All the research findings point to the importance of learning effects of cooperative venturing. The more experience, the better the venture will become.

2. When did a representative from your company have the first contact regarding the cooperative venture with your partner?

Frequency	Response
11	Less than 6 months before that agreement
27	6-12 months before the agreement
15	1-2 years before the agreement
10	More than two years before the agreement
4	N/A

For most companies, the formation of the cooperative venture took more than six months, with a peak between six and twelve months. In other words, the "typical" formation phase in the companies in this database lasted approximately one year.

3. Did you have previous business contacts with your partner, e.g., as a customer, supplier, or in another cooperative venture?

Frequency	Response
40	Yes
25	No
2	N/A

Approximately two-thirds of the companies had previous business experience with each other. This is a factor that might be related to the concept of "learning" (see Argyris, 1982), in that previous experience of the partner might facilitate the formation phase.

#### Alternatives and Choices

The following questions and answers concerned the alternatives and choices the parent companies made in connection with the cooperative venture.

1. How many alternatives to your present partner were internally discussed in order to clarify the cooperative venture possibilities?

Alternative partners	0	1	2	3	4	5	10	11	N/A
Number of responses	34	6	8	6	4	1	1	1	6

Nearly half the companies did not discuss any alternative to the present partner. However, two companies discussed up to eleven alternative partners! This question is related to the issue of partner selection, as discussed by Geringer (1987).

2. How many of these potential partners were contacted in order to discuss the possibilities for a cooperative venture?

Number contacted	0	1	2	3	4	5	N/A
Number of responses	39	7	3	4	5	1	8

Given the responses in the previous question, it was not surprising that many of the alternative potential partners were not contacted at all. Hence, the conclusion is that very few of the companies in this database contacted, or even considered, an alternative partner than the present. It is difficult to compare these findings, as such, with those of Geringer (1987) and others, who stressed the importance of partner complementarities.

3. How important were the following reasons for the choice of a partner, and how satisfied are you with the outcome?

	Very important			Un-important			N/A	Very satisfied			Dis-satisfied	
	1	2	3	4	5	N/A		1	2	3	4	5
Access to geographical home market	18	8	5	10	23	13		4	7	16	6	
Access to geographical export market	11	6	8	7	32	3		2	7	12	6	
Access to customer contacts	16	8	12	11	17	3				N/A		
Possibilities of competitive advantages through cooperation instead of competition	10	7	7	2	37	4				N/A		
Access to management competence	4	12	14	8	25	4				N/A		
Access to product development competence	32	9	10	6	8	2		8	13	16	10	
Access to production competence	15	6	15	4	25	2				N/A		

Access to product assortment	10	16	7	7	23	4	N/A			
Access to financial resources	7	13	10	7	27	3	N/A			
Reduction of over-capacity	1	2	1	3	55	5	N/A			
Possibility of rationalizing	3	6	4	5	44	5	N/A			
Product sharing	2	5	6	8	42	4	N/A			
Increased bargaining power	2	3	7	6	44	5	N/A			
Time saving	21	23	9	3	9	5	6	12	14	10
Risk sharing	21	14	18	5	6	3	7	12	16	6

We can see that the most important factors for choosing the partner were (1) product development competence, (2) time saving and sharing of risks, and (3) access to the partner's home market and customer contacts. These findings verify that there are mainly two different types of cooperative venture motives in this population, namely, product development and market development. Again, we can see that this is somewhat different from Hergert and Morris's (1988) findings (see chapter 2).

**4. Did you internally within your company, as a part of the formation process, carry out the following investigations:**

	Clearly yes			Clearly no			N/A
	1	2	3	4	5		
Formulation of the objective of the cooperative venture	43	17	5	1	0		4
Analysis of how the venture fits with your company's strategy	37	20	8	1	0		1
Analysis of how the venture fits with your partner's strategy	23	15	14	7	6		2
Analysis of the market for the venture's products	34	21	9	1	1		1
Analysis of the competitive situation within the venture's product area	30	29	6	1	0		1
Analysis of own resources	34	23	6	3	0		1
Analysis of partner's resources	20	23	17	4	2		1

In general, many respondents perceived that their companies, to a large extent, carried out these investigations. However, many also felt that it was not unilaterally clear that this was done. These issues can be seen as part of the "investigation forces" discussed in the formation process literature in Chapter 3. From this, we would expect that a large number of these types of investigations would influence the managerial processes in the formation phase. In the present database, we can see that most companies did indeed carry out such investigations. However, between one-third and one-half of the respondents indicated that it was not totally clear whether these assessments were performed. This might be interpreted in two different ways - either as an indication of true "almost completeness" or as an indication of a post-rationalized wishful overestimation of an uncertainty regarding this matter in Weick's (1969) terms. Because many respondents were not in a position to carry out hands-on investigations, the latter interpretation seems to be reasonable. Hence, a "4" response might be interpreted as a lower number of investigations than the Lickert scale might indicate.

### Pattern of Cooperation

The following questions and answers concerned the pattern of cooperation between the parent companies in connection with the cooperative venture.

1. In general, how extensive were your company's contacts with the partner company during the formation process until the agreement?

Very extensive						Very limited					
1	2	3	4	5	N/A						
25	31	10	0	1	0						

Too much			Right level		Too little	
1	2	3	4	5	N/A	
1	7	47	7	1	4	

The respondents felt that the contacts, in general, had been relatively extensive, but that this was the "right" level of intensity.

2. Approximately how many times did representatives of your company and the partner company meet during the formation process until the agreement?

Frequency	Response
0	Not at all
4	1-3 times
34	4-8 times
29	>8 times

Almost all the companies met with their partner more than four times, and approximately half the companies met more than eight times.

3. How many persons from your company actively participated in:
- the formation process internally within your company?
  - negotiations with the partner?

i) Number of persons	1	2	3	4	5	6	7	10	N/A
Number of responses	2	14	19	11	10	3	2	3	3

ii) Number of persons	1	2	3	4	5	7	N/A
Number of responses	4	28	12	13	3	2	5

In most companies, between two and five persons participated in the formation process internally. In general, fewer persons were involved in the negotiation process - between two and four.

4. Did you use legal or consultant assistance in the negotiations with your partner?

Frequency	Response	Frequency	Response
10	Yes, internal legal assistance	17	No
15	Yes, external legal assistance	21	No
7	Yes, consultant	24	No

Not surprisingly, many companies used legal assistance but not a consultant when forming the cooperative venture.

5. Was a letter-of-intent formulated before the final agreement?

Frequency	Response
30	Yes
35	No
2	N/A

Approximately half of the companies formulated a letter-of-intent before the final agreement.

6. How much time elapsed between the first contact with the partner and an approval [of project financing] from SNI?

Months	3	4	5	6	7	8	9	10	12	13	14	15	16	18	20	24	28	30	N/A
Number of responses	5	1	3	11	3	1	2	3	11	2	1	4	1	6	1	2	1	1	8

There is a concentration of responses on six, twelve, and eighteen months. Such cyclical responses are, however, not surprising for this type of question.



**7. How have the human relations worked out between the partners?**

Very good 1	2	3	4	Very bad 5	N/A
35	14	9	8	0	1

More than half the respondents felt that there had been excellent human relations between the parent companies. Very few felt that these relations were not good. The lack of "personal chemistry" between the managers directly involved in the cooperative venture has been emphasized in the cooperative venture literature as major determinant for failure (see Harrigan, 1986; Lorange, 1986; Lorange and Roos; 1987).

**The Agreement**

The following questions and answers concerned the agreement between the parent companies in connection with the cooperative venture.

**1. Does the cooperative venture agreement, and other formal agreements resulting from the formation process, cover the following?**

Issues	Yes	No	N/A
Rules for assignment of project leader	39	25	3
Rules for assignment of steering committee	46	18	3
Principles for incentives to personnel	15	48	4
Long-term planning routine	40	22	5
Routine for budgeting	39	25	3
Forms for decision-making in case of expansion of the activities	27	35	5
Rules for sharing sales rights in new markets	48	17	2
Rules for protection of core know-how	32	32	3
Procedures to cope with changes in ownership in partner company	26	38	3
Procedures for competitor analysis	11	53	3
Routines for surveying the market	26	36	5
Control routines	33	29	5
Procedures in case of conflicts between the partners	49	14	4
Procedures for dissolution of the venture	48	16	3

Most of the companies included the issues mentioned in the cooperative venture literature, such as assignment of management, planning routines, procedures in case of conflicts, sharing sales rights, and procedures for dissolving the cooperative venture (see, for instance, Lorange, 1987). On the other hand, most companies did not include principles for incentives, procedures for competitor analysis, forms of decision-making in case of an expansion of the activities, protection of know-how, and control routines.

**2. How detailed is the cooperative venture agreement?**

Very detailed		Right level		Too general	
1	2	3	4	5	N/A
1	1	51	10	2	2

The vast majority of the companies considered the agreement to be of the right level of detail.

**3. Regardless of the level of detail, does the agreement cover the type of questions you intended to cover?**

Covers exactly what we intended it to cover				Does not at all cover what was intended	
1	2	3	4	5	N/A
15	30	14	2	2	4

Many of the respondents felt that the agreement had not covered exactly what they had intended it to cover. This should be compared with the fact that several issues were de facto not covered at all in the agreement.

4. From an economic point of view, how advantageous do you think the agreement is?

	Very advantageous 1	2	Equal 3	4	Very disadvantageous 5	N/A
So far:						
for your company	5	14	29	11	4	4
for your partner	10	17	27	6	3	4
In two years' time:						
for your company	9	11	33	5	2	7
for your partner	9	14	33	3	1	7
After two years:						
for your company	9	21	22	5	2	8
for your partner	8	23	22	5	1	8

Most respondents felt that the agreement was equally advantageous for both partners, at the time of the survey as well as in the future. Again, we see an indication of a "win-win" attitude among the respondents in this database - both partners were perceived to gain equally from the agreement.

5. Have you violated parts of the agreement?

Frequency	Response
3	Yes
61	No
3	N/A

6. Has your partner violated parts of the agreement?

Frequency	Response
12	Yes
52	No
3	N/A

The vast majority of the respondents felt that neither their own company nor the partner company had violated parts of the cooperative venture agreement.

### Performance and Experiences

The following questions and answers concerned experiences of the cooperative venture.

1. Which types of costs, caused by the cooperative venture, do you consider to be most important?

	Great importance			No importance		N/A
	1	2	3	4	5	
Direct financial	22	13	10	5	3	9
Lost opportunities	5	10	4	8	19	21
Delays	11	7	6	7	17	19
Bad reputation	7	3	10	1	24	22
Lost control	4	4	6	9	19	25
Lost competence	5	1	9	7	19	26
Time consumption:						
project leader	8	13	17	5	4	20
other personnel	6	15	15	8	4	19

In general, the response rate on this question was relatively low. However, direct financial costs, time consumption, and delays were considered to be the most important types of costs.

2. How large is the difference between planned costs/revenues versus the result so far?

	Large positive difference		No difference		Large negative difference		N/A
	1	2	3	4	5	6	
Costs	1	11	30	15	6		4
Revenues	2	2	25	14	16		8

Approximately half the respondents felt that there were no differences between planned costs/revenues and the results so far. However, a number felt that the difference was slightly negative. Given the well-known difficulties in measuring cooperative venture performance, these two measures can be interpreted as an indication of the financial results of the cooperative venture, seen from the parent companies' perspective.

**3. Have your experiences during the cooperative venture resulted in changes in:**

	Large change				No change	
	1	2	3	4	5	N/A
Objective of the cooperative venture	8	14	10	7	24	4
Your company's strategy	5	12	11	11	24	4
The venture's adaptation to your company's strategy	4	12	9	8	27	5
Your company's planned input of resources	5	8	13	11	25	5
Your partner's planned input of resources	5	7	12	14	20	9

This might be interpreted as an indication of an adaptation of the cooperative venture. If experience during of the cooperative venture resulted in changes, they have been in the objectives of the venture or in one's own or the partner's strategy.

**4. How do you perceive that the general results have been?**

Very good					Very bad	
1	2	3	4	5	N/A	
20	20	9	8	3	7	

The results of these cooperative ventures were, in general, perceived as very positive. It should be underscored that this is a generic perceptual measurement which is not related to any tangible milestones or financial result. It merely depicts how the manager directly involved in the cooperative venture perceives the performance. This will be further discussed in Chapter 6.

**5. What would the results have been if the cooperative venture had been pursued by your company only?**

Much better		Same		Much worse	
1	2	3	4	5	N/A
3	6	7	10	8	3

30 The project would not have been pursued.

Many of the cooperative ventures would not have been pursued at all if the alternative would have been to carry out the project within one company only. Again, this adds to the cooperative nature of the ventures - only one partner did not have sufficient resources or competence to start up the venture.

**6. If the cooperative venture has not resulted in a satisfactory result, what are the main causes for this?**

Priority:			Cause
1st	2nd	3rd	
18	6	2	The market
15	6	2	The technology
4	9	4	The cooperation as such
3	2	6	The "personal chemistry"
3	2	1	Other

The most important reasons for unsatisfactory results of the cooperative venture were related to the technology and the

market. Again, this should be related to the type of cooperative ventures in this population.

### The Role of SNI

The following questions and answers concerned the role of SNI in connection with the cooperative venture.

1. Did your company know about SNI before this cooperative venture?

Frequency	Response
27	Yes
38	No
2	N/A

Most of the companies were unaware of SNI before this cooperative venture.

2. When was SNI contacted for the first time?

Frequency	Response
6	Before the negotiations with the partner
36	During these negotiations
21	After the agreement with the partner
1	Other
3	N/A

Most of the companies contacted SNI during the negotiations with the partner.

3. How important were the following reasons for involving SNI in the cooperative venture?

	Very important			No importance			
	1	2	3	4	5		
Help to find a partner		1	0	1	0	53	12
Advice on cooperation		5	3	8	5	35	11
Lowering the risk		31	15	14	0	1	6
SNI-financing		38	19	9	0	0	1
Goodwill		15	14	13	4	14	5

The most important reasons for the companies to seek SNI involvement in the cooperative ventures were financing, lowering the risk, and, to some extent, goodwill.

**4. Would the cooperative venture have been pursued without SNI's participation?**

	Yes	No	N/A
In its present form	15	42	10
In a different form	36	15	16

A larger share of the cooperative ventures would not have been pursued in their present form without SNI's participation. Many would, however, have pursued the venture in a different form. In other words, this might indicate the general importance of SNI for the cooperative venture to be formed.

**5. How would you rank the "SNI investigators'" work during the project evaluation?**

Very good				Very bad	
1	2	3	4	5	N/A
33	15	13	3	0	3

Most of the respondents felt that the "investigators" did a good job during the project evaluation. Very few felt that they did a bad job.



6. How has the cooperation with SNI's administration worked out?

Very good				Very bad	
1	2	3	4	5	N/A
44	16	7	0	0	0

Two-thirds of the respondents felt that the cooperation with SNI's administration had worked out very well. None of the respondents was actually very displeased!

7. How did this correspond with your expectations?

Very good				Very bad	
1	2	3	4	5	N/A
35	16	14	1	0	1

To a great extent, the level of cooperation with SNI's administration was obviously expected by the project leaders.



## APPENDIX 6

**Loadings, Weights, and Communalities from PLS Estimation**

## MODEL I

## Correlations of latent variables

	INTERNAL STAKEHOLDER ANALYTICAL OUTCOME			
INTERNAL PUSH	1.000			
STAKEHOLDER STRENGTH	-.139	1.000		
ANALYTICAL SCOPE	.422	-.431	1.000	
PUTCOME	.421	-.362	.591	1.000

## Outer Model

Variable	Weight	Loading	ResidVar	Communal	Redundan
INTERNAL PUSH					
1	.4176	.5717	.6731	.3269	.0000
2	.6530	.5865	.6560	.3440	.0000
3	.1746	.0584	.9966	.0034	.0000
4	-.6959	-.3065	.9060	.0940	.0000
5	.2416	.5743	.6702	.3298	.0000
6	.1806	.4697	.7794	.2206	.0000
STAKEHOLDER STRENGTH					
1	-.6615	-.5424	.7058	.2942	.0057
2	-.9471	-.8995	.1908	.8092	.0157
ANALYTICAL SCOPE					
1	.3630	.7211	.4800	.5200	.1658
2	.3642	.8243	.3206	.6794	.2166
3	-.4128	.3308	.8906	.1094	.0349
4	.3697	.6803	.5372	.4628	.1475
5	-.1614	.3919	.8464	.1536	.0490
6	.4870	.7938	.3699	.6301	.2009
OUTCOME					
1	.5841	.7154	.4881	.5119	.2059
2	.1873	.6187	.6173	.3827	.1540
3	.6687	.7602	.4221	.5779	.2324
4	-.0785	.3769	.8579	.1421	.0571

# MODEL II

## Correlations of latent variables

	STAKEHOLDER	ANALYTICAL	INTERNAL	OUTCOME
STAKEHOLDER STRENGTH	1.000			
ANALYTICAL SCOPE	-.397	1.000		
INTERNAL PUSH	-.088	.360	1.000	
OUTCOME	-.362	-.602	.455	1.000

## Outer Model

Variable	Weight	Loading	ResidVar	Communal	Redundan
STAKEHOLDER STRENGTH					
1	-.5979	-.4829	.7668	.2332	.0000
2	-.9901	-.9009	.1884	.8116	.0000
ANALYTICAL SCOPE					
1	.4084	.7299	.4672	.5328	.0841
2	.4006	.8376	.2984	.7016	.1107
3	-.2399	.3270	.8931	.1069	.0169
4	-.0551	.3139	.9015	.0985	.0155
5	-.1472	.4166	.8265	.1735	.0274
6	.6436	.8172	.3321	.6679	.1054
INTERNAL PUSH					
1	.4115	.5813	.6621	.3379	.0438
2	.4006	.8376	.2984	.7016	.1107
3	.2953	.1867	.9651	.0349	.0045
4	-.6862	-.2789	.9222	.0778	.0101
5	.1224	.4831	.7666	.2334	.0303
6	.2842	.5549	.6921	.3079	.0399
OUTCOME					
1	.5654	.7167	.4864	.5136	.2310
2	.2610	.6599	.5646	.4354	.1959
3	.6435	.7368	.4571	.5429	.2442
4	-.1182	.3341	.8884	.1116	.0502



## APPENDIX 7

### CASE 1: COMPUTERIZED SYSTEM FOR TECHNICAL DOCUMENTATION

#### Introduction

In this example, we will illustrate the cooperative venture between the Swedish firm, Viak AB, and the Norwegian firm, Terotech A/S<sup>1</sup>. The cooperative venture included both system development and market development of a computerized system for technical documentation in the processing and offshore industries. The cooperative venture did not involve equity shares, but both partners provided both specialist and financial resources in order to develop and market the product. Terotech was responsible for developing the text processing and Viak the graphic processing aspects of the system.

The cooperative venture project was divided into two consecutive, but partly overlapping, phases, namely a system development phase and a market development phase. Today, the system development is in the final stages and the partners have begun to market the product.

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<sup>1</sup> The names of companies and persons are not disguised in this case description.

**Actor Summary**

Company	Name	Title
Viak AB, Karlstad office	Mr. Göte Rahm	Managing Director
	Mr. Sune Johansson	Technical Manager and Project Manager
Terotech A/S	Mr. Øystein Søyland	Managing Director - May 1985
	Mr. Jonn Heggland	Technical Manager/ Project Manager - Jan 1986
	Mr. Leif Fjellin	Managing Director June 1985 - June 1986
	Mr. Rune Ström	Technical Manager/ Project Manager Feb 1986 - June 1987
	Mr. Ove Skretting	Managing Director March 1986 - April 1988
	Mr. Jarl Henning Thorsen	Project Manager July 1987 -
Wermex AB	Mr. Lars Bäckman	Managing Director
SNI	Mr. Atle Bye "Primary-investigator" "Secondary-investigator"	Managing Director

**Event Summary**

Year	Month	Event
1984	January	First contact between representatives of the two firms.
	August	Initial contact regarding cooperation at a trade fair.
1985	May	Second meeting between the two firms. Overall guidelines for the cooperative venture.
	June	Third meeting between the two firms. Details of the cooperative venture. Guidelines for the agreement.
	October	Signing of the cooperative venture agreement. SNI was contacted.
1986	February	The pre-feasibility study was reported.
	May	Formal application for SNI-financing.
	September	SNI's board of directors granted project financing.



1987		Continued product development in cooperation with pilot customer. Initial marketing.
1988	July	Product development finished. Intensive marketing.

## The Partners

### The Swedish Partner: Viak AB

The Viak Group was established in 1930. Its operations involved engineering and consultant services and for the three market segments:

- (1) Land and Water (30% of turnover)
- (2) Construction and Energy (45%)
- (3) Digital Maps (15%)

In the Digital Maps segment, Viak developed a computerized system for geographical and technical maps on various scales. This 'digital map' technique is widely used in the process and construction industries.

The Viak Group had a turnover of SEK 410 million in 1987. The direct partner in the cooperative venture was the Viak Office in the city of Karlstad. This office had 38 employees and a turnover of SEK 13.4 million in 1987, with basically the same system mix as the Viak Group. The Viak Group is listed for the OTC Trading at the Stockholm Stock Exchange. A large proportion of the shares are owned by its employees.

### The Norwegian Partner: Terotech A/S

Terotech was established in 1978 by four Norwegian companies in the offshore industry. Since 1986, the company has been owned by National Electro, which is a part of the Elektrisk Byrå Group (EB). In January 1, 1988, Asea Brown

Boveri (ABB) acquired 65% of the shares in the EB Group. Terotech's operations can be divided into three segments:

- (1) Engineering/consultant services (53% of turnover)
- (2) Large scale maintenance work on offshore platforms (23%)
- (3) Electronic services and instrument system (24%)

In the engineering/consultant service segment, the company develops complete maintenance systems for offshore platforms, refineries, and process plants. It also develops technical manuals and provides services within computer scanning, CAD/CAE, thermographic inspections, and vibration analyses.

In 1987, Terotech had 150 employees and a turnover of NKR 66 million. Due to a large contract with Statoil, some additional 220 people were employed for special maintenance work on three offshore platforms by January 1988.

## Background

Administration of technical documentation is a large problem in offshore operations. There can be three million documents on one offshore platform and the initial costs for providing this can be some NKR 50 million. The costs for maintaining and updating these documents are very high. It is also vital to define routines which permit fast retrieval of information. Since Terotech was active in the offshore industry, the company was aware of this problem and had observed serious consequences of poor management of technical documentation on several occasions.

In early 1984, representatives of the two companies happened to meet during a company visit to Norway for study purposes. The study trip was organized by Utveklingsfonden (a governmental organization that supports and encourages the development of small business in Sweden) in the city of

Karlstad some 150 kilometers from the Norwegian border. Viak participated, since the company was interested in increasing its business with Norway. On this occasion, the Terotech representative expressed his firm's interest in Viak's know-how regarding the 'technical documentation' field, but there were no further direct contacts.

Even though the Viak Group was represented in Norway, the Karlstad branch office wanted to increase its business in Norway and especially on the North Sea offshore market. To this end, the company participated in various trade fairs in order to demonstrate its services. Viak's Karlstad office also became a member of Wermex AB (a non-profit governmental organization that assists its member companies in their internationalization efforts).

In August 1984, both Viak and Terotech were represented at an offshore trade fair in Stavanger on the Norwegian west coast (ONS-84). Mr. Lars Bäckman, head of Wermex, assisted and participated in the Viak team. During the trade fair, Mr. Bäckman suggested that Viak's representative, the Technical Manager Mr. Sune Johansson, should contact Terotech's representative and Managing Director Mr. Øystein Søyland and the Technical Manager Mr. John Heggland, since the Norwegian company had previously shown some interest in Viak's services.

In the subsequent discussion, Mr. Johansson, Mr. Heggland, Mr. Søyland, and Mr. Bäckman developed good personal contacts. Mr. Heggland said:

In order to make our ideas more tangible, we invited Mr. Johansson and Mr. Bäckman to our office and we got very good personal contacts. At this stage, however, we primarily wanted to buy Viak's competence in the technical documentation field.

During these discussions, the parties realized that the two companies seemed to complement each others' competencies. It was therefore decided that they should meet again to further discuss some of the ideas that had come up during this meeting, i.e., some form of cooperation within the field of "technical documentation." The parties initially arranged a

meeting in Karlstad, which, however, was cancelled by Terotech. To the Viak team's relief, it soon turned out that the reason for the cancellation was an unexpected visit from a large customer and it had nothing to do with Terotech's interest in the cooperative venture idea. At Viak, Mr. Rahm indicated that this was a critical issue for himself and Mr. Johansson:

We were very surprised and distressed over this cancellation, and thought that Terotech suddenly had lost their interest in the cooperative venture idea. Hence, we came to realize that miscommunication could be fatal in the early phases of such a project.

### **The Cooperative Venture**

It was not until May 1985 that a delegation from Terotech visited Viak in Karlstad. The delegation included the Managing Director, Mr. Söyland, and the Technical Manager, Mr. Heggland. This was the first time that Viak's Managing Director, Mr. Göte Rahm, was personally involved in the discussions. Mr. Heggland expressed his and Mr. Söyland's opinion before they went to this meeting:

We were determined to discuss in terms of concrete cooperation or nothing at all. Otherwise we might as well continue with some other project within our own firm.

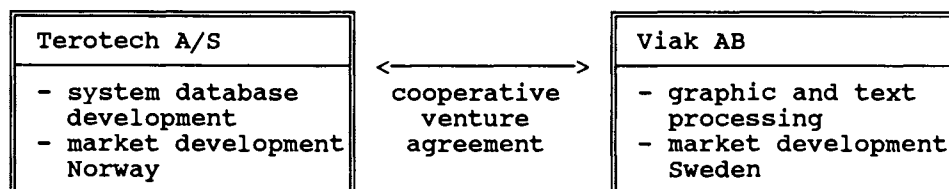
The two parties felt that their general visions and technological understanding matched the other partner's and they were also able to rapidly develop a framework for the concept. Since the parties' technological know-how appeared to be complementary, it was easy to settle the technological framework of the system. Consequently, they tentatively agreed to form a cooperative venture project - to develop a computerized system for processing large amounts of technical information - which was to be marketed to the North Sea offshore industry and the Swedish and Norwegian process

industries. This system was subsequently called PRINS - Primary Information System (PRINS is the Scandinavian word for prince). Both parties felt that, even if the process industry in both countries was a potential market, offshore was much more interesting and should be the primary target. In 1984, offshore was booming and had significantly more financial resources than the onshore process industry. Oil companies had explicitly realized the problem of technical documentation, and had already allocated resources to solve the problem.

The intention was to make PRINS a hierarchial and highly user-friendly system for technical information and documentation. Its contents could be divided into four areas:

- information as to where certain equipment was located,
- information on how a certain system worked,
- technical files (safety regulations, manuals, spare parts, etc), and
- information on references across hierarchial levels in the system.

In the cooperative venture, Viak was to be tentatively responsible for the graphic and text processing part of the system, and Terotech for the system database. In order to meet demands in the industry, the system was to be developed in close cooperation with a pilot customer. The responsibility for marketing was divided into two geographical areas, Sweden and Norway (including North Sea offshore) with each company responsible for its own country. The responsibilities for international marketing were to be specified and determined by both partners in each case. The cooperative venture model could, in principle, be described as follows:



Not long after the meeting in May 1985, a new Managing Director was appointed in Terotech - Mr. Leif Fjellin. This was critical to the Viak team since Mr. Söyland had been very enthusiastic about the project. Mr. Rahm and Mr. Johansson were worried that this change of managing directors at Terotech would result in reduced interest in the cooperative venture. Mr. Rahm said that "this made us realize how crucial the personal chemistry aspect of a cooperative venture is."

It soon turned out, however, that Mr. Fjellin was also interested in the cooperative venture idea. It was decided that a meeting should take place in June 1985.

### **Preparations**

Both companies were rather well known in their respective industries. The two companies did not, however, have previous business experience with each other. Even though Terotech was rather well known in the North Sea offshore industry, Viak decided make some investigations of their potential partner. Mr. Rahm explained:

We made a brief study of Terotech from three different aspects:

- (1) We checked the firm's financial situation.
- (2) Since this was a system development project with a time lag between costs and revenues, we assessed the ownership structure both from a financial perspective (i.e. did the parent companies have a solid financial base?), as well as from a strategic perspective (i.e. would the parent companies accept this kind of project?).
- (3) Finally, we checked a few of Terotech's previous and present contracts.

The financial check was carried out at Viak's head office in Stockholm. The assessment of Terotech's ownership structure and contracts was performed by Mr. Rahm, Mr. Johansson, and a sub-director at the head office. Mr. Rahm concluded that the

project was important to Terotech and that they possessed the financial resources to pursue their side of the deal. Mr. Johansson stressed, however, that these analyses were rather informal. He said:

In total, we spent about two days on these evaluations. The normal procedure in Viak was to inform each other what was happening in one office and let people react to that. We did not get any negative reaction towards our cooperation with Terotech.

The Viak Group had previously been involved in several cooperative ventures, but not within this specific business area. Hence, the Viak team did not draw upon relevant inter-firm cooperative venture experience.

Even though the Terotech team knew about Viak's activities before this project, they were not so familiar with this particular business area at Viak. They knew, however, that Viak as a company, was almost sixty years old and that it was well known for its technical competence. Mr. Heggland, who was assigned to be the project leader, concluded that there was no reason to doubt that Viak was able to develop their side of the PRINS concept. His opinion was that "we knew that Viak was very interested in gaining access to the North Sea offshore market. This meant that the project was strategically very important to them."

Mr. Heggland also mentioned that he had experience of two other cooperative ventures in his previous job. These were Norwegian - British cooperative ventures in neighboring fields. This was considered very important to Terotech and the Managing Director and he spent some time analyzing this experience. They were the only people actively involved in the preparations. Mr. Heggland said that they did not want to involve anyone else in the project until the system was more tangible, since the company was already involved in many other projects.

## The Agreement

During the meeting in June 1985, the parties discussed what the cooperative venture agreement should include. At that time, Mr. Fjellin provided an example of a cooperative venture agreement in which he had been previously involved. It was agreed that this example should be the basis for the agreement. Mr. Fjellin was given responsibility for adapting the agreement to the current circumstances.

According to both parties, there were no controversial issues that had to be discussed further. The only issue that caused some discussion was whether Swedish or Norwegian law should be applicable. Mr. Johansson explained that:

Even though this issue caused some discussions, we soon agreed that since nothing really complicated could happen in this cooperation, it did not really matter - so we decided to choose Norwegian law.

Viak received a copy of the proposed agreement and had it checked with their corporate lawyer. The agreement was signed at Viak's head office in Stockholm in October 4, 1985.

The agreement was based on two major principles. First, both parties would equally share costs and profits. Second, the "project management committee" (two representatives from each company and alternating chairmanship) was given much formal power. The purpose was to make this project management committee function in the same way as a board of directors for a joint venture company. This committee was responsible for formulating overall strategy and marketing plans for the venture, for working out details regarding distribution of costs and responsibilities, and for formulating and signing customer contracts. The ten page agreement was written in Norwegian and covered the following issues:

- purpose of the cooperative venture,
- other potential projects,
- brand name,



- management and control,
- marketing,
- each partner's share of the deliveries,
- each partner's share of marketing and sales costs,
- protection of core know-how,
- elimination of competition,
- transfer of the agreement,
- validity of the agreement, and
- conflict elimination.

#### Purpose of the Cooperative Venture:

The two companies were to cooperate in marketing and in deliveries of computerized systems for technical documentation and other related equipment, to national and international markets, with emphasis on major process industries in Sweden and the offshore industry in Norway. The basis for the cooperation was a pilot system that was to be developed by the two firms.

#### Other Potential Projects:

The partners were to keep each other informed of other potential projects in which the system might be used. If there was any doubt about how a project should be treated, the parties had to inform each other before an offer was submitted to a customer.

#### Brand Name:

Both companies were to market and offer the system in cooperation, using the combined names of the two firms.

#### Management and Control:

Each company was to assign two persons to form a project management committee. This committee was to meet every three months, or whenever either of the parties called for a meeting. The chairmanship of the committee alternated between the two parties each calendar year. The party that did not have the chairmanship was to appoint the committee's

secretary. All decisions in the committee had to be unanimous. The parties were to inform each other of projects that might be covered by this agreement. In addition, the committee was to:

- formulate a strategy and market development plan.
- find new mutual markets and projects,
- distribute tasks when formulating a mutual bid,
- assign project leaders from each company where both parties were involved,
- follow-up ongoing projects,
- allocate operating costs between the two parties, and
- formally accept customer contracts and work out formal project agreements.

#### Market Development:

The parties agreed that they should not appear as competitors in the market. The two parties were to work out details of a marketing plan, including advertising and participation in trade fairs - in general and for specific customers. The plan was to be updated at least once a year. Normally, the parties were to be equally engaged in marketing, and hoped to reduce the cost as much as possible by, for example, representing each other at trade fairs. The overall rule was that Terotech was responsible for marketing in Norway and Viak in Sweden. Each case involving international marketing was to be discussed in the management committee. The committee was also to assign one person to be responsible for the marketing of each project.

Both parties had the right to participate in customer meetings with the other party. Each party was required to participate in specific customer negotiations, if nothing else was agreed.

#### Each Partner's Share of the Deliveries:

Each partner's share of the deliveries was to be stipulated in connection with each bid, or not later than the

signing of the formal agreement. A special project agreement that regulated each party's responsibility and input as well as the financial premises was to be formalized for each successful order. Also, each partner was to clearly reveal the basis for cost calculations for the other partner.

#### Each Partner's Share of Marketing and Sales Costs:

The main principle was that each party should cover its costs for marketing. The management committee, could, however change this allocation if it was unfair to one party. The direct sales costs should be distributed between the parties after each project, in accordance with the management committee's decision.

#### Protection of Core Know-How:

Technical know-how and other business secrets gained from the other partner were not to be used in areas not stipulated in the cooperative agreement. Both parties guaranteed that this type of knowledge, as well as internal prices, calculations, technical drafts and descriptions, contracts and correspondence, etc, would be keep secret within each firm. This clause was to remain valid even if the agreement was cancelled, until the information entered the public domain.

#### Elimination of Competition:

Neither of the parties was to engage in activities in direct competition with the cooperative venture's activities.

#### Transfer of the Agreement:

The parties were able to transfer the agreement, or parts thereof, to a subsidiary (minimum 50% equity share) if agreed by the project management committee.

#### Validity of the Agreement:

The agreement was to be valid for two years, and thereafter to be extended for one year at a time until either of the parties formally cancelled the agreement with six months notice. However, if there was an obvious imbalance for

one of the parties, the agreement could be terminated immediately. A cancellation of the agreement was not, however, to affect ongoing projects.

#### Conflict Elimination:

All conflicts were first to be addressed by the two partner's managing directors, and thereafter be subject to voluntary arbitration. Finally, if a litigation situation occurred, it was to be regulated in accordance with Norwegian law.

Both parties stated that they were very satisfied with the agreement and that all issues that were intended to be included, had actually been covered.

In connection with the agreement, the parties estimated the total future investments, revenues and costs for both companies for two alternative situations - a minimum and a maximum sales alternative.

#### **Estimated investments, revenues and costs for PRINS (\*1000 SEK)**

	1986	1987	1988	1989	1990	1991	1992	1993
Investments:	250	950	2700	2250	550	900	1100	1300
<b>Min:</b>								
Revenues	-	600	2000	3500	5300	6500	7600	9400
Costs	40	690	2210	3755	5285	6400	7435	9080
Result	-40	-90	-210	-255	15	100	165	329
<b>Max:</b>								
Revenues	150	1500	4200	8000	10500	13200	16000	20500
Costs	180	1405	3825	7025	9005	11200	13505	17150
Result	-30	95	370	975	1495	2000	2495	3350

As can be seen above, the cooperative venture was expected to show a positive return after one year in the more optimistic alternative, but not until after four years in the pessimistic alternative. The greater part of the revenues would be derived from the implementation phase, i.e., evaluation and storage of the customers' primary information in PRINS.

### **The Cooperative Venture and the Parent Firms**

At Viak, Mr. Rahm and Mr. Johansson felt that the cooperative venture with Terotech was a natural extension of one of the firm's three business segments, namely Digital Maps. Within this segment, the company had developed a system for the digitalization and computerized storage of geographical maps and technical drawings. Hence, an old technique would be adopted and applied to a new area - technical documentation in the offshore and process industries. Mr. Rahm expected PRINS to be an attractive documentation system for Swedish process industries. In addition to extending Viak's traditional market segments, he hoped that the company would get better access to the North Sea offshore market through PRINS. The system would be a complement to Viak's other computerized services.

Terotech's Technical Manager, Mr. Heggland, said that the cooperative venture with Viak represented an expansion within the firm's major business area, i.e., engineering and consultant services. The cooperation should also permit an improvement in the firm's data processing competence, thus also improving its "high-tech image."

Terotech's present Managing Director, Mr. Skretting, felt that the cooperative venture was important since it was unique and "...gave us new experiences that in turn gave us new tasks and customers."

### **The Cooperative Venture and the Project Leaders**

Mr. Johansson had been employed in Viak for 23 years and was one of the engineers who had developed the digital map system. He had been the project leader in Viak since the cooperative venture was initiated and explained his feeling towards the project as follows:

I had been very active in the development of digital maps in the 1970's and I immediately saw the possibility to develop that technique in other areas, which made me personally very happy. However, even if we had not met Terotech, we would probably have developed the technique ourselves in a different version.

Mr. Johansson's counterpart at Terotech, Mr. Heggland, was also interested in the project. He felt that this was a very interesting side of the firm's activities. Terotech had previously worked with technical documentation and was familiar with the problems involved. This project gave them a partner who "perceived the problem from a different perspective." Mr. Rune Ström, his successor as Technical Manager and project leader in Terotech since February 1986, also took a great interest in the cooperative venture. He gave the same reasons for this interest as Mr. Heggland and continued:

The project was to give Terotech information processing know-how and strengthen our image on the market. The project would result in three major advantages: (1) better knowledge of this type of systems, (2) increased know-how of computerized techniques, and (3) future revenues. It is, of course stimulating to participate in the development of such a product.

## **Role of SNI**

### **Initial Contact and the Feasibility Study**

During the meeting in October 1985, when the agreement was signed, the parties discussed the possibility of obtaining project financing from SNI and it was Mr. Bäckman from Wermex who suggested SNI-financing. Mr. Bäckman participated in the meeting as a Viak representative and knew the Managing Director of SNI, Mr. Atle Bye, and was familiar with SNI's

mission and operations. Neither Viak nor Terotech were familiar with SNI, but the EB Group (Terotech's owner) had previously been involved in SNI-financed projects. It was suggested that Mr. Bäckman would be a suitable choice for pursuing a potential feasibility study.

Since SNI's Managing Director, Mr. Atle Bye, was a former Managing Director of a Swedish Karlstad-based subsidiary in Oslo, he knew about Mr. Bäckman's activities in Wermex. Mr. Bye explained how he was contacted in November 1985:

It was during one of our contacts that Mr. Bäckman mentioned that he was involved with Viak regarding a cooperative venture with Terotech. He also said that they had some problems in making their ideas tangible.

Mr. Bye suggested that the partners should initiate a 50% SNI-backed feasibility study of the project that also could be the basis for the formal application for SNI-financing. In cooperation with Mr. Bye, the parties decided that Mr. Bäckman should perform the study, since he already knew the background conditions and both partners.

The eight page feasibility study was completed in February 1986. First, Mr. Bäckman described the project idea, the partner companies and their respective competencies, and the division of responsibilities. Secondly, he assessed the potential market to be some NKR 300 million in the Norwegian offshore industry (0.0002 % of already invested capital and 0.001 % of future investments in offshore). The Swedish market consisted of major industrial processing plants, and Mr. Bäckman estimated this market to include more than 200 potential customers, totalling approximately SEK 200 million. A third market was the British offshore industry. This potential market was estimated to be SEK 150 million. Thirdly, the competitive situation was discussed. Mr. Bäckman felt that there were few serious competitors for the PRINS concept, but there was a rapidly growing interest in the market of this kind of system. In general, he found it difficult to assess the competitive situation. Fourthly, he described the existing

hardware and the fact that both parties already possessed an HP mini computer was, according to Mr. Bäckman, very important for the cooperative venture. This would facilitate communication and the companies would not have to invest in much additional hardware. It was concluded that the PRINS concept was clearly feasible - both from a technological and market point of view.

The general opinion at Terotech was that the feasibility study did not provide any additional knowledge. Terotech's present Managing Director Mr. Skretting stated:

The feasibility study did not give us any further inputs regarding the cooperative venture. I am sure, however, that Viak got something out of it - particularly regarding PRINS's offshore potential.

At Viak, Mr. Johansson felt that the feasibility study added further credence to the cooperative venture idea. Mr. Bye felt that the report was satisfactory and that it was good enough to serve as a basis for an SNI-application. He also stressed Mr. Bäckman's role as an catalyst in initiating the cooperative venture.

In May 1986, Viak transferred the cooperative venture agreement to a newly established subsidiary named Viak Interface AB. The purpose was to focus the development and marketing of PRINS into a separate firm. Viak's Technical Manager Mr. Johansson, who had a minority equity share in the firm, was assigned Managing Director of Viak Interface. At Terotech, Mr. Skretting was not particularly happy about this manoeuvre. He explained:

If Viak could transfer the cooperative venture to Viak Interface, perhaps this subsidiary could transfer it to a new future subsidiary. Consequently, the cooperative venture could become more and more distant from the Viak Group, which originally signed the agreement. My point of view is that the more Viak owns of Viak Interface, the better it is for us.



### Application to SNI and Further Business

The parties mentioned two main reasons for wanting SNI financing for the development of PRINS. First, SNI financing would generate goodwill in the market in two ways. Customers and others would think that:

1. the project must obviously be both unique and important as a result of SNI participation, and
2. this was an ideal cooperation - Swedish and Norwegian technology with SNI as catalyst.

The second reason can be explained by the fact that both companies were parts of larger groups, and that there was internal competition for resources for development projects. If they could obtain SNI financing, PRINS might be regarded as a more serious prospect than other projects within the company and, therefore, should receive more attention from the parent firms. The companies formally applied for SNI financing in May 1986 - a **royalty** based SNI financing instead of the usual type of loan with fixed interest rates.

During 1986, the companies developed the PRINS concept further. However, this development took more time than expected. The major reason was that both companies had to had to adapt the concept continuously with the rapid development of personal computers. According to both Mr. Johansson and Mr. Thorsen, this resulted in a better product than was initially planned.

In a summary from the management committee in July 1986, Terotech reported that several potential customers were interested in the PRINS concept, but that it was likely that the drop in oil prices would make it more difficult to market PRINS. They also wanted to delay further marketing of PRINS until SNI had responded to their application.

### SNI's Decision

Based on the application, Mr. Bye assigned a Swedish "primary-investigator" and a Norwegian "secondary-

investigator." Their jobs were to evaluate and assess the project idea and the SNI application, and recommend whether, and to what extent, SNI should provide project financing. The investigators' nine page report was presented in September 1986 and included a brief description of the two firms, the cooperative venture project, and the form of cooperative venture. There was also an assessment of the market and competitors, the risks associated with the project, and the importance of SNI financing.

In general, the investigators felt that the parties had made a thin analysis of the potential market, and that this analysis consisted of only an estimated share of capital invested in the industries concerned. They had also tried to identify several potential competitors - for instance, companies marketing CAD-systems. However, such companies did not have any experience of offshore or process industries. Another group of competitors were companies marketing conventional systems for technical documentation, but these were not appropriate for effective administration and data searching. A final group of potential competitors were companies operating close to the national defense systems in each country.

According to the report, there were three major risks involved in the project. It might be that PRINS was not sophisticated enough to cope with the demands that might arise. Secondly, there might be a potential lack of specialized computer competence and other necessary resources in the firms. Finally, the parties might have under-estimated future requirements for compatibility with larger computer systems. Hence, there was a "...certain risk of delays and increased costs." In general, it was considered that it might be difficult to secure internal resources for the project, "...since product development projects do not always have high priorities in a consultant firm."

In the last part of their report, the investigators discussed the importance of SNI financing of the project. They felt that this would have four positive effects:

1. prestige on the market,
2. independence from potential customers who otherwise might have to sponsor the project,
3. faster product development and market penetration, and
4. higher internal status for the project within each firm.

In their recommendations, the two investigators recommended SNI to grant the cooperative venture 50% financing of total costs up to 2.5 million KR to each partner, in accordance with the application. They also stressed the importance of obtaining an agreement with a pilot customer in both the offshore and the process industries in order to further develop PRINS. The "primary-investigator" personally felt that, if SNI did not grant project financing, Viak would develop a variation of the PRINS concept within the firm. He did not think, however, that Terotech would join them without SNI-support. According to Mr. Bye, the "primary-investigator" made a thorough investigation of the cooperative venture concept. However, both partners felt that the "primary-investigator" interfered with internal matters that did not come under the terms of his assignment. On the other hand, the "primary-investigator" felt that the parties over-reacted to his questions. He explained his point of view as follows:

In Terotech, they did not at all appreciate my questions regarding the firm's financial situation. I wanted to know whether they had a sound financial base, since their major operations were in the declining offshore industry. At Viak, we had different opinions regarding the level of ambition for the system. I was not particularly impressed by the software - they used more or less the type of graphics program that you and I can buy in any computer store. I suggested that they should let some experienced 'hackers' check out and improve the system. Also, I disagreed with both companies on the loan issue. They wanted a royalty based loan, but I thought that the basis for the underlying calculations was not satisfactory for a SNI loan. Also, in my experience, Norwegian companies are more sensitive to these type of questions than their Swedish counterparts.

The two Managing Directors, Mr. Rahm and Mr. Skretting, discussed their concerns regarding the investigator with Mr. Bye of SNI, who decided to make the "secondary-investigator" responsible for the follow-up phase of the project. Mr. Bye explained that:

It appeared that they immediately developed bad relations with the 'primary-investigator' - one of the most competent investigators used. The two Managing Directors visited me in order to eliminate him from the follow-up phase of the cooperative venture. This demonstrated how serious this matter was to them.

Based on the investigators' report, Mr. Bye suggested that SNI's Board of Directors should accept the application. In September 1986, the Board decided to provide 50% project financing of the total costs up to SEK 1.6 million for each of the two firms. After discussions with the two parties, Mr. Bye felt that it was indeed very difficult to find a basis for a royalty payment and, consequently, he decided that the SNI financing should be provided in the form of a low interest loan. Both Mr. Rahm and Mr. Skretting were somewhat unhappy about this. Mr. Skretting said:

The project financing did not turn out to be so inexpensive as we had expected. We had hoped to obtain a royalty loan but instead we got a loan at a low interest rate. Moreover, since the preparations for the SNI application required both financial and human resources, this loan did not turn out to be particularly cheap. When we realized this, we had already incurred these preparation costs - so there was nothing to be done.

### **Operations and Evolution**

Despite the continuously bad offshore market and the fact that Terotech had lost some key personnel during 1986, the company could continue to develop its side of PRINS. SNI's decision to provide project financing was very critical to

Terotech. Mr. Ström's opinion was that if they had not received project financing, the cooperative venture would have significantly slowed or even died out. After receiving project financing from SNI, the parties intensified their efforts to develop PRINS and investigate the market.

Initially, they had started to work with a HP mini computer but in line with the advances in the PC industry it was decided in 1986 to switch to IBM-compatible personal computers. In order to arrive at a formal pilot plant agreement with a customer, Terotech contacted several potential customers in the North Sea business, and reached agreement with an oil company in early 1987. Viak, on the other hand, contacted several large companies in the process industry who expressed considerable interest. They had only tangible contacts with one steel manufacturer, which agreed in 1987 to be Viak's pilot customer in Sweden. The conditions for obtaining the SNI loan were thus fulfilled.

During the summer of 1987, Terotech's parent company changed its offshore policy and inquired about the cost of the PRINS project. Oil prices remained low and the market for development projects within offshore had declined significantly. Mr. Skretting said that this was indeed a critical phase for PRINS. Other offshore contracts were obtained, however, thus enabling Terotech to maintain a sound financial position, while continuing the development of PRINS.

In a memorandum to SNI in December 1987, the parties explained that the complete PRINS system would be delayed. The reason for this was that the concept had been further improved and extended. Hence, they had incorporated more information than was originally intended into PRINS. Viak reported that they had received very positive responses to their product demonstrations. They also felt that the potential market could be extended to incorporate other industries in Sweden. Terotech, on the other hand, focused on North Sea offshore but had also contacted the Norwegian navy. Due to positive customer response, Terotech was also optimistic and felt that the market was larger than they had initially expected.

By mid 1988, most of the system development was completed. Due to the rapid advances in scanning, CAD-converting, video, and optical storage techniques during 1988, the companies decided to improve certain features in the system. The first complete PRINS was to be launched by the end of 1988.

In the summer of 1988, the partners decided to increase their marketing efforts in both countries and also in the international market. They planned to intensify their customer contacts and participate in suitable trade fairs in Sweden, Norway and other countries.

#### Outcome

Both parties stated that the cooperative venture was a success. Mr. Johansson, for Viak's part, stressed that despite delays they had achieved what they had intended (i.e., develop PRINS at less than the anticipated costs). For instance, in their last report to SNI in March 1988, Mr. Johansson stated that "in general, the cooperative venture follows the revised plan for technical development and we expect the final product to be available by the end of 1988."

He argued that PRINS was much better than originally intended. In addition, only a few companies offered parts of the concept and, therefore, there was no serious competition. Mr. Johansson explained the delays by the fact that the project's internal priority had changed over time in both firms. The only negative aspects from Viak's point of view were the many changes in personnel at Terotech. In the course of the project (three-and-a-half years), there had been three Managing Directors and three Technical Managers at Terotech. According to Mr. Rahm, this indicated the differences in company culture between the two firms. While this typified the situation in the offshore industry in general, it still made it difficult to cooperate with such a company. Mr. Bye also

mentioned the different situation at Terotech in comparison with Viak:

I have noticed the significant number of changes in key personnel in Terotech. I am sure that this turbulence has, at least to some extent, caused delays and other disturbance in the cooperative venture.

In spite of this, Mr. Rahm emphasized the good personal relationships between the two companies' project teams. He felt that the major lesson from this project was that one must recognize that cooperative venturing takes much more time than expected. He also stressed the overall importance of good personal relations between the personnel involved in a cooperative venture.

Terotech's Managing Director, Mr. Skretting, considered the cooperative venture to be a success, since the development of PRINS was almost completed. He argued that, despite internal problems (i.e. changes in key personnel) and external problems (i.e. the decline in the offshore industry), Terotech had managed to accomplish their side of the cooperative venture. He also mentioned that the industry decline caused a change in their parent firm's (National Electro) strategy, making it tougher to pursue the project. He underscored that the project had sometimes been "kept alive" thanks to Viak's patience. According to Mr. Skretting, the most important factor in the success of the cooperative venture was the excellent personal chemistry between the two project teams. On the other hand, the former Technical Manager Mr. Ström, mentioned, as a success factor, that Terotech had received several other orders from the pilot offshore company due to the work with PRINS.

Terotech's current project leader, Mr. Thorsen, stressed the positive market signals in the offshore industry and this correlated with technological developments:

We have seen a new trend - the market lies there and awaits a solution of its problem with technical documentation. Thanks to rapid diffusion of new improvements in the relevant technology, the customers are beginning to realize that we can solve their problems. Hence, the product introduction has the right timing.

The estimated and achieved total costs for the two companies as well as the financing obtained from SNI are summarized below:

#### TEROTECH A/S

Estimated costs (May 1986), achieved costs, and SNI financing					
(*1000 NKR)		1986	1987	1988	Total
Product development:	budget	295	1280	950	2525
	outcome		585	850	1435
Market development:	budget	50	175	275	500
	outcome		126	275	401
Other costs:	budget	50	50	75	175
	outcome		65	40	105
Total annual costs:	budget	395	1505	1300	3200
	outcome		776	1165	1940
SNI financing:	budget	200	750	600	1600
	outcome		338	582	970

#### VIAK AB

Estimated costs (May 1986), achieved costs, and SNI financing					
(*1000 SEK)		1986	1987	1988	Total
Product development:	budget	295	1280	950	2525
	outcome		803	700	1503
Market development:	budget	50	175	275	500
	outcome		48	70	118
Other costs:	budget	50	50	75	175
	outcome		35	30	65
Total annual costs:	budget	395	1505	1300	3200
	outcome		886	800	1686
SNI financing:	budget	200	750	600	1600
	outcome		443	400	843

(1988: prognosis)



Mr. Bye also regarded the project as a success, since the product development was successful. Nonetheless, he mentioned the importance that both parties could continue the successful cooperative venture in the second phase of the cooperative venture, i.e., market development.



## APPENDIX 8

### CASE 2: INDUSTRIAL WASTE INCINERATION

#### Introduction

This case describes a joint venture between two large companies in the industrial waste industry<sup>1</sup>. The Swedish company, here called "S-PART AB," is the wholly-owned subsidiary of a Swedish multinational corporation, "S-CONCERN AB." The Norwegian company, here called "N-PART A/S," is a subsidiary of the large Norwegian industrial corporation "N-CONCERN A/S." After a somewhat complicated history, with several ownership changes in a joint venture originally formed by two consultant companies, "Joint Venture I," S-PART and N-PART acquired this joint venture and formed a new 50/50 joint venture - "Joint Venture II".

The purpose of this joint venture was to develop and market a new type of total system for the incineration of industrial waste in Norway, Sweden, and the international market. S-PART was responsible for major components and related know-how, while N-PART's engineers were responsible for adaptation of the components to the specific conditions in the industrial waste industry.

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<sup>1</sup> The name of companies and persons are disguised in this case description.

**Actor Summary**

<b>Company</b>	<b>Name</b>	<b>Title</b>
Consultant Company I	Mr. Consultant	Senior Consultant
Consultant Company II		
Norwegian Corporation		
N-PART A/S N-CONCERN	Mr. N-partner	Managing Director 1985 -
S-PART A/S	Mr. S-partner	Managing Director 1984 -
S-CONCERN AB	Mr. S-concern	Head of Division
Joint Venture II	Mr. Manager	Managing Director 1987 - 1988
SNI	Mr. Atle Bye "Primary-investigator" "Secondary-investigator"	Managing Director

**Event Summary**

<b>Year</b>	<b>Month</b>	<b>Event</b>
1983		Forming of Joint Venture I, which owned 100% of the licence, by Consultant Company I and II.
1984		Norwegian Corporation acquired 50% of the licence.
1985	January August	N-PART acquired Consultant Company II's share of Joint Venture I. S-PART acquired Large Norwegian Corporation's 50% stake of the licence.
1986	March May  June  September	First contact with SNI. Letter-of-intent between S-PART and Joint Venture I. Joint Venture I changed name to Joint Venture II. Formal application for project financing to SNI. The investigators' report. SNI's board of directors granted project financing.

	December	N-PART acquired Consultant Company I's share of Joint Venture II. Joint venture agreement between S-PART and N-PART.
1987	January	Mr. Manager was employed as Managing Director of Joint Venture II.
	March	Joint Venture II lost an order (late deliveries from S-PART).
	April	Board meeting in Joint Venture II, where the parties said that the concept was worthless and that N-PART should withdraw from the joint venture.
	July	Internal PM to SNI, where the "primary-investigator" recommended SNI to wait for the reconstruction of Joint Venture II.
	November	Joint Venture II lost another order. S-PART acquired N-PART's share in Joint Venture II, and closed down its activities.

## The Partners

### The Swedish Part: S-PART AB

S-PART is the representative in Norway of the Swedish multinational enterprise, S-CONCERN AB. S-CONCERN is active in several business areas and within several industries with a total turnover of SEK 7 billion, including manufacturing equipment for industrial waste processing. S-PART was established in Oslo in 1920 and markets most of S-CONCERN's equipment in Norway. In 1987, S-PART had some 80 employees and a turnover of NKR 150 million. Industrial waste related equipment accounted for one third of its turnover in 1987.

### The Norwegian Partner: N-PART A/S

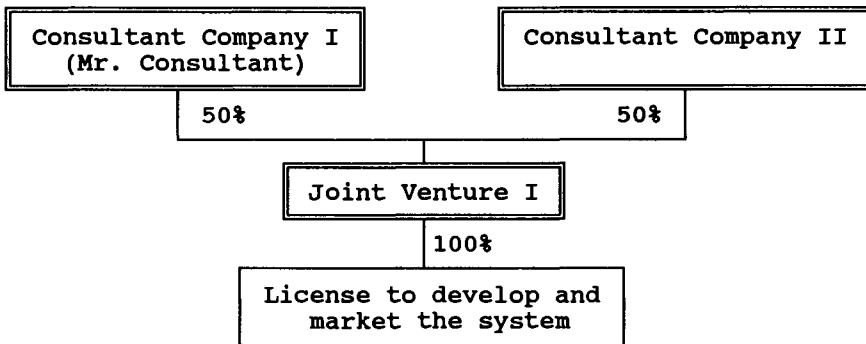
N-PART is a technical engineering and consultant company owned by the large Norwegian industrial company N-CONCERN (75%) and a German engineering company (25%). N-PART's business includes engineering and technical consultant services in various process industries, including project administration and turn-key projects. The company was

established in 1970 and the 1987 turnover was NKR 90 million. In addition to the 80 employees, some 30 specialists were hired temporarily on a project basis. Industrial waste processing services accounted for half the total turnover in 1987.

## Background

In 1983, representatives of two Norwegian consulting companies in the waste industry met and discussed the possibility of developing a new, total system for the treatment and processing of bi-products from incineration processes. In their work as consultants to various companies within this industry, they had learned that current incineration technology included a number of complicated processing steps rather than a complete system. This was perceived as a significant problem. It did not take long before they were able to develop tangible plans for a new type of system. The new system would significantly improve the processing technology for companies involved in this type of activity, thus reducing their costs.

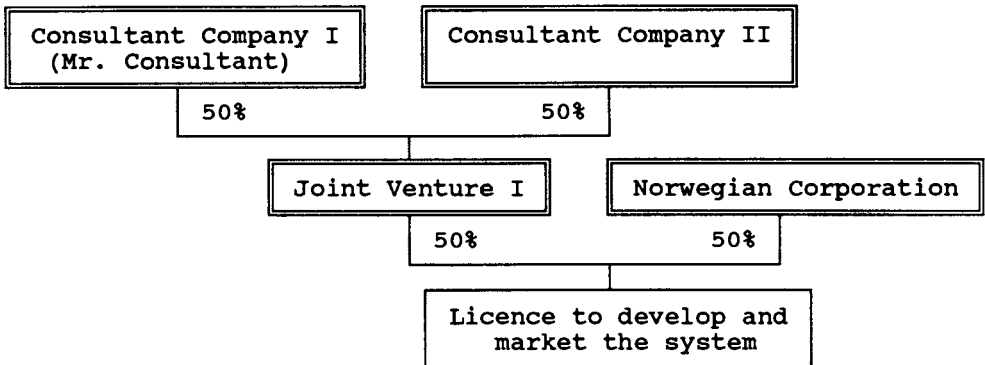
However, there was a problem. Both companies were consulting companies and had limited financial resources and industrial competence. Hence, they could not develop the system within their own companies. In order to explore the project they established a 50/50 cooperative venture - Joint Venture I - which was to own a license for the development and marketing of the new system.



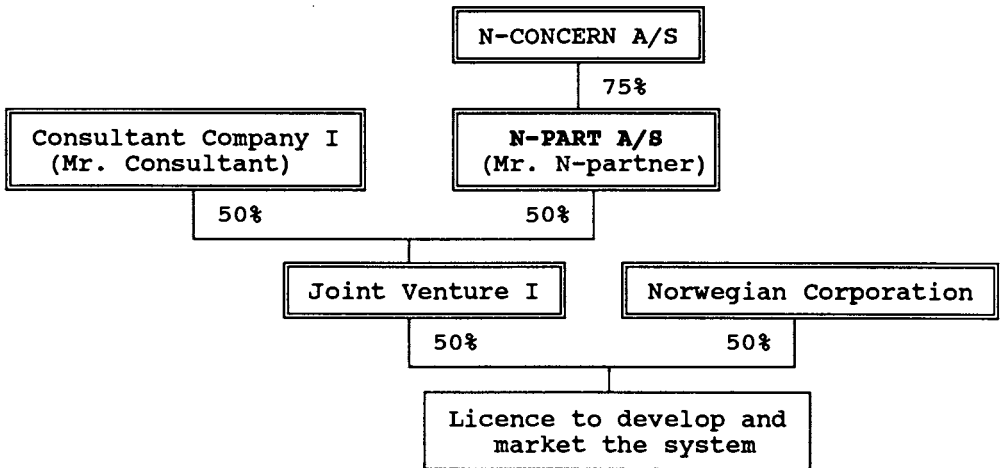
In the first phase, the main objective was to develop the concept to a high technological level. In the second phase, the purpose was to attract other industrial companies which could acquire parts of the joint venture or the license to develop and market the system and also take responsibility for further product and market development. Mr. Consultant, who initiated the project in Consultant Company I, explained his company's motives:

The project idea was really interesting. It would have been really nice if we had been able to develop the system, since it would have strengthened our company's profile as an operative consultant company. Since I, personally, was one of the two people who initiated the project idea, I would - of course - have been personally very pleased if we had succeeded.

In 1984, 50% of the license was sold to Norwegian Corporation, so that this company and Joint Venture I owned 50% each of the licence. Joint Venture I was still owned by the two founding consultant companies. Norwegian Corporation was a well-known industrial concern and was expected to contribute significant industrial know-how to the project. The ownership structure is illustrated below.



In 1985, N-CONCERN acquired Consultant Company Two's equity share in Joint Venture I, and organized this interest through its subsidiary, N-PART, an engineering company. The acquisition was seen by top management as a natural way for N-CONCERN to further develop its interest in the industrial waste incineration "software" sector. These transactions resulted in the following ownership structure:





Not long after N-CONCERN's acquisition, Mr. N-partner was appointed as new Managing Director of N-PART. He remembers when he first learned about the project:

When I got the project papers on my desk at N-PART, I realized that this was a very risky project. Consultant Company I, who remained active in the form of Mr Consultant, explicitly said that they did not have any more resources to put into the project and wanted to become a passive partner. On the other hand, our parent company, N-CONCERN, had both the resources and the strategy to expand within this industry - it is a rather bad prerequisite for a fruitful cooperative venture that there is no common objective!

N-PART saw the project as an addition to one specific part of the company's activities (approximately 50% of turnover). Mr. N-partner thought that if the concept was feasible, N-PART could make a profit both on its specific engineering inputs and on the increased value of its shares in Joint Venture I. The project was one of several projects in N-PART's portfolio. Mr. N-partner explained:

I was very sceptical about the project - it seemed as though N-PART had been more or less 'dragged' into the cooperative venture through our parent company. If the waste incineration system could be developed in line with the intentions, however, it would have been a natural way to expand our business within this field.

During the autumn of 1985, Mr. N-partner and his partner in Consultant Company I - Mr. Consultant - realized that they needed to introduce an additional partner into the cooperation. Mr. N-partner mentioned two reasons for this:

In principle, there were two reasons for finding an additional partner. First, the market risk was very high - nobody knew when the concept could be developed into a product, or what the market looked like at that time. Second, we had to buy the basic components and, therefore, it would be great if an equipment manufacturer could join us.

### **S-PART's Appearance**

S-PART had been active in the waste industry for a long time, mainly through a cooperation with a British company. Based on earlier personal experience of Swedish subsidiaries in Norway and on S-PART's cooperation with the British company, the Managing Director - Mr. S-partner - became increasingly interested in the waste industry in general. S-PART sold many of its parent company's products, and waste processing-related products represented almost one third of its total turnover.

In mid 1985, S-PART and the British company held initial discussions to prepare the termination of the cooperation. During the summer, Mr. S-partner met the Managing Director of the company which had previously acquired 50% of the license for the concept from Joint Venture I (Norwegian Corporation). He explained to Mr. S-partner that they were likely to sell their 50% share of the license since they had recently acquired a large share in another engineering company, and this had developed to a conflict of interest with Joint Venture I's activities. Since Mr. S-partner's opinion was that the waste treatment concept was sound and that S-PART's products would fit the system well, he expressed his interest in acquiring Norwegian Corporation's share in the license. Mr. S-partner and the Managing Director of Norwegian Corporation met on five occasions for discussions of an eventual takeover of the license during the summer of 1985. He also contacted the owners of Joint Venture I and discussed the matter with Mr. Consultant and the Chairman of N-PART. At this stage, the Managing Director of N-PART, Mr. N-partner, was not involved in these discussions. Mr. S-partner felt that S-PART's participation in the development could be seen as a means of expanding within the industrial waste processing industry. He hoped that this would increase the sales of S-CONCERN's equipment.

Mr. S-partner knew his potential partners quite well - both companies were well-known and had considerable relevant competence. S-PART also had previous business contacts with both companies. Mr. S-partner had great confidence in both Mr. Consultant and N-PART's Chairman and Managing Director (at this stage, Mr. N-partner had been brought into the discussions) and did not undertake any specific assessments or analyses of the potential partner companies. He explained this:

The concept seemed to fit very well with both N-PART's and Consultant Company I's strategy, and they also seemed to have the necessary competence to accomplish the product development.

The three of them visited the head of S-CONCERN's relevant business area - Mr. S-concern - in Sweden in May 1985, explaining the business concept and the purpose of S-PART's participation. Mr. S-concern explained his initial reaction to the project as follows:

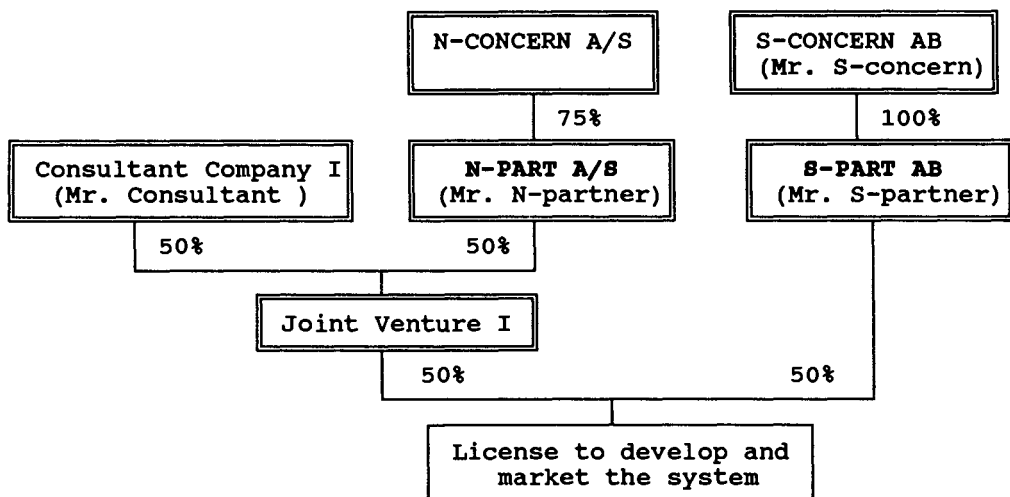
My first reaction was very negative - it was difficult to believe in the project idea. Over time, however, the idea appeared to me to be better and better, but I still thought that it was a very risky project. To some extent, I was 'talked into' the project.

During the summer and autumn of 1985, Mr. S-partner met with Joint Venture I's owners five times to discuss this matter.

In early January 1986, Mr. S-partner obtained formal approval to pursue the NKR 750.000 acquisition of 50% of the license. Mr. S-partner said that he was convinced that Mr. S-concern and others in S-CONCERN considered the idea very interesting and that they supported this project idea. Mr. S-concern stated:

I briefly discussed the idea with S-CONCERN's CEO and we came to the conclusion: "alright, it is risky but worth a try - if we cannot try something like this we might as well close down."

The deal resulted in the following ownership structure:



According to Mr. N-partner, things progressed very rapidly after S-PART's decision to join the cooperation: "everything went too fast, considering that it was both a complicated project technology-wise, and that it was uncertain how the potential market would develop."

Mr. N-partner and Mr. Consultant were, on the other hand, very pleased with the chance of cooperating with S-PART. According to Mr. Consultant, at this time Joint Venture I's owners had invested a total of NKR 2 million in development costs. The project was, to a large extent, pursued by Mr. Consultant. N-partner and Mr. Consultant felt that it was excellent that S-CONCERN, through S-PART, were participating in the cooperative venture. S-CONCERN was a well-established and well-known Swedish multinational company and its equipment was needed in order to develop a good incineration system. Mr. N-partner explained:

S-PART was very committed to the project idea, since they probably saw an opportunity to get quick access to the Norwegian waste processing industry with its equipment. It seemed as though we were finally getting the industrial partner we were looking for.

### **Cooperation Between Joint Venture I and S-PART**

In early 1986, the three leading protagonists, Mr. S-partner, Mr. N-partner and Mr. Consultant, started to discuss how the waste incineration system should be further developed and commercialized. In May 1986, the partners agreed on the basis for their future cooperation, formalized in a letter-of-intent between S-PART and Joint Venture I in May 1986. The letter-of-intent was formalized by Mr. Consultant and he said that he spent approximately two weeks preparing this document.

The companies agreed to establish a new joint venture, **Joint Venture II**, which owned 100% of the license to develop and market the waste treatment system. Joint Venture II was 50% owned by S-PART and 50% by Joint Venture I. Mr. S-partner explained his company's opinion as follows:

We suggested that S-PART should have a majority share in Joint Venture II. There were two reasons for this:

- A. The corporate policy regarding cooperative ventures in S-CONCERN was to have a majority share.
- B. If we had had 90% of the joint venture, it would have become a subsidiary in the S-CONCERN Group, which would have led to certain tax advantages.

N-PART, however, did not want to become a minority owner and we agreed to the 50/50 split for three reasons:

- 1. a 50/50 split would mean that the joint venture was not consolidated into any of the parent companies,
- 2. N-PART and S-PART had approximately the same accumulated costs regarding the project, and

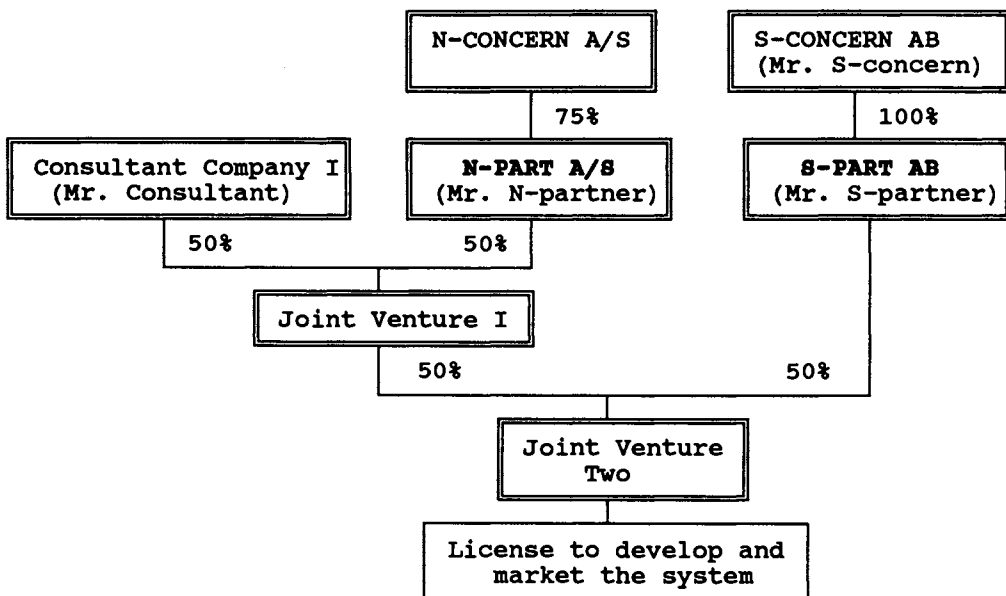
3. we could agree that S-PART should provide a loan to Joint Venture II that could be converted into equity shares at any time. If the loan was fully converted, this operation would give S-PART 80% of the shares in Joint Venture II within three years.

At this stage, S-PART had spent approximately NKR 100.000 on the project. Mr. S-partner said that these costs were mainly travel expenses, direct costs for the documentation, and costs for a share in a larger external marketing survey of the industry.

Mr. S-concern said that, in principle, his company was against 50/50 joint ventures, and his decision to accept this split was based on two factors:

First, we could gain control over the joint venture any time through the option of transferring the loan into equity shares. Second, we had control over the management.

The operation resulted in the following ownership structure:



The four page letter-of-intent, signed in May 1986, covered the following issues:

- motives for cooperation,
- legal rights,
- marketing,
- research and development,
- organization,
- restriction of competing activities,
- financing,
- right of first refusal,
- expansion of the capital base, and
- changes in the agreement.

#### Motives for Cooperation

S-PART was interested in increasing its activity within the industrial waste processing field in the direction of integrated systems, while Joint Venture I wanted to contribute to further development of the incineration concept.

#### Legal Rights

The equity capital was two million NKR and each party would take 50% of the shares. Payment for these shares represented previous costs both parties had contributed during the product development.

In entering the joint venture, both partners would transfer their formal rights in the concept to Joint Venture II. Joint Venture II was to have a Board of Directors consisting of five persons, three from S-PART and two from Joint Venture I. S-PART had the right to nominate the Chairman of the Board. Joint Venture II was to be based in Oslo and be incorporated into S-PART.

#### Activity

Joint Venture II was to develop and market products and services related to the incineration of industrial waste.

Particular emphasis was placed on developing and marketing complete process systems. Operations were to be based on both parent companies' activities and competencies, and the procurement of additional complementary competence. The company was to establish itself as a leading Norwegian distributor of the most modern types of complete waste incineration systems.

All components in the incineration system that were part of the parent companies' product range were to be bought only from the parent companies directly. Joint Venture II was not to market any of competitors' products, but was to be allowed to incorporate some of these products if required by the customer.

#### Marketing

All marketing was to be on a global basis and oriented directly to the end-users. It was possible to establish separate representation offices or agents in countries outside Sweden and Norway. As a first alternative, however, the parent companies' marketing channels were to be used. In Norway, all sales, including components from the parent companies, were to be sold through Joint Venture II. However, the sales of single components were not to interfere with S-CONCERN's international marketing.

#### Research and Development

In order to develop the system and become competitive, Joint Venture II was to undertake the necessary R&D. The purpose was to develop the system in close cooperation with specific customers. How the R&D should be performed or to what extent Joint Venture II could draw upon the parent companies was not specified.

#### Organization

Joint Venture II was to build up an organization that could undertake marketing, project administration, financial follow-up, and general administration and control.



Joint Venture II was to purchase any additional resources required from external sources, but this, however, was to be regulated in separate agreements. Separate agreements were also envisaged regarding inputs to Joint Venture II from N-PART and N-CONCERN, and S-PART and S-CONCERN, respectively.

#### Restriction of Competing Activities

The agreement did not oblige the parent companies and other related companies to refrain from operating within the field of industrial waste incineration, unless this was in direct conflict with Joint Venture II's activities. If such operations were to result in knowledge that might be of interest to Joint Venture II, Joint Venture II should have equal rights to negotiate regarding the commercial use of this knowledge.

#### Financing:

In order to cover the development costs in the first two to three years, Joint Venture II (under establishment) was to apply for project financing from SNI, The Norwegian National Industrial Fund, or similar sources.

S-PART was also to provide Joint Venture II with a loan of NKR 3 million, which Joint Venture II could draw upon over a period of three years. S-PART could at any time during this period of time, convert this loan, or parts of it, into equity shares in Joint Venture II. This would give S-PART a maximum equity share of 80% in Joint Venture II.

#### Right of First Refusal:

Each partner was to have the right of first refusal if the other partner decided to sell its shares.

#### Expansion of the Capital Base:

If the operations in Joint Venture II required an expansion of the capital base, and Joint Venture I's equity share fell below 10.1%, Joint Venture I could demand that S-PART acquire its shares.

Changes in the Agreement:

If anything occurred that significantly affected the foundation of this cooperation, the parties were to start immediate negotiations in order to modify the agreement in accordance with the new premises.

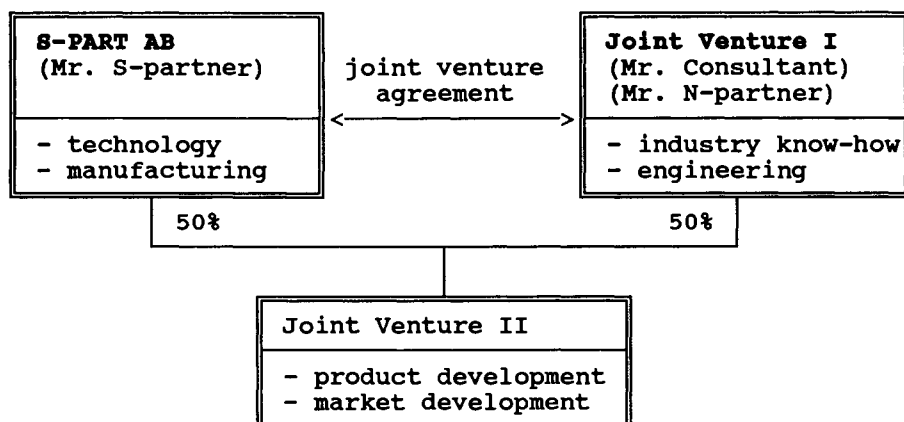
In addition to the agreement, the following forecast for future sales was presented:

**ESTIMATED SALES 1986 - 1990 (millions of NKR)**

	1986/87	1988	1989	1990
Orders received	62	293	222	317
Deliveries	35	148	283	257
Order stock	27	172	111	171

**Role of SNI**

As indicated above, Joint Venture II was to apply for project financing for further development of the system from SNI, the Norwegian National Industrial Fund, or another potential source of risk capital. The specific structure and division of responsibilities in the joint venture are described below:



Mr. S-partner first suggested SNI-financing. He knew the Managing Director of SNI and was acquainted with SNI's objectives. He explained:

I saw the possibility of risk financing. Our project seemed to fulfill SNI's requirements since (a) there were two companies which did not really know each other (S- PART and Joint Venture I), (b) there was a high risk in this industry per se, and (c) it was an ideal cooperative venture - Norwegian waste processing competence and Swedish technology.

Mr. S-partner thought that SNI was one of several sources of financing, apart from alternative potential sources for risk funding, such as internal S-CONCERN financing or financing from a major customer. Both Mr. N-partner and Mr. Consultant also thought that they should apply for SNI-financing. Mr. Consultant conducted most of the contacts with SNI and its Managing Director, Mr. Atle Bye. SNI was first contacted in March 1986 (i.e., before the letter-of-intent) and the initial contact inspired the partners to prepare a formal application for project financing by June 1986. Mr. Bye explained how he perceived the initial contacts:

Mr. S-partner had an ambition to create a Swedish-Norwegian cooperative venture, and it was obvious that he had observed the advantageous project financing that SNI could provide.

Mr. Consultant worked out most of the details on the application to SNI (i.e., general description of the cooperative venture model, project budget, finance plan, and project plan). Most of this information was, however, already available in connection with the preparation of the earlier letter-of-intent.

After receiving the application, Mr. Bye assigned a Swedish "primary-investigator" and a Norwegian "secondary-investigator," who were to analyze the basis for the cooperative venture, market opportunities, etc, and evaluate the application to SNI. A fourteen page report was submitted by the investigators to SNI in September 1986. About half of the report covered descriptions of the companies, joint venture model, joint venture background, the business concept and the industry structure. In addition to this, the investigators assessed major risks involved in the project. They felt that the technical risks were very low, since the joint venture was based on well-known technology and competent partners. On the other hand, they perceived two significant market risks - "making the venture a high-risk project." These were (1) low demand due to a general decline in the relevant industry, and (2) strong competition. They also stressed that the decline in the industry would lead to difficulties in marketing parts of the system, specific components, and related services. In addition, they judged it to be difficult to secure contracts for the rebuilding of existing incineration plants.

Joint Venture II's system also faced significant competition. The major competitors were various engineering companies which enjoyed close ties with the customers. However, competitors would face the same kind of difficulties as Joint Venture II. An advantage was that S-PART and N-PART were not dependent on this industry and, therefore, were expected to have the financial patience required.

In addition, the investigators mentioned that the market for this type of incineration system could be seen as somewhat

conservative (i.e., it would be difficult to introduce new ideas). On the other hand, the "investigators" argued that the decline in the market might lead to a situation where the potential customers wanted to invest in more effective systems in order to save operating costs.

Referring to the sales forecast in the letter-of-intent, the investigator made the following comment:

Under these conditions, the new joint venture will - without any doubt - enjoy a substantial increase in profits. However, in the present market conditions, it is not likely that the outcome will comply with the forecast.

On the other hand, they stressed that Joint Venture II would not be involved in production or manufacturing, but rather in engineering and marketing. Hence, the costs involved in the project were related to personnel and external consultants, which would guarantee that potential losses would not be too great.

When it came to evaluation of SNI's potential role in this project, the investigators stated that the project was in an initial phase where the partners were primarily awaiting a solution of the financial problem. The development costs were estimated to be NKR 30 million over a period of three years and the parties had applied for NKR 15 million (50%) in project financing from SNI. The investigators recommended that the proposed project should be divided into two phases, and that SNI should provide up to 30% project financing of the total costs (NKR 4.5 million) for the first phase. After this phase SNI should again decide whether project financing should be provided for the second phase. They concluded that "the fact remains that the business concept, without any doubt, is very good and that the operations will be profitable - when market conditions improve."

SNI's Managing Director, Mr. Bye, was positive towards the project idea. Based on the investigators' report, he thought that the business concept was sound and that both

parties had the necessary resources and competence. However, he was opposed to the 50/50 equity split:

We had an intense discussion regarding the 50/50 split. In my opinion, I strongly recommended the parties to consider, this is the worst form of joint venture - there must always be one party that has the main responsibility and control!

In spite of this, Mr. N-partner and Mr. S-partner insisted on the ownership structure already chosen. In September 1986, SNI's Board of Directors granted Joint Venture II project financing in accordance with Mr. Bye's recommendation, based on the investigators' report. The Board of Directors stated the following:

The project appears to be well planned and prepared by partners with serious intentions and the requisite technical competence. The project has a small technical risk but a considerable market risk.

Mr. Consultant and Mr. S-partner said that they were pleased with the way SNI dealt with their project application. Mr. S-partner felt that the process went very smoothly and that there were no problems with the investigators' report, which reinforced his opinion about the opportunities. Mr. N-partner said that SNI, as an organization, acted as he had expected.

### **Restructuring**

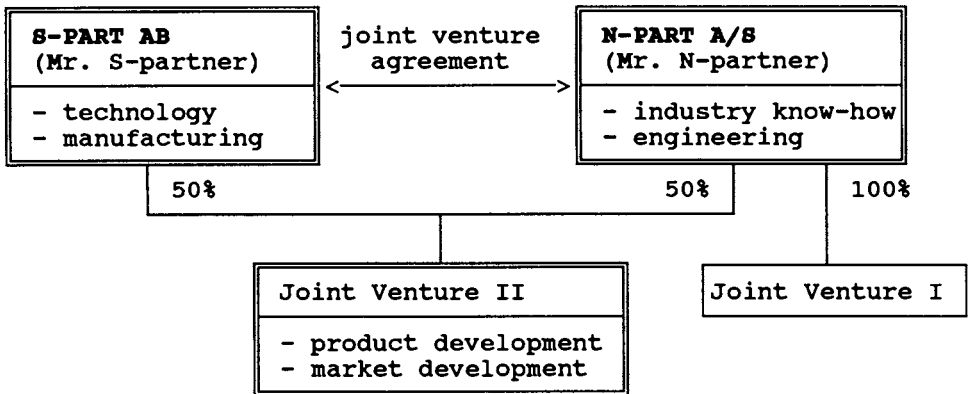
Three important issues arose during the second half of 1986. First, even though the demand for industrial waste processing plants had declined in the first half of 1986, the demand dropped further in the last six months of the year. The cooperative venture partners thought, however, that this was only a temporary weakening of the market, and did not change the orientation of the product development. By the end of

1986, however, they came to realize that it would be difficult to market the larger systems.

A second important occurrence in 1986 was that N-CONCERN changed its company strategy regarding industrial waste processing systems, to some extent due to the subsequent decline in prices for waste processing systems in general. Hence, this business area was now receiving less attention in N-CONCERN. Mr. N-partner said that this led to a situation where Joint Venture II no longer complied so well with N-PART's strategy. He also said that, to some extent, this new policy was already implied in the earlier letter-of-intent in line with the clause by which S-PART could become the majority owner of Joint Venture II.

The third issue was that Consultant Company I reached a stage where they did not want to give additional financial guarantees to Joint Venture II. Mr. Consultant argued that additional guarantees were impossible since they were a consulting company - not an industrial concern with large assets.

These three issues led to new discussions between the parties. As a result of these discussions, Mr. S-partner, Mr. N-partner, and Mr. Consultant agreed that N-PART should acquire the consultant company's share of Joint Venture I. However, since Joint Venture I was merely a "mail-box company," S-PART and N-PART decided to formalize cooperation directly between their two companies, rather than via Joint Venture I. Despite this development, Mr. Consultant was asked to stay as an advisor on the new cooperative venture's Board as an adviser. Mr. S-partner said that, by this stage, S-PART had spent a total of NKR 1 million on the project. This resulted in the following ownership structure:



The new situation was regulated in a joint venture agreement between S-PART and N-PART in December 1986. The agreement was formalized by S-PART's corporate lawyer and was based largely on the earlier letter-of-intent between S-PART and Joint Venture I. Initially, both parties owned 50% each of Joint Venture II but, as stated in the letter-of-intent, S-PART had the possibility of converting a loan to equity shares within three years, thus obtaining 80% of the equity capital. Mr. N-partner felt that this arrangement demonstrated, once again, N-PART's wish to be a more passive partner than S-PART:

The way I saw it, and the way the project had developed during 1986, N-PART should have a minority share. I argued for this in our discussions, but I got the feeling that S-PART did not want to change the situation since they had the option to become majority owners anyway. Another reason could have been that they did not want to put more money into the project at that time.

Mr. S-partner said that the discussions were the same as for the previous joint venture. Hence, in spite of their company policy, they decided to continue with a 50/50 split. On the other hand, Mr. S-partner stressed that S-PART did not formally have to convert the loan - even though this was the



intention. Consequently, this clause could also be seen as a way out of a potentially bad cooperation.

The three page joint venture agreement differed from the previous letter-of-intent as follows:

- more emphasis on the parent companies' guarantees for the joint venture's operations. If one partner should choose not to provide these guarantees, this party was to reduce its equity share,
- more details as to how equity shares should be valued if one partner should acquire the other partner's shares, and
- more details as to how potential conflicts should be handled.

There was also a clause emphasizing that each partner should aim at fulfilling the intentions outlined in the letter-of-intent.

The Board of Directors consisted of Mr. S-partner (Chairman of the Board), the Technical Manager at S-PART, Mr. S-concern from S-CONCERN, Mr. N-partner, and Mr. Consultant. Hence, S-PART was represented by three persons and N-PART by two (including Mr. Consultant).

In order to both intensify Joint Venture II's operations and incorporate more management capacity, the partners employed a Managing Director for Joint Venture II in January 1987 - Mr. Manager - who also became a member of the Board. This was also in line with SNI's recommendations. Mr. Consultant explained the reasons for employing a Managing Director:

I think we all came to realize that it was not possible to continue working with the project type of organization that we had, where a few persons from various companies worked part-time on the project. Hence, we decided that the only thing to do was to employ a Managing Director.

Mr. N-partner stressed the importance of understanding the market as one reason for employing a Managing Director:

The most important job was to check whether the market accepted the product - before further product development was carried out. The best way to do this was to employ a full time Managing Director.

Mr. Manager was recruited through a "head hunter" and had both national and international experience of the relevant industries, and no ties with either of the parent companies. He was physically located in an office in S-PART's headquarters in Norway. The partners also formed an informal management team that met every third week for informal discussions, which consisted of Mr. N-partner, Mr. S-partner, and Mr. Manager.

### Operations

By January 1987, the various internal investigations had resulted in the following documentation:

Date	Month	Title	Headings
1986	May	Business plan	Business idea Market and product development Organization Financing Forecast of net result and cash-flow
		Letter-of-intent	
	June	Application to SNI	Forecast of sales and net result Budget 1986 - 1990 Specification of costs Cash-flow analysis
	Dec	Joint venture agreement	

When asked about how he felt about the joint venture by the end of 1986 Mr. S-partner replied that "it was an

excellent joint venture - otherwise I would never have entered and continued with it!

Mr. Consultant said that in December 1986 he still felt that it was a long term development project:

I argued that we should de-emphasize our total concept and instead try to develop two to three projects that were completely adapted to the customer's specific needs.

The newly assigned Managing Director felt that he had two tasks to perform, (1) develop the concept into a product, and (2) examine and assess the market response to this product. However, during the first part of 1987 things did not go particularly well. He explained his feelings after the first two months as follows:

The whole documentation of the system was very poor indeed - only visions and nothing tangible. I also found out that a number of other companies were about to develop similar systems, and I drew the conclusion that we had to start marketing attractive parts of the systems immediately. These parts only contained S-CONCERN components.

A large problem was that the demand for incineration systems remained low, which the customers to change their priorities from large complete systems towards smaller systems. This made Joint Venture II's whole business concept significantly less attractive on the market. According to Mr. Manager, this made it even more urgent to start marketing parts of the system. Joint Venture II's owners were aware of these problems and agreed to the marketing parts of the system.

At this stage, Mr. N-partner still felt that S-PART should play the active role in the joint venture and that N-PART could be more passive until a system was sold and its engineering input was needed. Also, some of N-PART's employees who had been working with the system left the company in 1986. In retrospect, Mr. N-partner said that he realized that his

attitude (i.e., that his company should be a passive partner in the cooperation) might have had a negative influence on the cooperation as such. It was, however, "S-PART that was responsible for running the joint venture, which had been formalized in the agreement." He also stressed the two company's different objectives with regard to Joint Venture II:

S-PART was much more anxious to introduce a product on the market than we were. They wanted to have quick, tangible results after entering the cooperative venture. The problem was that the basis for the concept were not good enough and we wanted to emphasize further development instead of a quick introduction of only parts of the system. S-PART's priority was market penetration where we emphasized development of a system. This made me realize how important it is to have joint objectives.

Another of Mr. Manager's concerns was that S-CONCERN had its own waste processing equipment subsidiary in Germany. He did not know about this and explained his surprise:

It was amazing to find out that S-CONCERN in fact had established two groups with the same mission - one wholly owned and one joint venture. It also turned out that this other group felt that we threatened them, so it was impossible to cooperate. This made life very complicated for me as the head of the joint venture. I visited Mr. S-concern at S-CONCERN in March 1987 to discuss this, but he just urged me to cooperate with the German company.

Mr. S-concern, on the other hand, explained that the German subsidiary had been operating for a considerable time. As a matter of fact, he had previously been Managing Director of this company, which was an integrated part of the basic organization of S-CONCERN, and was responsible for the product development and manufacture of components for waste incineration. Through a cooperative agreement, a British company had been responsible for the worldwide marketing of these components for the last twelve years. Mr. S-concern

explained the relationship between the German company and Joint Venture II as follows:

We still had an agreement with the British company when we started to negotiate with Joint Venture I's owner. Hence, we delivered components to the British company and they sold them worldwide. In contrast, the business idea in Joint Venture II was to develop a total system, including several sub-systems with a high degree of automation - the purpose was absolutely not to sell single components, this was primarily a development project. Despite this, we included a clause in the agreement whereby Joint Venture II could also sell components - if necessary. This was, as I said, very unlikely to occur. I discussed this with the British company and they, of course, did not like the arrangement but felt that there was no risk that Joint Venture II would start to sell components. Consequently, I agreed to the arrangement in spite of the fact that the British company was our sole agent for the components - also in Norway. However, we did include a vague clause that Joint Venture II was not allowed to interfere with S- CONCERN's present activities, i.e., interfere with our agreement with the British company.

He also argued that since cooperation with the British company was terminated January 1, 1987, the situation had changed, and it was acceptable to start marketing single components through Joint Venture II as well:

However, the joint venture would then have become a company marketing our products in Norway, which was silly since we already had S-PART doing this. Consequently, I wanted to stop this. In the subsequent discussions, however, Mr Consultant opposed stopping Joint Venture II's activities. He argued forcefully that the market decline was temporary and that it only meant a delay of the market's acceptance of the system. Therefore, it took quite a long time before we reached a decision on the matter.

In spite of the problems he perceived, Mr. Manager contacted six potential customers and introduced the system and its parts. During the late spring of 1987, he presented two formal offers to potential customers, one of which

resulted in an order. Due to late deliveries from S-CONCERN, however, Joint Venture II could not meet the deadline and therefore subsequently lost the order.

The situation deteriorated and the parties developed different opinions regarding the operation of Joint Venture II. N-PART did not change their opinion that they were, and should remain, the passive side of the venture. Mr. S-partner, on the other hand, said that he felt some pressure from S-CONCERN since they thought that the components ought to be sold directly through S-PART - not from Joint Venture II. In a Joint Venture II Board protocol in late April 1987, it was concluded that:

- (1) Due to environmental circumstances, Joint Venture II's basis (the waste incineration system) must be regarded as worthless.
- (2) Joint Venture II ought to focus on marketing S-PART's technology and N-PART should withdraw from the joint venture.

Mr. Manager reported the Board's opinion to SNI in May 1987, and estimated that it would take at least two to three years before there was a demand for Joint Venture II's complete system. After this, Mr. Bye discussed the situation with Mr. Manager and the "primary-investigator." Mr. Bye explained his feelings after this meeting:

I felt that something would go wrong, and it seemed that the joint venture was not accepted by S-CONCERN. However, there was no reason for SNI to interfere with the partners - they must take care of this type of problems themselves.

On the other hand, Mr. Bye asked the "primary-investigator" to evaluate the situation. In July 1987, they recommended that SNI remain passive until new strategy and business and cooperative plans had been formulated for Joint Venture II. He summarized the situation as follows:

The proposed new orientation does not seem to be an obstacle to continuing the project as an SNI project. Future changes in the cooperative form might, however, mean that the project might not fulfill SNI's project requirements.

Joint Venture II had a new opportunity to deliver a pilot system during the late summer of 1987. When they failed to secure this order, the situation became worse. During the autumn of 1987, the Board of Directors of Joint Venture II discussed various alternatives for N-PART's possible departure from the joint venture and whether other S-PART units might be incorporated into Joint Venture II.

In November 1987, the partners finally agreed that S-PART should acquire N-PART's share in Joint Venture II and that operations should be terminated. The Board of Directors made the following statement:

The Board of Directors has agreed that the owners' objectives are so different that it was impossible, with the present ownership structure, to find a basis for further efficient operations within Joint Venture II.

#### Outcome

All parties felt that the joint venture was a failure. There were, however, several dimensions in this judgement. Mr. N-partner said:

The joint venture turned out to be a failure. There was never a demand for the product on the market during the project period. The efforts put into product development were, however, not wasted and I am certain that S-PART could get something out of it if they decided to carry on in the future. Of course, the joint venture generated some costs for N-PART. These were only direct costs for our consultants in the product development work was not a problem at all. From a financial perspective, I do not see the total joint venture project as a loss.

Mr. S-partner perceived the results as very bad, both from a financial point of view and in terms of developing the concept into a product. He mentioned three main reasons for this failure:

- (1) the decline in prices, which meant that the business concept became less interesting,
- (2) due to market conditions, Joint Venture II could only offer parts of the system. These parts were completely dominated by S-PART, and N-PART's engineering inputs were not required, and
- (3) unfortunately, S-CONCERN had allowed two companies to be established at the same time, making almost the same thing, and the management of these companies could not cooperate.

He felt that his company's input, approximately NKR 1 million in costs and NKR 750.000 in acquiring the license, was lost. Theoretically, they could continue development at a later date - Joint Venture II still exists as a company. In addition, Mr. S-partner said that Swedish companies sometimes do not understand the specific problems of the Norwegian incineration industry - in spite of their global experience. In addition to special "rules of the game," there are political requirements that have to be met.

The estimated and achieved total costs for the joint venture company as well as the financing obtained from SNI are summarized below:



## JOINT VENTURE II

Estimated costs (Dec, 1986), achieved costs, and SNI financing				
(*1000 NKR)		1987	1988	Total
Product development:	budget	4400	2700	7100
	outcome	-	-	-
Production development:	budget	600	800	1400
	outcome	-	-	-
Market development:	budget	1200	800	2000
	outcome	774	-	774
Other costs:	budget	3000	1500	4500
	outcome	1000	-	1000
Total annual costs:	budget	9200	5800	15000
	outcome	1774	-	1774
SNI financing:	budget	2800	1700	4500
	outcome	630	0	630

Mr. S-concern felt that the joint venture was clearly a flop. He was particularly concerned by the strategic and operational conflict that developed between Joint Venture II and the German company: "this was a stupid conflict between a 50% joint venture and the rest of S-CONCERN's organization." He argued that, even though Joint Venture II turned out to be a failure, they were now about to enter a new cooperative venture with another Norwegian company. This joint venture would, however, "be set up in a different way."

Mr. Consultant - one of the founders of the concept - was saddened that they never succeeded in producing a system or even got Joint Venture II really into operation. However, he also felt that the time he spent was worthwhile:

I have learnt the importance of timing a product idea to market conditions, but also the problems of cooperating with a large multinational corporation that has difficulties both with its strategic coordination within its large organization as well as with profitability requirements.

In Mr. Bye's opinion too, the joint venture was a failure:

When the industrial partners said that they wanted to close down the joint venture, I had the opinion that they never gave an interesting project idea a reasonable chance. Also, one must recognize the impossible situation for the joint venture's Managing Director in such a situation, i.e., strategic conflict within and between parent companies.

In February 1988, SNI demanded - and obtained - full reimbursement of the loan provided to Joint Venture II.

## APPENDIX 9

### CASE 3: ALUMINUM BALCONIES

#### Introduction

This case describes a cooperative venture between two small companies, namely the Swedish manufacturing company, Alnova Bygg AB, based in Strömstad on the Swedish west coast, and the Norwegian company, Altex Consult A/S, in Fredrikstad<sup>1</sup>. The geographical distance between Strömstad and Fredrikstad is not more than 20 kilometers. Alnova was established by three entrepreneurs who saw a business opportunity in the product development and manufacture of a new type of patented aluminum balcony in the construction industry. The cooperative venture evolved as a means for marketing Alnova's product in Norway. The structure of the cooperative venture involved substantial cross-ownerships between the owners of the two parent companies.

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<sup>1</sup> The name of companies and persons (with one exception) are not disguised in this case description.

**Actor Summary**

<b>Company</b>	<b>Name</b>	<b>Title</b>
Alnova Bygg AB	Mr. Sven-Olof Ovdahl	Managing Director
	Mr. Bengt Fridolfson	Member of the Board
	Mr. Åke Johansson	Technical manager
Altex Consult A/S	Mr. Jan Aas	Managing Director
Götabanken	Mr. Sten-Åke Berg	Banker
Construction A/S	Mr. Construction	Managing Director
SNI	Mr. Jan Diedrichsen	Managing Director - July 1984
	Mr. Atle Bye	Managing Director August 1984 -
	"Primary-investigator"	

**Event Summary**

<b>Year</b>	<b>Month</b>	<b>Event</b>
1981		Mr. Ovdahl, Mr. Fridolfson, and Mr. Johansson had initial contacts regarding the idea.
1983	January	Alnova Bygg AB was established.
1984	January	Mr. Ovdahl contacted Mr. Berg regarding his interest in the Norwegian market. First contact with Mr. Aas.
	May	First contact with SNI (Mr. Diedrichsen) a seminar, which resulted in the cooperative venture idea as such.
	August	Second contact with SNI (Mr. Bye), which resulted in a tangible cooperative venture idea.
	September	Altex Consult A/S was established. Licensing agreement between Alnova and Altex.
	October	Formal application for SNI financing.
1985	February	Mr. Construction acquired 25% of Altex. Investigators' report to SNI.

	March	Mr. Construction acquired 24% of Alnova.
	April	Modified cooperative venture agreement. SNI's Board of Directors decides to provide project financing.
1987	October	Mr. Construction agreed to withdraw from the cooperation.
1988	May	The previous owners acquired Mr. Construction's shares in Altex and Alnova.

### **The Parent Companies**

#### The Swedish Partner: Alnova Bygg AB

Alnova Bygg AB was founded in 1983 by Mr. Sven-Olof Ovdahl, Mr. Åke Johansson, and Mr. Bengt Fridolfson, in Strömstad, a town located close to the Norwegian border on the Swedish west coast. Both Mr. Ovdahl and Mr. Johansson were former employees of Fogasystem AB - a Strömstad based company that manufactured various types of equipment in aluminum. Alnova manufactures and distributes a type of aluminum balcony that is used both as a replacement for old concrete balconies which have deteriorated and for standard low weight balconies in new buildings. The company is owned by the Swedish partners (70%) and Mr. Jan Aas (30%). The 1987 turnover was SEK 23 million, which was an increase of 44% from the previous year. Alnova employed 26 persons in 1987.

#### The Norwegian Partner: Altex Consult A/S

Altex Consult A/S was established in August 1984 in Fredrikstad, which is close to the Swedish border. Altex Consult A/S is owned by Mr. Jan Aas (70%) and by Mr. Ovdahl jr. (30%). In 1987, Altex had a turnover of NKR 14 million and two persons - the two owners - were employed full time. Altex is responsible for marketing Alnova's aluminum balconies in Norway.

**Background**

The former soccer player Sven-Olof Ovdahl had been a manager of Foga Systems for several years - a small Swedish company that produced various types of equipment in aluminum. In 1981, Mr. Ovdahl met a friend of his, Mr. Bengt Fridolfson from HSB (a large co-operative organization which builds and administers its members' apartments). Fridolfson expressed his concerns about the maintenance problems for concrete balconies in HSB's buildings. Due to the increased level of acid rain in Scandinavia, the concrete balconies had started to deteriorate, and these balconies had to be replaced before an accident occurred. The usual way to do this was to tear down the old balcony and to construct a new concrete balcony, using concrete shuttering, etc. Since this was both very costly and somewhat complicated Mr. Fridolfson asked Mr. Ovdahl whether Foga Systems might possibly be able to supply a balcony in aluminum, thus reducing the costs of replacement and future maintenance.

Even though Foga Systems produced aluminum products, the technology required to manufacture an aluminum balcony was quite different from that used to produce the company's present products according to Mr. Ovdahl, and consequently Foga Systems was not interested. Mr. Ovdahl discussed this problem with another friend of his - Mr. Åke Johansson - who was the Technical Manager at Foga Systems. They were convinced that it was technically possible to develop and manufacture the required balcony. As a matter of fact, they thought that this was such a good idea that they even considered jointly forming a new company, where the business concept would be to manufacture this new type of aluminum balconies as replacement for old concrete balconies in Sweden, which were subject to deterioration.

Not long after these discussions, Mr. Ovdahl by coincidence met a local politician who had just completed an official survey of the situation regarding defective concrete balconies in Sweden. When Mr. Ovdahl told him about the

business concept, the politician became very enthusiastic, judged it to be the right product at the right time, and urged Mr. Ovdahl to go ahead. Mr. Ovdahl also carried out a limited survey of the Swedish market and found that the potential market might be some 400.000 balconies. These encouraging figures, and later discussions with Foga Systems AB, resulted in a decision to establish a company named Foga System Bygg AB. The company was based on Foga Systems' facilities and the purpose was to construct prototypes of an aluminum balcony and obtain formal governmental approval of the product. There were many regulations and restrictions regarding construction work on buildings, particularly in the case of balconies. For instance, a balcony had to resist 1200° C heat for one hour without any deformation.

After more than 18 months of struggling, both with design problems and with local and national authorities, they finally arrived at a balcony that met all the necessary requirements. The partners in Foga Systems Bygg AB decided that it was time to leave Foga Systems and start their own production in new premises in Strömstad. It was natural to base the company in Strömstad since both Mr. Ovdahl and Mr. Johansson resided in this city. At this stage, they changed the name of the company to Alnova Bygg AB, and in order to protect their product line, they also applied for patents for the balcony in the U.S., Europe, and Japan.

Since marketing competence at Alnova at that time was rather limited, the Managing Director, Mr. Ovdahl, established contacts with an existing company involved in marketing of other types of balconies in Sweden - Pronova AB - and Pronova was to market balconies in Sweden. Production started and the balconies were marketed in Sweden.

Partly as a result of Alnova's new idea of aluminum balconies, approximately ten other smaller companies started to develop their own aluminum balcony. None of them, however, became strongly competitive with Alnova's patented balcony.

### Entry into the Norwegian Market

After the initial success in Sweden, it did not take long before Mr. Ovdahl and his team started to look at the Norwegian market. Mr. Ovdahl explained that "since we were based in Strömstad, close to the Norwegian border, it was quite natural for us to turn our attention towards Norway."

Mr. Ovdahl had previously been employed in a Swedish company's subsidiary in Norway and had also been responsible for aspects of the Norwegian operations of another Swedish company. He felt that, thanks to this experience, he was aware of the specific challenges in starting a business in Norway. Alnova's objective at this stage, however, was to find a Norwegian partner for market development in Norway.

In January 1984, Mr. Ovdahl discussed his ideas with his banker friend in Götabanken in Strömstad, Mr. Sten-Åke Berg. Mr. Berg, who also had been an active soccer player in Strömstad, came up with the idea of contacting another friend of his - the well known Norwegian soccer player, Mr. Jan Aas. Mr. Berg thought that he might be a suitable first contact for Alnova. Also, Mr. Ovdahl was, to some extent, already acquainted with Mr. Aas through their mutual interest in soccer. Mr. Berg had separate discussions with both Mr. Ovdahl and Mr. Aas, and also initiated the first contact between them.

When Mr. Ovdahl explained the business concept to Mr. Aas at the first meeting in February 1984, Mr. Aas considered the idea very good and of interest to his company. They agreed that Mr. Aas should carry out an initial marketing survey in order to estimate the market for Alnova's balconies in Norway. Mr. Aas explained his decision to perform the survey:

I did not have any experience of this particular industry at all, but I did have marketing experience. It seemed to me that this was the most important competence Alnova needed at this stage.



In the subsequent marketing survey, Mr. Aas found that the Norwegian market was quite different from the Swedish. Deterioration of balconies was not - at that time - perceived to be a problem in Norway at all and, consequently, it seemed to be difficult to market aluminum balconies in Norway. Not surprisingly, tests of several balconies in Norwegian cities revealed that the problems were the same in the two countries - the Norwegians were just not aware of these problems. Mr. Ovdahl explained that they "knew that there was a need and a huge market in Sweden but we had to create a similar market in Norway."

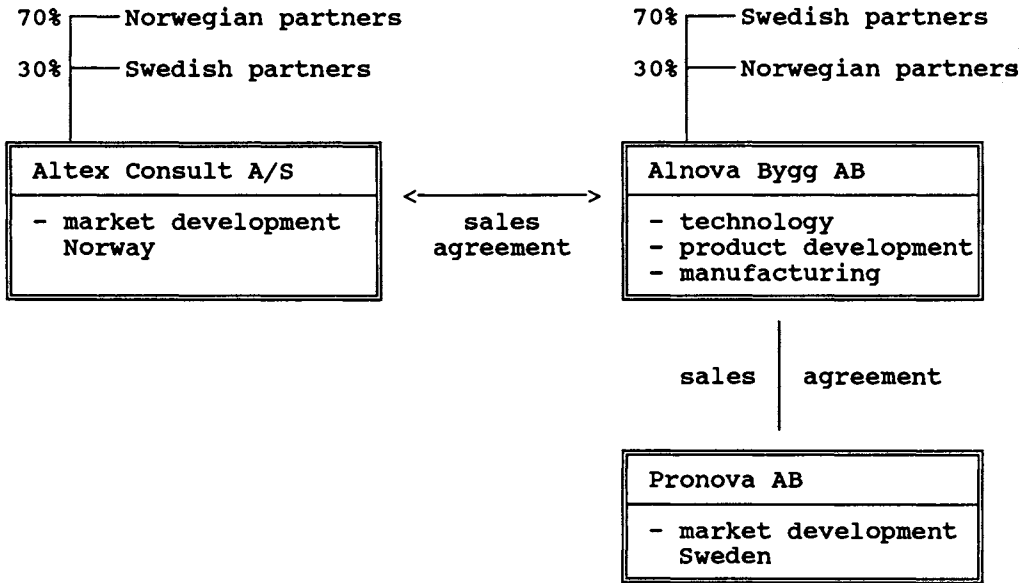
At the same time, Mr. Aas found that there was a substantial and increasing demand for a technology that could be used to enlarge old balconies in Norway. When the Alnova team discussed this, they realized that this could probably be achieved using the same type of balcony Alnova was currently manufacturing for the Swedish market. Based on these findings, Mr. Ovdahl and his partners decided that Mr. Aas should become Alnova's partner for market development in Norway. Mr. Ovdahl explained his choice of Mr. Aas:

Mr. Aas was very important for our operations in Norway. Due to his good reputation and his well-known track record in the national soccer league, he immediately got an amazing access to private companies and governmental organizations. From my point of view, we gained at least one year by using him as our contact in Norway.

As a result, Mr. Aas established a limited company, Altex Consult A/S. Mr. Aas was the majority owner (70%), but it was also decided that Mr. Ovdahl and his Swedish partners should own an equity share of the company (30%). It was decided, however, that this equity position should be taken by Mr. Ovdahl's son, who had previously worked with marketing and who decided to join Altex at this time. The partners also agreed that Mr. Aas should become a minority owner of Alnova (the same percentage as the Swedish partners had in Altex through Mr. Ovdahl, J.r, i.e., 30%). Mr. Ovdahl explained that the

basic purpose of these cross-ownership operations was to "to ensure that both partners were highly committed to the project, both in Sweden and Norway."

Neither Mr. Aas nor Mr. Ovdahl made any particular assessments or analyses of each other before this operation, since they felt that both partners already knew each other quite well, and since it was obvious that both partners were already highly committed to the project - especially due to the cross-ownership arrangement. In August 1984, the companies were organized as follows:



### The Cooperative Venture and Application to SNI

It soon became necessary to modify and develop the product to meet Norwegian conditions and, as mentioned earlier, this product development required significant additional financial resources. When Mr. Ovdahl discussed this with Mr. Berg in Götabanken, Mr. Berg thought of SNI financing. He was acquainted with the Managing Director of

SNI, Mr. Diedrichsen, and knew about SNI's objectives and operations. He thought that there was a good chance that the Alnova-Altex cooperation could fulfil SNI's requirements for project financing of cooperative ventures. Therefore, arrangements were made for he and Mr. Ovdahl to participate in a seminar where Mr. Diedrichsen presented SNI and its mission. After this seminar, held on May 17, 1984, Mr. Ovdahl and Mr. Berg met personally with Mr. Diedrichsen. However, even though Diedrichsen felt that the project seemed to be suitable for SNI-financing, he did not want to become involved in the project since he intended to resign within the next few months. Instead, he recommended Mr. Ovdahl to contact the new Managing Director of SNI in August 1984. A week later, Mr. Ovdahl briefed Mr. Aas about this meeting and they decided to follow Diedrichsen's advice and contact the new Managing Director.

SNI's new Managing Director, Mr. Atle Bye, was enthusiastic about the project since (1) the product covered a demand on the market, and (2) aluminum balconies seemed to create a better environment in residential areas where many large buildings did not have balconies at all. However, he felt that the parties had a long way to go in order to arrive at a suitable Swedish-Norwegian cooperative venture. He explained the situation in the following terms:

Since I had been working in a construction company, I felt that the business concept was very good and that the timing was right. However, the cooperative venture had significant weaknesses. For instance, the Swedish partner had a weak financial position due to costs in connection with its establishment and low profits on sales in Sweden. Also, even though Mr. Aas was very enthusiastic and had the marketing competence, he lacked experience of the construction industry. As a matter of fact, the project situation looked rather bad.

On the other hand, Mr. Bye stressed that both Mr. Ovdahl and Mr. Aas were very enthusiastic about the cooperative venture opportunity, and that they appeared to have a good personal relationship. He felt that SNI financing was a

necessary way to achieve their objectives, i.e., to create a Swedish-Norwegian cooperative venture.

In order to fulfil the SNI financing requirements, the parties had to prepare the standard documentation that SNI required as well as a formal cooperative venture agreement. Mr. Ovdahl said that Mr. Bye took an active part in these preparations, including the cooperative venture agreement. Mr. Bye said that he helped the parties structure the project according to SNI's intentions. He explained:

When the first SNI-application arrived, I worked actively on the cooperative venture structure and agreement as such. I realized that we had 'thin' parties but it was a very interesting business opportunity.

Both Mr. Ovdahl and Mr. Aas said that Mr. Bye contributed substantially with know-how to the design and development of the cooperative venture. In the two companies, it was Mr. Ovdahl and Mr. Aas who were responsible for working out the details in the application to SNI.

In September 1984, Mr. Aas and Mr. Ovdahl had reformulated their sales agreement, making it a cooperative venture agreement, and they were both very satisfied with the new agreement. It was very straightforward and based to a large extent on the previous sales agreement. Mr. Aas explained:

If we were to disagree in the future, a complex formal agreement would not help anyway. On the contrary, it would only create trouble. The most important thing was to be personally committed to the project - which we indeed were, due to the cross-ownership.

Mr. Ovdahl and Mr. Aas had worked out the details of the agreement and each of them had briefly checked it with a lawyer before each company's Board of Directors formally accepted the cooperative venture agreement. The agreement covered the following issues:

- exclusivity,
- restrictions regarding competing products,
- duration and cancellation,
- terms of payments, deliveries, etc.,
- product specification,
- deliveries, and
- conflict resolution.

#### Exclusivity

Altex Consult A/S had the exclusive rights to market the product in Norway.

#### Restrictions Regarding Competing Products

Altex Consult A/S did not have the right to market or sell other products that might compete with Alnova's products.

#### Duration and Cancellation

The agreement was to be valid for nine years, until 1994, with a 12 month period of notice of cancellation. If the agreement was not cancelled in 1994, it was to be prolonged for one year at that time. Each party could, however, immediately cancel the agreement if the other partner failed to fulfil his obligations in accordance with the agreement.

#### Terms of Payments, Deliveries, etc

All details regarding terms of payments, deliveries, minimum turnover, marketing efforts, etc, were regulated in a separate appendix attached to the cooperative venture agreement.

#### Product Specifications

Altex Consult A/S was responsible to Alnova for the correct and necessary product specifications.

### Deliveries

If Alnova realized that they could not meet the time of delivery, this had to be brought to Altex Consult's attention immediately. Alnova then had to specify the reason(s) for delay and the estimated new delivery time.

### Conflict Resolution

Any conflict regarding this agreement was to be solved by legal arbitration based on Swedish Law.

During the autumn of 1984, Mr. Ovdahl and Mr. Aas personally met with Mr. Bye seven times and discussed the project with him over the telephone on about 15 occasions. The formal nine page application for SNI financing was sent to SNI in October 1984. The project was divided into two consecutive phases:

- (1) adaptation of the balcony for the Norwegian market and market development in Norway, and
- (2) further product development and international market development. (After an assessment of the market in Denmark, for instance, the parties expected that the Danish market potential was similar to that pertaining in Sweden and Norway).

### **The Cooperative Venture and the Project Leaders**

When asked about what the cooperative venture project meant to the parties involved, Mr. Ovdahl responded:

This cooperative venture definitely seemed to be the best way to market our products in Norway and in Sweden. Therefore, this cooperative arrangement was very important to Alnova as a company, and to me personally as one of the owners of this company.

Mr. Aas's opinion was that the arrangement was a major step for him and his company. He stated:

The cooperative venture between Altex and Alnova was, of course, very important to me personally. I had invested a great deal of money in Altex and Alnova, and was determined to get a good return.

Both Mr. Aas and Mr. Ovdahl said that they had already developed a good personal relationship, and that initial contacts improved over time. In addition, Mr. Aas had become familiar with the other partners in Alnova and was "accepted as a member of the team."

Both Mr. Aas and Mr. Ovdahl emphasized the opportunity to obtain financing as the overall reason for seeking SNI involvement and that this reduced each party's risk. Mr. Ovdahl felt that the whole idea of entering Norway with the "right" type of balcony, would have been delayed two years if they had not received SNI support. Mr. Aas also stressed the positive psychological effect of actually achieving SNI financing.

Both of them said that they were very pleased with Mr. Bye's assistance in the design phase. Mr. Aas felt that the project "really took off" after they had contacted Mr. Bye.

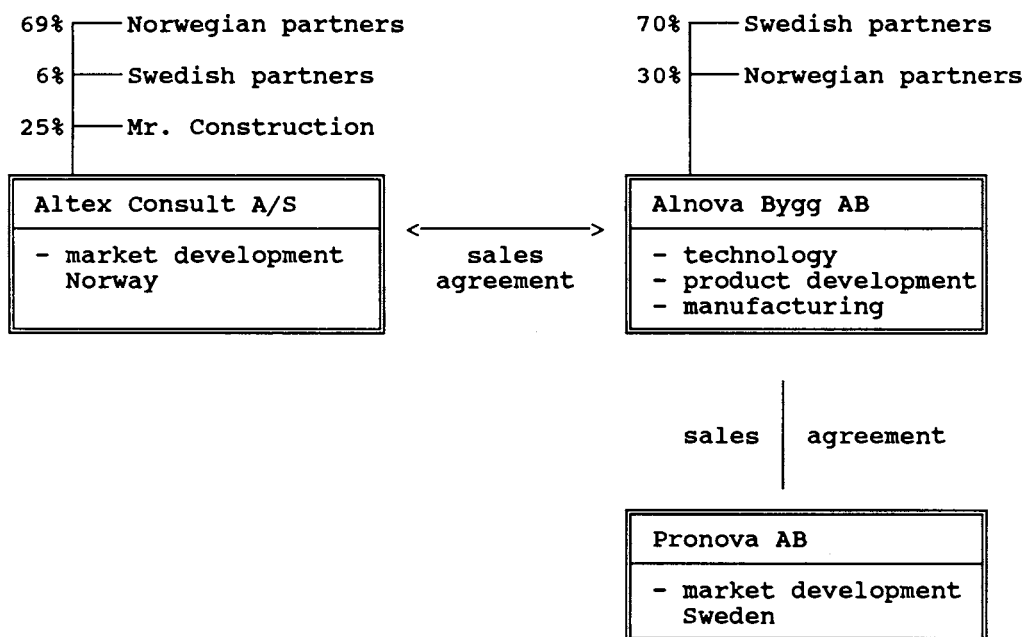
#### **A New Partner in Altex**

Both Mr. Ovdahl and Mr. Aas realized that marketing the first version of the balcony as a means of enlarging Norwegian balconies (i.e., a product intended for replacement of old, defective balconies in Sweden), was definitely a short-term strategy. Hence, Alnova would soon have to modify its balcony to meet Norwegian conditions. Mr. Ovdahl and his partners knew that the costs of this product development, in addition to the operating costs, were too high to be carried out without significant external financial input which would broaden the company's capital base.

When Mr. Ovdahl and Mr. Aas discussed their future plans with their banking contacts they realized that they probably would have to bring an additional partner into the team. The

business had evolved very rapidly and people told them that they had the production and marketing competence, but lacked the engineering competence. Also, Mr. Bye emphasized the necessity of increasing the company's equity capital as soon as possible.

As a result, the Norwegian re-construction specialist, Construction A/S - being a specialist in the renovation of fronts of buildings - became a significant owner in Altex Consult (25%) in January 1985. This resulted in the following cooperative venture structure:



### **SNi Investigation**

In cooperation with the Swedish National Industrial Development Fund<sup>2</sup>, it was decided to assign an outside

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<sup>2</sup> In line with the normal procedures for assignment of investigators.



consultant to be "primary-investigator" and evaluate the application to SNI, and SNI's potential role in the project. In a seven page report, presented in February 1985, the investigator described the companies and the business concept, the cooperative venture, and the market possibilities. He also discussed the sales forecast (which he found to be reasonable) the parties' resources, capital requirements and the financial position, and SNI's role in the project. Future sales of balconies were estimated as follows:

**SALES FORECAST (\*1000 balconies)**

Year	Normal situation		Worst case	
	Total	Norway's share	Total	Norway's share
1984/85	2250	500	1600	300
1985/86	4000	1200	2500	500
1986/87	6000	1500	3000	1000

The costs for the first phase totalled SEK 3.4 million for Alnova and NKR 2.0 million for Altex. The parties applied for 50% project financing of these costs.

The investigator thought that in a "normal situation" the cooperative venture would be very profitable, but in the "worst case" situation the project would result in a loss. According to the investigator, this loss would significantly affect Alnova's equity base. Hence, a royalty based financing would make it easier to obtain additional external financing. In Altex's case, the project would be profitable within one year in the "normal situation," and after four to five years in the "worst case situation." A royalty based financing also seemed to be a logical solution in Altex's case, accordingly to the investigator.

The investigator stressed the potential positive impact on both the cooperative venture, and on the capital base in Alnova and Altex, if they would bring in a new partner. He mentioned in particular the ongoing negotiations with Mr. Construction and Alnova. (As mentioned above, Mr. Construction

had become a 25% owner of Altex in February 1985, i.e., one month before the investigators' report.) Finally, the investigator underscored the vital importance SNI appeared to have for this project, particularly for Alnova:

Non-payment from SNI could result in serious negative effects on other present financiers in Alnova. Altex requires the loan in order to carry out the planned market penetration in Norway.

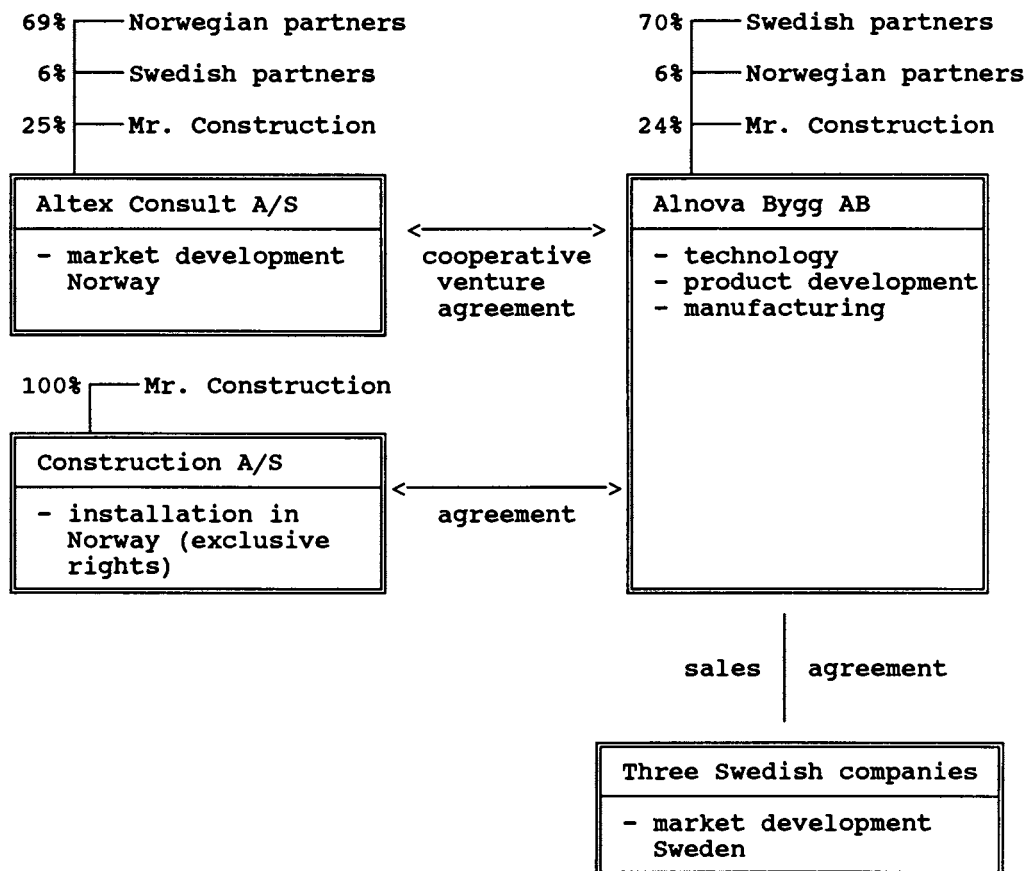
Consequently, he recommended SNI to accept the application and provide 50% project financing of the total costs up to SEK 1.7 million for Alnova and up to NKR 1.0 million for Altex. The project financing was to be provided as a royalty based financing. The condition was that a project management committee be established which would be directly responsible for the cooperative venture.

#### **A New Partner in Alnova**

In early 1985, some problems occurred with Alnova's marketing representative in Sweden, Pronova AB. Pronova started to manufacture their own balcony and, consequently, started to compete with Alnova. Therefore, Mr. Ovdahl established contacts with three other companies who were willing to market the balconies in Sweden. As a result, however, Alnova temporarily lost all its sales in Sweden. Hence, it became critical to Alnova's existence that Altex's operation performed well in Norway.

In March 1985, Alnova's Board of Directors agreed that Mr. Construction should acquire 24% of the shares in the company. This was the second step in the two companies' strategies to incorporate more engineering/construction competence into the cooperative venture. Mr. Construction was also to become Chairman of the Board at Alnova. In addition, Mr. Construction was to acquire the exclusive rights to

install the balconies in Norway. This resulted in the following cooperative venture structure:



Mr. Construction was very enthusiastic about the business concept and felt that the Alnova balcony was the best available for enlarging balconies in Norway. Soon after, Altex received its first order for 177 balconies in Norway through Mr. Construction. He explained that "the business concept was really very good and fitted perfectly with the construction work I was already carrying out in my own company."

One month later, in April 1985, and after intense discussion, SNI's Board of Directors decided to follow Mr. Bye's recommendations (based on the investigators' report) and

grant Alnova SEK 1.7 million and Altex NKR 1.0 million in project financing. Mr. Bye explained the situation:

There was quite a discussion during this Board meeting. They were worried that the partners had neither the financial nor the management capacity to pursue such a cooperative venture. To some extent I agreed with this criticism, but argued that I would carefully observe this project in its initial phases.

### **Restructuring**

During 1985, things did not go particularly well. Sales were poor and some friction developed between Mr. Ovdahl and Mr. Aas on the one hand, and Mr. Construction on the other. In 1986, this friction evolved into a dispute over Mr. Construction's installation rights in Norway. It turned out that Altex's, and thus Alnova's, sales to other construction companies were negatively affected by the fact that Mr. Construction had the exclusive installation rights, in other words a fundamental strategic problem. Mr. Ovdahl explained how he felt about this situation in the cooperative venture during this period:

The second part of 1985 and 1986 was characterized by internal conflicts. In fact, we spent more time on conflicts in the Board of Directors than on actual market development - it was two lost years. I realized that we had incorporated the wrong type of partner.

To cope with this problem, Mr. Aas and Mr. Ovdahl established a new company in Norway during the autumn of 1986, named Alcon Montasje A/S. The purpose of this company was to offer installation services to the Norwegian customers in addition to Mr. Construction's company. Mr. Jan-Erik Stors became the Managing Director and co-owner of Alcon Montasje. He had extensive experience of the construction industry and, in his last assignment, had been responsible for installation

of a large quantity of Alnova balconies in Norway. In a memorandum to SNI in December 1987, Mr. Aas mentioned four reasons for establishing Alcon Montasje:

1. the available installation companies had a limited interest in installing aluminum balconies since they did not have the necessary competence,
2. the end users were often not satisfied with the installations,
3. all market signals pointed to the need for a 'neutral' installation company as a sub-contractor, that the installation company must be able to provide installation services to a main construction company without being perceived as a competitor, and
4. Through Alcon Montasje, Mr. Ovdahl and Mr. Aas would control the whole value chain - product development, production, marketing, and installation - which would strengthen their competitive position.

By mid 1987, they had arrived a stage when, according to Mr. Construction, "one party or the other had to withdraw from the cooperation." He offered to acquire the remaining parts of Alnova, but, instead, Mr. Ovdahl and Mr. Aas made a counter-bid for Mr. Construction's shares. In October 1987, they agreed that Mr. Construction should withdraw from both companies, and that Mr. Ovdahl and Mr. Aas should acquire his shares in both companies in May 1988. After this agreement, the parties focused on promoting the product in Norway and in Sweden, and by the end of 1987 sales increased significantly.

## **A Second SNI Project**

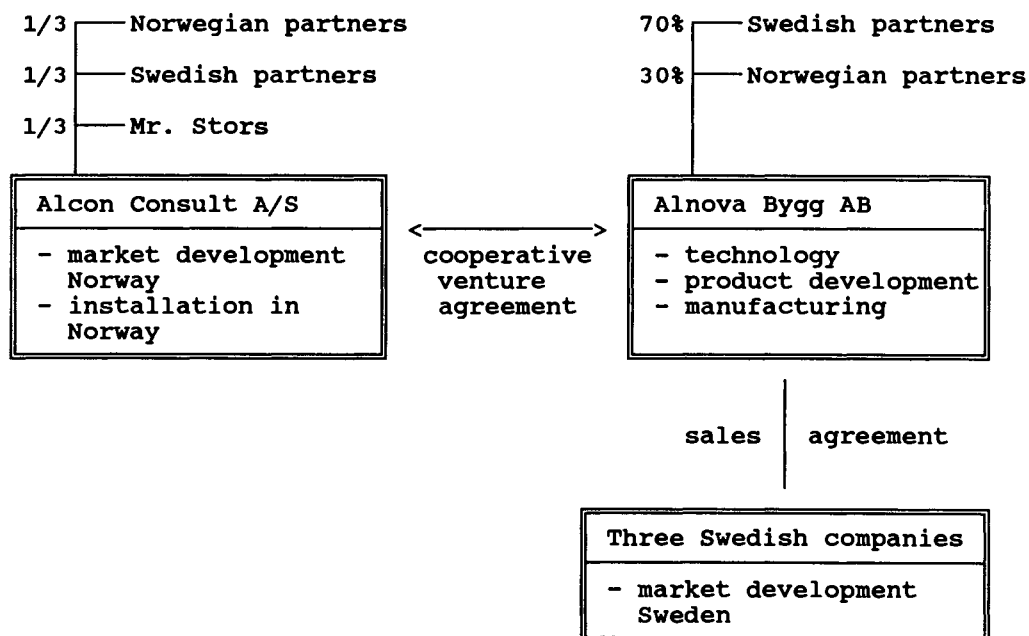
Parallel to the product and market development of the aluminum balcony, Alnova developed new prototypes of balconies in various materials and based on new installation techniques. One of these prototypes turned out to be so interesting that the parties decided to initiate an extensive product development phase in order to arrive at a usable balcony. Due to their good experience with SNI, it was decided that Alnova

and Alcon Montasje should apply for further project financing for the product development phase in November 1987. The application was examined by the "investigators," who presented their report in February 1988. The investigators argued that:

Due to the previous SNI support, the business has survived and today reached a level from where the companies have a significant potentiality to grow and be successful.

They recommended SNI to grant the project financing requested. By the end of February 1988, SNI's Board of Directors accepted the application for further project financing.

During the first months of 1988, it was also decided to merge Altex and Alcon into Alcon Consult A/S, as this company had the engineering, marketing, and installation functions. Thus, this company took over the operations on the Norwegian market. This resulted in the following cooperative venture structure:



## Outcome

Both Mr. Aas and Mr. Ovdahl stated that the cooperation was a great success. Everyone involved felt the "pioneer spirit" and was personally very committed to the project. They described the result in several dimensions. First, Alnova had actually developed a product that fulfilled all the official requirements as regards standardization, safety regulations, etc. This product had also been further developed to meet requirements in other countries.

Secondly, sales, profit and the order stock had reached a satisfactory level in Alnova:

(1000*SEK)	1985	1986	1987	1988
Sales	7318	19493	23312	
Profit	1	40	1583	
ROE	0.1%	-	63%	

(1986 = 18 months, 1988 = forecast)

In Altex, however, there was a loss in 1987. Mr. Aas explained that this was due to a large loss in connection with a single delivery. The estimated financial results in 1988 will, on the other hand, show a profit. The estimated and achieved total costs for the cooperative venture in the two companies as well as the financing obtained from SNI are summarized below. It should be noted that this does not include the second phase of the project:

**Alnova Bygg AB**

<b>Estimated costs (1984), achieved costs, and SNI financing</b>					
<b>(million NKR)</b>		<b>1986</b>	<b>1987</b>	<b>1988</b>	<b>Total</b>
<b>Product development:</b>	budget	2400			
	outcome	2500			
<b>Market development:</b>	budget	1000			
	outcome	1100			
<b>Other costs:</b>	budget				
	outcome				
<b>Total annual costs:</b>	budget	3400			
	outcome	3400			
<b>SNI financing:</b>	budget	1700			1700
	outcome	1700			1700

(1988: prognosis)

**Altex Consult A/S**

Estimated costs (1984), achieved costs, and SNI financing						
(1000 * NKR)		1985	1986	1987	1988	Total
Product development:	budget					
	outcome					
Market development:	budget	650	742			
	outcome	628	726			
Other costs:	budget	580	606			
	outcome	515	592			
Total annual costs:	budget	900	1800			2700
	outcome	1143	1318			2461
SNI financing:	budget	450	550			1000
	outcome	425	479			904

(1988: prognosis)

Thirdly, since the cooperative venture had evolved from its initial entrepreneurial phase into an industrial phase, a new professional Managing Director of Alnova was employed in



August 1988. One of his first major tasks was to develop and formalize an overall strategy of the company. Also, in order to handle Alnova's increased manufacturing, new buildings have recently been acquired. Alnova's real estate has been transferred to a new company, Vest Nova AB, and the operation involves administration of this property. Alnova's former Managing Director, Mr. Ovdahl, became Managing Director of Vest Nova AB.

Apart from the problem with governmental bureaucracy (regarding safety regulations and standardization), the only negative aspect of the cooperation, according to both Mr. Aas and Mr. Ovdahl, was the strategic conflict with Mr. Construction. Mr. Ovdahl and Mr. Aas said that Mr. Construction, in spite of good references, "did not share the entrepreneurial spirit of building up a business" and, therefore, did not fit into the team. Mr. Construction, on the other hand, felt that the conflict had been solved in a satisfactory manner for all parties: "Alnova has been saved, I got a reasonable profit from my shares, and I have learnt a lot regarding balconies!"

During the summer of 1988, Mr. Construction established his own product development and manufacturing of balconies in competition with Alnova. Both Mr. Ovdahl and Mr. Aas felt that it was better that the conflict with Mr. Construction occurred at an early stage in the cooperative venture's development. They both said that if they were to undertake a similar project in the future, they would be much more careful about incorporating new outside partners. Mr. Ovdahl explained:

We were only small companies in 1985 and 1986, and we were forced to learn how to cope with this type of problem. If it happened today, I am not so sure we would make it...

Mr. Bye said that the cooperative venture has turned out to be a success. In spite of rather bad initial premises, the parties had succeeded in building up weak and entrepreneurial companies into industrial corporations. In addition, he

emphasized the forming of the new installation company in Norway - based on new strategic insights - as a strong indicator of the good performance - "not the least since this resulted in a second SNI financed phase of the cooperative venture!"

## APPENDIX 10

### CASE 4: GARDEN EQUIPMENT

#### Introduction

This case illustrates the cooperative venture between the Swedish company, "Swedpartner AB," and the Norwegian company, "Norpartner A/S," in the garden equipment industry<sup>1</sup>. The cooperative venture included product development, licensed manufacturing, marketing of common product line in Norway and Sweden, and future plans for international market development. Both companies had a strong market position in their home countries. Since the products were complementary, the basic idea of the cooperative venture was to pool resources and arrive at a common product line to be sold in Sweden and Norway.

Today, the cooperative venture is terminated. Swedpartner has been sold to Competitor AB - the major Swedish competitor in the industry - and Norpartner has gone into bankruptcy.

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<sup>1</sup> The names of companies and persons are disguised in this case description.

**Actor Summary**

Company	Name	Title
Norpartner A/S	Mr. Nor Mr. Consult	Project Leader Chairman of the Board
Swedpartner AB	Mr. Swed	Managing Director 1983 - 1987
Swedconcern AB		
Competitor AB		Managing Director
SNI	Mr. Atle Bye "Primary-investigator"	Managing Director

**Event Summary**

Year	Month	Event
1985	May	Initial contact at a trade fair in Stockholm.
	June	First meeting between the parties.
	August	Second meeting between the parties.
	September	Meeting with SNI.
	October	Reporting of the feasibility study.
	November	Application to SNI.
		"Primary-investigator's" report.
		SNI's Board of Directors decides to grant project financing.
1986	May	Royalty agreement between SNI and the two partners.
	December	Swedconcern contacted Competitor AB regarding a potential acquisition of Competitor AB.
1987	January	Swedconcern contacted Competitor AB regarding a potential sale of Swedpartner to Competitor AB.
	March	Licensing agreement between Swedpartner and Norpartner.
	April	Unofficial agreement between Swedconcern and Competitor AB regarding the sale of Swedpartner.
		Swedpartner's Managing Director resigned.
	June	Meeting between Norpartner and Swedpartner's new Managing Director.
	July	Announcement of the sale of Swedpartner to Competitor AB.

	August	Competitor AB stated that they were not interested in the cooperative venture.
	September	SNI stopped further payments of the financing granted.
	November	Change in Norpartner's management.
1988	January - March	Negotiations for an agreement with Norpartner's creditors and reconstruction.
	May	Norpartner went into bankruptcy.

## **The Partners**

### **The Swedish Partner: Swedpartner AB**

Swedpartner was established in 1952 in the town of Hässleholm in southern Sweden. Until 1983, the company was a typical family company but from 1979 to 1987, the company was owned by Swedconcern AB. Swedconcern, which has an OTC-listing on the Stockholm Stock Exchange, is a holding company for some 100 autonomous medium-sized companies. Swedpartner's operations involved production and sales of a range of park products. The company had approximately 35% of the total market in Sweden in all product segments. In 1987, Swedpartner had 111 employees, and a turnover of SEK 40 million.

### **The Norwegian partner: Norpartner**

Norpartner was founded in 1942 by the Nor family in the city of Trondheim on the Norwegian west coast. Until mid 1988, the company was owned by the Nor family. Norpartner's operations were organized in two separate divisions: (1) product development and manufacturing, and (2) market development. Norpartner's business was divided into the following segments:

- garden equipment (40% of turnover),
- offshore related mechanical equipment and service (35% of turnover), and
- specialized steel equipment (15% of turnover).

A family member was Managing Director of the company and his brother, Mr. Nor, was head of the largest business segment - garden equipment. In 1987 the company had 38 employees and a total turnover of NKR 27 million.

### **Background**

The garden equipment industry in Scandinavia can be characterized as an oligopoly. In 1984, the two major producers on the Swedish market - Swedpartner and Competitor - had a market share of some 40% each. Both companies were represented in Europe, but Competitor's export share was 50% of a turnover of SEK 70 million, while Swedpartner only had some 10% of its sales of SEK 40 million on the international market.

The situation was slightly different in Norway. For more than thirty years, Norpartner A/S had been more or less the sole manufacturer of garden equipment. It was not until 1968 that a competitor entered the Norwegian market - the Swedish company Competitor, through its agent. Competitor turned out to be successful, since its large system-oriented products were particularly well suited to Norwegian market conditions in the early 1980's and, after a few years, Competitor had achieved a market share of 25%. After 1983, Mr. Nor worked hard to develop the garden equipment business segment of Norpartner. He established good contact with a German designer, and they developed a new set of wooden garden products that became very attractive on the market. In addition, in order to enhance management competence in the company, the Nor family decided to bring in additional professionals. Two new members of the Board were recruited,

one with extensive banking experience and a management consultant specialized in financial control. The latter - Mr. Consult - became Chairman of the Board of Directors. In addition, it was decided that instead of recruiting a new financial manager, Mr. Consult would complement the acting financial manager.

During a discussion between Mr. Nor and Mr. Consult, the latter came up with the idea of approaching SNI. Mr. Consult was acquainted with SNI and he argued that this was a good way to finance a potential cooperative venture. Mr. Nor explained that he thought this was a good idea since he, at that time, was determined to find a partner in Sweden to cooperate with in one way or another. Due to his long experience in the industry, he was quite familiar with all the major companies in the industry. He explained his reason for not contacting Competitor:

Norpartner and Competitor would have represented more than 65% of the Norwegian market, and, since I believe in competition it was unnatural to approach this company. Therefore, we were looking for a more suitable Swedish partner.

In May 1985, Mr. Nor read an article about one of the major actors on the Swedish market - Swedpartner AB. In the article, its Managing Director, Mr. Swed, expressed his company's ambition to expand both in Sweden and on the international market. Mr. Nor explained how he felt about Swedpartner:

I felt that Swedpartner could be a suitable partner to us for three reasons: (1) It was a wellknown fact that Mr. Swed had great ambitions for Swedpartner, (2) the company was owned by Swedconcern AB, which was known to emphasize innovations, product development, and exports, and (3) neither of us had been particularly successful on the other company's home market. In addition, I was personally willing to work with the project in our company. A cooperative venture between Norpartner and Swedpartner also seemed to be fully in line with SNI's objectives.

Mr. Nor decided to send the German designer to a trade fair in Stockholm, where he knew that Swedpartner was represented. The purpose was to establish initial contacts with Swedpartner and find out whether they would be interested in a cooperative venture. It turned out that Mr. Swed was very interested in Norpartner's new range of garden equipment and, therefore approached the designer at the trade fair. He stressed that every time he visited Swedpartner's agent in Norway, he learned about Norpartner's products through their active market development - "this gave me a very positive impression of Norpartner." He further explained why he was interested in the company:

I also knew that Norpartner was not represented in Sweden at all. Hence, I saw an opening towards a cooperative venture where we could sell each other's products. Surprisingly, the designer said that Norpartner had been discussing the same thing!

A few weeks after this initial contact, in June 1985, Mr. Nor invited Mr. Swed to Trondheim. Both of them said that this was a meeting where "they were to get to know the other party better." According to Mr. Nor, this meeting became the "embryo" of the cooperative venture. Mr. Swed said that he quickly developed very good personal contacts with Mr. Nor - but not with the Chairman of the Board, Mr. Consult. It was decided that both parties should analyze the other company's product range and make the cooperative venture idea more tangible at their next meeting.

After the meeting, Mr. Consult wrote a letter to Mr. Bye at SNI, explaining the oligopolistic nature of the industry and the idea of cooperating with Swedpartner. At Swedpartner, Mr. Swed briefed the Board of Directors about his initial discussions with Norpartner.

After a few telephone contacts, the two parties met for the second time in August 1985, this time in Oslo. At this meeting, Mr. Swed was informed by Mr. Consult that Norpartner considered SNI to be an interesting source of project



financing. Mr. Swed felt that, even though he could probably obtain project financing from his parent company, and even though he had not heard about SNI, this idea seemed to be an interesting approach to financing a Swedish-Norwegian cooperative venture. Hence, they agreed to form a cooperative venture in line with SNI's intentions.

## **The Cooperative Venture**

### The Cooperative Venture Model

The Norpartner team argued for a cooperative venture model that covered: (1) market development of each other's product ranges in their respective home markets, (2) pooling of each party's product development resources, and (3) cooperation regarding international market development. It was intended that the two latter tasks were to be carried out in a formal 50/50 joint venture company. Mr. Nor and Mr. Consult argued that since the demand in Norway had switched into larger systems, the cooperative venture with Swedpartner would result in twice as large a product range - without an increased capital base. According to Mr. Swed, this reasoning was also directly applicable to the Swedish conditions and, thus, did not give rise to any discussions. However, he was not interested in forming a joint venture for the purpose of mutual product development. Instead, he argued that it was better if product development was carried out within each parent company:

Since I did not know how financially strong Norpartner was, it seemed to be safer if each party could take care of its own share of the product development within each company. Otherwise, there might be problems with allocation of resources, sharing of costs, and division of labor. In addition, it would be easier to know which party had the formal right to the specific products in case of a "divorce."

After discussions, Mr. Nor and Mr. Swed agreed that the best solution would be to pursue a cooperative venture in three steps:

1. market development of each other's products in Norway and Sweden,
2. coordination of product development, and
3. forming a joint venture company for international market development of the common product line.

The third step should not, however, be pursued until the first two steps were successful. Mr. Nor realized that a Swedish company was not likely to form a joint market development company with a Norwegian company without having known the partner for one or two years.

Both parties agreed that international market development would be a second phase in the cooperation and should, therefore, not be considered further in the initial discussions. Mr. Swed said that, even though he indeed was interested in increasing the international aspects of Swedpartner's operations, Swedpartner did have some agents in Europe, and it was obvious that Norpartner was most interested in the international market development.

### Analyses

When it came to assessing the cooperative venture partner, Mr. Nor said that he made some inquiries about the Swedconcern. Most of this information came from SNI and from Swedpartner. He explained the following:

We found out that Swedpartner was worth some SEK 10-12 million, and that it was a solid company, and we knew that Swedconcern was known to have profitable companies. However, I also knew that Swedpartner had difficulties in developing new and competitive products.

In addition, Mr. Nor had learned from Mr. Swed that Swedconcern viewed Swedpartner as a long-term investment. Mr. Swed said that he did not perform any particular analyses of Norpartner. He made some inquiries about the company through his former agent in Norway. He also checked the annual report but felt that it was very difficult to penetrate the financial situation in Norpartner's separate divisions. Mr. Swed's comment was that "the cooperative venture was, to a very large extent, based on the excellent 'personal chemistry' between Mr. Nor and myself."

### Feasibility Study

At this stage, they presented the cooperative venture idea to SNI's Managing Director Mr. Atle Bye. He explained his initial feelings:

The project was certainly unstructured. They were very enthusiastic, but appeared to have limited knowledge about cooperative ventures. I suggested that a feasibility study, sponsored 50% by SNI, should be carried out. In order to save time, I approved that Mr. Consult would carry out this study.

The feasibility study, covering some 100 pages, was presented in September 1985. In addition to an extensive description of the companies, including organizational and ownership structure, the cooperative venture concept and model, each product development project and the potential world wide market, the following budget was presented:

(1000 KR)	1985/86	1987	1988	Total
<b>Norpartner:</b>				
Market development	1815	1425	1650	4890
Product development	900	430	100	1430
Other costs	380	550	750	1680
<b>Total</b>	<b>3095</b>	<b>2405</b>	<b>2500</b>	<b>8000</b>
<b>Swedpartner:</b>				
Market development	1115	1025	1350	3490
Product development	900	430	100	1430
Other costs	380	550	750	1680
<b>Total</b>	<b>2395</b>	<b>2005</b>	<b>2200</b>	<b>6600</b>

Mr. Consult also presented the following forecast for product development costs and returns, and costs of international market development in the proposed joint venture:

**International Market Development - Costs and Revenues**

(*1000 NKR)	1985	1986	1987	1988
Royalty from sales (15%)		900	1200	1950
Total development costs (7 countries)	230	1100	1545	1375
Return	-230	-200	-345	575

**Product Development Costs**

(*1000 NKR)	1985/86	1987	1988	Total
Product 1	480	360	100	940
Product 2	420	200	100	720
Product 3	175	100		275
Product 4	500	130		630
Product 5	225	75		300
<b>Total</b>	<b>1800</b>	<b>865</b>	<b>200</b>	<b>2865</b>

Mr. Swed thought that the feasibility study was a requirement for SNI financing. Mr. Consult had explained the

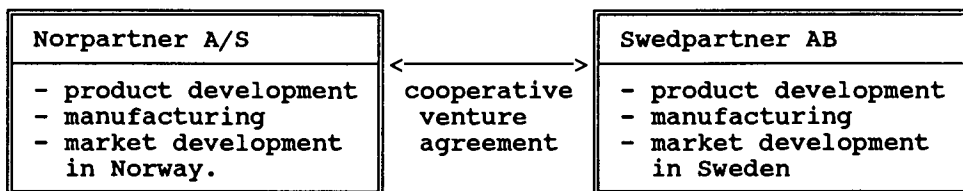
SNI procedure to be "initial contact - feasibility study - approval of the loan." Mr. Swed was, however, somewhat sceptical about the feasibility report:

The feasibility study was based on old information that was brushed-up and re-organized. My opinion was that it did not say very much. This made me even more suspicious of Mr. Consult's role in Norpartner, and it strengthened my opinion that we should pursue the cooperative venture in each company and not in a joint venture.

Mr. Nor knew that the report was somewhat too optimistic:

The feasibility study was so lengthy that it was difficult to comprehend. However, I think Mr. Consult's purpose was to make it very impenetrable, and to enhance the estimated level of sales, etc. The objective was that nobody at SNI would even bother to read it, thereby facilitating a quick decision to sponsor our cooperative venture.

In a second meeting between the parties and Mr. Bye, the following cooperative venture structure was settled upon:



In a second phase, the parties would focus on international market development, but not until the first phase (above) had shown positive results. Mr. Bye explained:

After 1 1/2 hours of discussions with the parties, we settled for a suitable Swedish-Norwegian cooperative venture model. I felt that they were very pleased with the help I gave them to structure their ideas. Even though I knew that both companies were quite weak from a financial perspective, I thought that Norpartner had done something positive about this by hiring Mr. Consult - with his broad international experience - as Chief Financial Officer and Chairman of the Board. Swedpartner, on the other hand, was part of the financially sound and well-known Swedconcern company.

### **The Cooperative Venture and the Parent Companies**

To Swedpartner, the cooperative venture was a natural expansion of their major activities. In 1984, Mr. Swed had initiated extensive rationalizations of the operations, including the renovation of the production plant. As a result, the operating results were quite modest in 1985 and, according to Mr. Swed, the company greatly needed to re-vitalize its product range. Swedpartner would now be able to market Norpartner's attractive range as a complement to its own in Sweden, which would result in both increased revenues and goodwill. Furthermore, the existing agent in Norway had not been particularly successful and as a result of the cooperative venture, sales might improve in Norway through Norpartner. Mr. Swed stressed the fact that their largest competitor, Competitor, had a substantial market share in Norway. Hence, the cooperative venture was expected to contribute significantly to Swedpartner's turnover, revenue, and future exports.

In 1985 the situation in Norpartner was such that the company had two options for the garden equipment segment - either focus on further product development and hopefully increase sales on the Norwegian market, or initiate extensive international market development in order to increase exports. According to Mr. Nor, it was quite obvious that the company could not afford both strategies at that time. He gave four major reasons for entering a cooperative venture with Swedpartner:

1. by selling each other's products, the two companies would be one sole distributor with a broad and competitive product line,
2. the average sales per customer would probably increase,
3. expansion of the product range would occur with limited additional capital requirements, and
4. the risk would be shared between the two companies.

## **The Cooperative Venture and the Project Leaders**

When asked how he felt about the cooperative venture, Mr. Swed responded that, as a representative of Swedpartner, he considered it important to get into the Norwegian market and to incorporate Norpartner's products into the company's range in Sweden. He also expressed his considerable personal interest in the project:

Even if there was no prestige involved, I desired both the new market and the products that the cooperative venture would result in - it had a high priority on my agenda.

As regards his partner in the discussions, Mr. Nor, he explained that in spite of different personalities the two of them enjoyed working with each other and that this did not change over time: "I really liked Mr. Nor, I thought he was a great optimist."

Mr. Swed never achieved personal contacts with Mr. Bye at SNI, as Mr. Nor had done: "to some extent I felt that I was slightly offside in the contacts with SNI, but I thought that we would develop this over time. However, this never happened."

Mr. Nor felt that he had a hard time working with the garden business segment in his own company in the early 1980's. The general feeling on the Board of Directors was that - in spite of a 40% market share - profitability was unsatisfactory and, therefore, activities should be terminated. Mr. Nor explained the situation as follows:

A Board of Directors must understand the industry - ours did not ... It was difficult to discuss strategy with them, since they were more interested in various financial statements and accounting-based measures.

However, the situation changed when the cooperative venture discussions were initiated. Mr. Nor explained that the

cooperative venture idea was quite important to him, and that the Board of Directors understood its potential benefits. As a result, Mr. Nor increased his efforts in the company. He explained:

It was, of course, marvelous to initiate and implement a cooperative venture like this - I was given both the money and other resources to use in a business segment that I really believed in.

Mr. Nor also stressed his good personal relationship with his counterpart in Swedpartner, Mr. Swed. He felt that Mr. Swed was "honest, had an open personality, was ambitious, and did a good job in Swedpartner," and that this did not change over time. According to Mr. Nor, Mr. Swed treated the cooperative venture as "his baby." On the other hand, Mr. Nor felt that Mr. Swed soon developed a poor personal relationship with Norpartner's Chairman of the Board, Mr. Consult. Mr. Nor felt that this was caused by the somewhat optimistic feasibility study that Mr. Consult carried out. Mr. Nor also emphasized one fundamental difference between the two companies' management style:

I immediately felt that the leadership style in Swedpartner was more "top-down", compared to ours, but I thought that was perhaps the typical "Swedish" practice, and then I thought that our style was perhaps typical "Norwegian" practice.

Mr. Nor tried to establish some "operational" contacts between the two companies. During a meeting at Swedpartner in September 1985, Mr. Nor and the management team in Norpartner met all the key personnel in the company (financial, production, and market development management). In spite of a good meeting, personal contacts never developed, and the cooperative venture continued to be, to a large extent, pursued by Mr. Nor and Mr. Swed.



## Application to SNI and Evaluation

The formal application for project financing was sent to SNI in October 1985, and included summaries of the cooperative venture model, project plan, capital requirements and financing plan, and previous years' financial statements from the two companies. (The project plan was based on the feasibility study.) As demonstrated in the feasibility study, the capital requirement for the cooperative venture was NKR 8.0 million in Norpartner's case, and SEK 6.6 million for Swedpartner.

Mr. Bye assigned a Swedish "primary-investigator" and a Norwegian "secondary-investigator" to evaluate the SNI application and recommend whether or not SNI should provide project financing. The "primary-investigator's" six page report was presented in November 1985 and included a brief description of the companies, the cooperative venture idea, and the market. It was argued that there was large market potential in both countries and in the international market. Since the companies had a strong position in their home countries, but had a small export share (less than 10%), there was a large potential for increased exports. As a matter of fact, the total market potential in Western Europe was estimated to be SEK 150 - 200 million within five years time. In addition, the financial aspects of the cooperative venture were discussed. It was argued that since the sales forecast was quite modest, the estimated results from international market development in the seven countries (18% ROC from 1989) might well be exceeded. The investigators also felt that the estimates of the product development costs were acceptable and the pay-back time for these costs was not more than four to five years if sales increased by SEK four to five million per year. They stressed that SNI-financing was particularly important for Norpartner due to the company's weak financial position in the first phase of the cooperative venture. They described the importance of SNI in this cooperation as follows:

If SNI do not grant project financing, there is a risk that the project will be limited to Sweden and Norway only, and that product development will be significantly reduced and delayed.

In the conclusions, the investigators recommended SNI to finance the cooperative venture with a combination of loans and a royalty-based financing:

because the project is based on a well defined and planned cooperation between two competent companies, the potential return is satisfactory, and the risks are limited. SNI's financing is needed in order to gain Norpartner's whole-hearted contribution.

The "primary-investigator" stressed that he had not undertaken an assessment of the industrial partners per se - only the business concept. However, he remembers that he mentally noted that Mr. Consult seemed to have an unconventional role in the cooperative venture. As a matter of fact, he initially thought that Mr. Consult was hired by SNI, which was not the case. According to the "primary-investigator," the feasibility report was undoubtedly adapted to SNI's requirements, which "was always the case for this type of project financing." However, he felt that the project idea was very good:

We all thought that this was an ideal cooperative venture: market development of each other's products, product development and, in the future, international market development.

The feasibility report was so inclusive and comprehensive that he "only inspected it and accepted the figures."

Mr. Bye noted that the "primary-investigator" made a positive assessment of the cooperative venture, and that this was the basis for his positive recommendation to the Board of Directors. In addition, he knew that the partners had already, to some extent, started to cooperate and market each other products. At the end of November 1985, SNI's Board of

Directors granted the two companies the amount required, and Mr. Bye was given the authority to negotiate whether it should be a loan or a royalty-based financing. The discussions regarding the form of the project financing did not start until April 1986, however. In April and May 1986, Mr. Swed wrote two letters to Mr. Bye arguing for a royalty based agreement. After some discussions, Mr. Nor and Mr. Swed had each signed a royalty based agreement with SNI by the end of May 1986.

Mr. Bye noted that Mr. Swed in particular was very anxious for the royalty based financing. He thought that this was due to pressure from Swedpartner's parent company, Swedconcern, regarding Swedpartner's weak financial position.

### **The Agreement**

The cooperative venture agreement between the parties was signed in mid February 1986. Mr. Swed explained that only he and Mr. Nor formulated the agreement. In addition to letters and telephone contact, they met twice to discuss the agreement. Mr. Swed explained what he felt about these preparations as follows:

It felt great since, in general, everything fitted together. We were both very anxious to protect our companies, but at the same time we wanted to give up some of our secret "black-boxes", and the agreement was formalized accordingly. The intention was that we should be known as one unit on the market.

Mr. Nor also stressed the cooperative objective of the agreement:

Mr. Swed presented what I thought was a standard agreement - a type of developed letter-of-intent. It covered a number of major issues regarding the cooperative activities.

He further explained that, since the purpose was to extend the cooperative venture in the future, they agreed that it would cause problems if the initial agreement was too formalized and inflexible. He felt that the most important issue was to clarify the sharing of costs.

The two page cooperative venture agreement covered the following issues:

- range of the agreement,
- duration of the agreement,
- prices,
- terms of payment,
- terms of deliveries,
- geographical areas,
- copying of products,
- customer questions,
- sales promoting materials,
- information,
- product development,
- export cooperation,
- management committee,
- termination, and
- conflicts.

#### Range of the Agreement

The cooperative venture covered both companies' complete product range in 1986.

#### Duration of the agreement

The cooperative venture was to be valid from January 1, 1986 to December 31, 1988. If the agreement was not cancelled by any of the parties, not later than three months before December 31, 1988, it would continue for one year at that time.

### Prices

The parties were to use each company's export price list after January 1986. New prices had to be given to the other party at least two months in advance.

### Terms of Payment

Thirty days after invoice.

### Terms of Delivery

FOB the producer's plant.

### Geographical Areas

In Norway: Norpartner A/S and in Sweden: Swedpartner AB.

### Copying of Products

The parties were not allowed to copy each other's products.

### Customer Questions

Each party was to pass on any questions regarding the other party's products to the other party.

### Sales Promotion Material

Each party was to make their existing sales promotion materials available to the other party without charge. Additional materials for market development of the other party's products were to be paid by the selling partner.

### Information

The parties were to inform each other about decisions regarding changes in products or product information in advance.

### Product Development

The parties agreed to establish cooperation regarding product development, where the purpose would be to coordinate their respective technical competence and experience, and also

to incorporate other relevant external competence. The party that initiated a specific development project was to be responsible for this particular project. There was to be a separate agreement for each development project that included: name of the responsible project leader, budget, specifications of costs, and legal rights to the product.

#### Export Cooperation

At the time of the agreement, the two parties had different sales representatives in other countries. The purpose was to establish a joint representation on potential export markets.

#### Management Committee

The parties established a joint management committee for product development and export issues consisting of each company's top management. The committee was to meet at least twice per year, and a copy of the protocol would be sent to SNI.

#### Termination

If either party violated the agreement, the other party would have the right to immediately cancel the agreement.

#### Conflicts

All conflicts were first subject to voluntary arbitration.

#### **Operations and Evolution**

During the spring and the summer of 1986, product development market development activities were initiated. Mr. Swed explained that market development and sales work had the highest priority. This included printing of Swedpartner-Norpartner common product line catalogues in Swedish, and preparations for various exhibitions. It was not long before

Swedpartner sold some of Norpartner's products. However, the typical customer reaction was: "Fantastic products and great design - but too expensive!" As a result, in July 1986 the parties agreed that Swedpartner should start manufacturing some of Norpartner's products under license for the Swedish market. According to Mr. Swed, this fitted very well with his plans, since Swedpartner at that time had a significant surplus capacity in its production facilities.

At the same time, the sales of Swedpartner's product line took off in Norway through Norpartner. Norpartner's sales increased from NKR 10.5 to 16.5 million from 1986 to 1987. A new local sales office was also established in Oslo, with responsibility for the East-Norwegian market.

In early 1986, Swedpartner's parent company, Swedconcern, started to put some pressure on Mr. Swed regarding Swedpartner's profitability. According to Mr. Swed, the administrators in Swedconcern were worried about the low profitability of Swedpartner. Furthermore, Mr. Swed's direct contact, and supervisor, in Swedconcern was replaced. Mr. Swed said that the 'personal chemistry' between the new supervisor did not work at all. He explained how he felt:

The pressure to increase profitability was huge, and it was difficult to get an understanding of what we were doing. I argued for, and pursued, the existing strategy, but that was tough.

At the same time, Mr. Swed planned to acquire Swedpartner's major competitor, Competitor. He was acquainted with the owners of Competitor, and he also knew that they were considering selling the company due to succession problems in the owner family. Mr. Swed presented his plans to his parent company and argued that this was a "golden opportunity to structure the industry in Sweden." When Swedconcern initiated negotiations with Competitor in the autumn of 1986, without the presence of Mr. Swed, they discovered that the owner family suddenly had changed their minds and were not interested in selling the company.

By the end of 1986, the parties had produced three brochures presenting both companies's products and had been represented at several trade fairs in Sweden. In addition, Swedpartner was manufacturing some of Norpartner's products for the Swedish market.

In December 1986, Mr. Swed perceived that Competitor was interested in acquiring Swedpartner, and, after reporting this at a Board meeting, the Board of Directors decided to initiate discussions with Competitor. However, Mr. Swed was not asked to participate in these discussions at all - his supervisor from Swedconcern headed the negotiations. Mr. Swed felt that the situation was very difficult, and as a consequence he applied for a new job:

It was difficult to act as Managing Director when I knew that the company was about to be sold to a competitor, and that we were simultaneously heavily involved with an important cooperative venture with Norpartner. Of course, I could not mention anything about this to the Norwegian team.

In March 1987, Mr. Nor and Mr. Swed signed a formal licensing agreement that set the rules for Swedpartner's extended manufacture of Norpartner's products. As a matter of fact, Norpartner became, more or less, dependent on Swedpartner's manufacturing capability to manufacture products for marketing in Norway. The six-page licencing agreement was seen by the participants as much more detailed in comparison with the earlier cooperative venture agreement. The licencing agreement had the same duration as the cooperative venture agreement of February 1986. Mr. Nor felt that this agreement was very advantageous to both parties:

The licensing agreement was a good deal for us, since we did not have to make large investments in new production facilities, but it was an even better deal for Swedpartner. The part of the total licensed production in Swedpartner that we were to bring back to Norway was equivalent to almost SEK ten million. This must be compared to Competitor AB's turnover of NKR five million in Norway - after 20 years of hard work!



It should be noted that the agreement included several clauses covering penalties, delays and termination of the agreement.

In April 1987, Swedconcern reached an unofficial agreement with Competitor that the latter company would acquire Swedpartner. As a result, Mr. Swed was given new directives to suspend a number of employees in Swedpartner. However, he refused to do this since he had planned to use this labor for the licensed production of Norpartner's products that the companies had agreed upon one month earlier. Consequently, he resigned his position at Swedpartner.

For Mr. Nor, this was the first indication that something was "wrong" in Swedpartner. However, since he did not know about the negotiations and subsequent agreement with Competitor, he did not act. Instead, he instantly required a new formal project leader in Swedpartner.

Mr. Bye responded to Mr. Swed's resignation from Swedpartner by calling for a meeting with Mr. Nor and the "primary-investigator" in May 1988. It was concluded that all parties were to aim for a continuation of the cooperative venture.

By the end of June 1987, a representative of Norpartner visited Swedpartner's new temporary Managing Director, who was hired by Swedconcern. They agreed to continue the intensive cooperation between the two companies and agreed to meet again in August 1987. Three days later, on July 1st 1987, it was announced that Swedpartner had been sold to Competitor.

### **The New Situation**

Mr. Nor learned about the acquisition during his vacation in France from one of Norpartner's sales representatives in Norway, who had received the information from Competitor's agent in Norway. Mr. Bye was immediately informed by Mr. Nor. Neither of them had received any information regarding the

acquisition from Competitor or Swedpartner/Swedconcern. When Mr. Bye contacted Swedconcern's top management, the deal was confirmed. Both Mr. Nor and Mr. Bye said that they were very disappointed that Swedconcern could pursue such a sale without notifying the other party - especially since this was a violation of the royalty agreement with SNI.

When Mr. Nor and the owners of Competitor contacted each other it was decided that they should meet in August to discuss the cooperative venture between Norpartner and Swedpartner. During this meeting, it became clear that Competitor was not interested in the cooperative venture. Competitor's Managing Director explained how he viewed the new situation:

First, our opinion was that the previous product development in Swedpartner was useless to us - there were a lot of ideas that were not businesslike. Secondly, the cooperative venture with Norpartner put us in a competitive situation with our agent in Norway. Consequently, this was of no interest to us. Nonetheless, we would have fulfilled the delivery agreements with Norpartner, i.e., until the end of 1988.

Due to the subsequent merger of the operations in Sweden in the autumn of 1987, Swedpartner had some production difficulties which resulted in delayed deliveries to Norpartner. This, in turn, resulted in complications for Norpartner in their market development and distribution, which resulted in declining sales income, which affected the company's cash-flow and profitability. In turn, this led to difficulties in fulfilling the financial obligations towards Swedpartner.

When it was evident that Competitor was not going to pursue the cooperative venture in accordance with the original intentions, Mr. Bye and the "primary-investigator" discussed SNI's role. They came to the conclusion that the agreement with SNI must be regarded as having been violated by the Swedish partner. Since the situation in Norpartner was uncertain, SNI stopped further payments on the approved

financing in August 1987. It should be noted that Mr. Bye and the "primary-investigator" briefly discussed a temporary stop of further payments to the parties from July 1987, i.e., when they learned about the acquisition, but this was very difficult since the agreement had not been officially broken.

When SNI withdrew their project financing to Norpartner, the company's bank became very worried about the company's financial situation. In addition, Competitor was demanding bank guarantees for their deliveries of products made under license from Swedpartner to Norpartner, which further strained Norpartner's financial situation. In spite of a change in management at Norpartner and a significant order reserve, by the end of 1987, the financial situation became worse. In January to March 1988, Norpartner's management tried to negotiate for an agreement with the creditors, but one of the creditors did not accept the suggested solution. Secondly, the management tried to increase the company's capital base through equity input from the companies owners and the employees, which did not work out. Thirdly, a subsidized loan from the national Norwegian Industrial Development Fund was applied for, which was not granted. In May 1988, Norpartner went bankrupt.

Today, Norpartner's activities has been taken over by the above mentioned creditor and two production managers in Norpartner.

## Outcome

Mr. Nor in Norpartner compared the situation with the theoretical " $1+1>2$ " synergy effect of cooperative venturing. He felt that, since the cooperative venture was terminated in this abrupt way, the situation could be characterized as " $1+1=0$ " situation. Competitor, on the other hand, had acquired their largest competitor in Sweden, and also managed to wreck their largest competitor in Norway. Hence, this could be characterized as a " $1-1=3$ " effect.

Mr. Swed felt that Competitor's acquisition of Swedpartner was the second best solution for Swedpartner. Since Competitor was not interested in either the licensed production or in the cooperative venture as such, the result was disastrous for Norpartner. In addition, a monopoly situation developed in the garden equipment industry in Scandinavia. He stressed that his resignation was related to the change of management at Swedconcern: "it was a matter of honor - Norpartner trusted me and when I was overruled by my parent company, I did not want to be responsible for other people's decisions."

Mr. Swed's opinion was that nothing in the cooperative venture agreement could have stopped the acquisition. Mr. Nor said that when the lawyers came in after the acquisition, they labelled the cooperative venture agreement a letter-of-intent type of contract.

The estimated and achieved total costs for the two companies as well as the financing obtained from SNI are summarized below:

#### NORPARTNER AB

Estimated costs (Sept, 1985), achieved costs, and SNI financing					
(1000 NKR)		1985/86	1987	1988	Total
Product development:	budget	900	430	100	1430
	outcome	1200	300		1500
Market development:	budget	1851	1425	1650	4890
	outcome	1100	600		1500
Other costs:	budget	380	550	750	1680
	outcome	100	100		200
Total annual costs:	budget	3095	2405	2500	8000
	outcome	2400	1000		3400
SNI financing:	budget	1550	1200	1250	4000
	outcome	1200	500		1700

**SWEDPARTNER AB**

<b>Estimated costs (May 1986), achieved costs, and SNI financing</b>					
<b>(million SEK)</b>		<b>1985/86</b>	<b>1987</b>	<b>1988</b>	<b>Total</b>
<b>Product development:</b>	budget	900	430	100	1430
	outcome	600			600
<b>Market development:</b>	budget	1115	1025	1350	3490
	outcome	400			400
<b>Other costs:</b>	budget	380	550	750	1680
	outcome	200			200
<b>Total annual costs:</b>	budget	2395	2005	2200	6600
	outcome	1200			1200
<b>SNI financing:</b>	budget	1200	1000	1100	3300
	outcome	600			600

Competitor's Managing Director was very satisfied with the acquisition, "since Swedconcern clearly wanted to get rid of Swedpartner, we had an advantage in the negotiations. Consequently, our bid was not too high..." He also stressed that the market's response to the acquisition was very good.

Mr. Bye felt that it was too bad that an interesting cooperative venture failed through this unexpected acquisition. Everything seemed to work, the "personal chemistry", the sales, and the cooperative venture model as such. He realized, however, that the cooperative venture agreement was too general, but "SNI surely cannot draw up the agreements for them!" Mr. Bye argued that it is necessary to be very careful with the cooperative venture agreements, and include check points and penalty clauses. He also felt that this cooperative venture demonstrated how important individual persons might be for a cooperative venture, and how difficult it can be to protect oneself, for instance, against a shift in management and ownership.











