THE DISSOLUTION PROCESS OF A BUSINESS RELATIONSHIP

A case study from tailored software business

JAANA TÄHTINEN

Department of Marketing,
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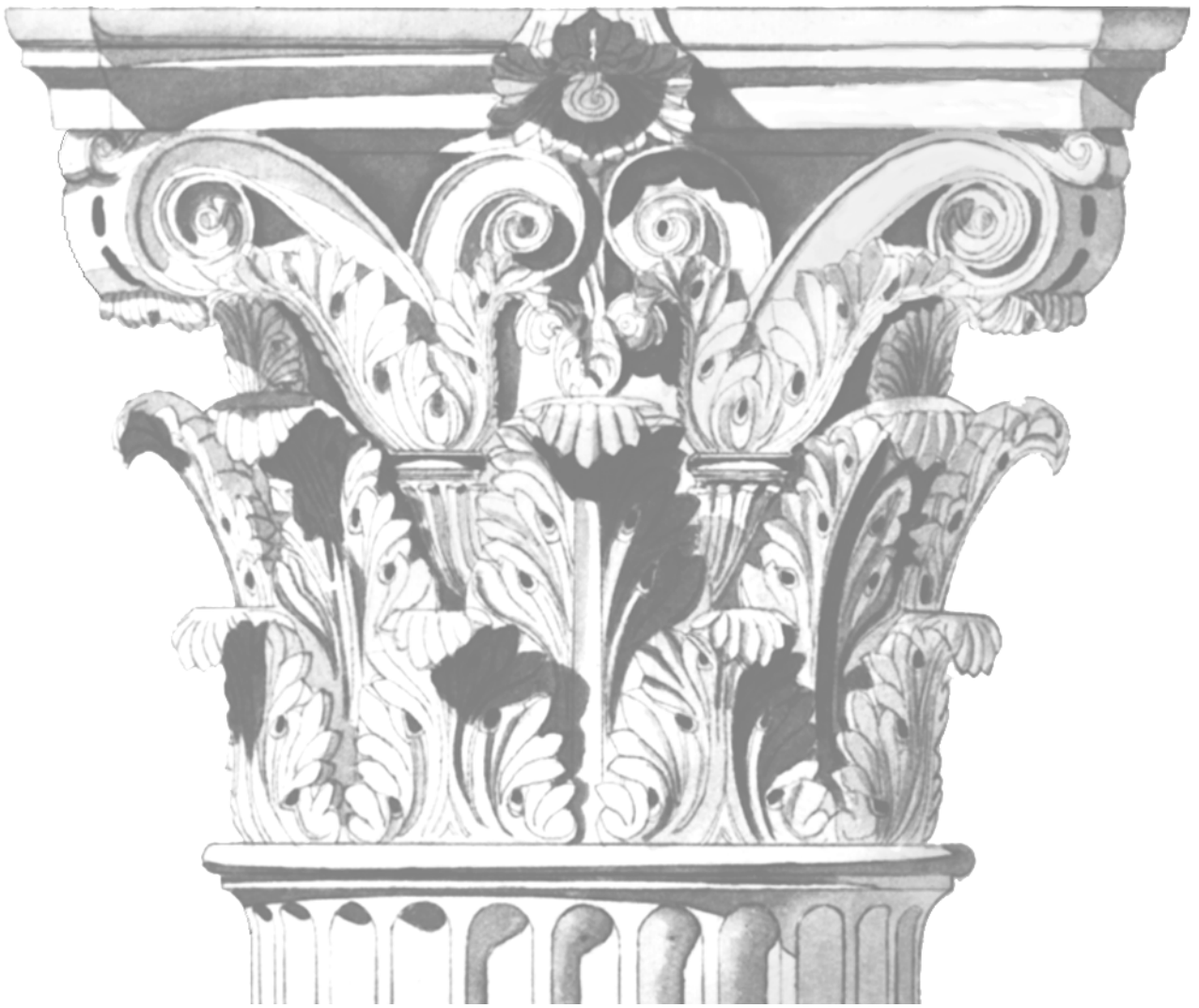

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A case study from tailored software business

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Abstract

This research aims at developing theory about the dissolution process of business-to-business relationships in tailored software context. Although dissolving business relationships can be viewed as one of the essential themes of marketing, the existing research on dissolution does not provide us with a holistic picture of the dissolution as a process.

This research builds an empirically-grounded model of the business relationship dissolution process. First, a theoretical, tentative model of the process of business relationship dissolution is built. Second, empirical knowledge is acquired from a case study of business relationship dissolution in a software context. The case study data has been collected from various sources, from both seller and buyer organisations as well as network actors, through interviews and also from other written and oral sources in order to ensure triangulation. Third, the findings of the case study are compared to the tentative process model and the model is adjusted accordingly, thus developing the empirically-grounded process model.

The process model includes three elements: the nature of the relationship, the factors influencing its dissolution, and the dissolution process. It incorporates both the time dimension and the multiplicity of the actors (individuals, companies, other relationships) involved into the model. The nature of the relationship is classified (terminal, continuous, episodic) as are the influencing factors and events (predisposing, precipitating and attenuating). The dissolution process is modelled by using stages, which describe the different action and time periods of the process, and by using levels, which describe the different actors who bring the process about. Six stages are distinguished: the communication stage, consideration stage, disengagement stage, enabling stage, restoration stage, and sensemaking / aftermath stage. The concept of stage is used to divide the complex process into more comprehensible periods and to emphasise that in each stage, managers' actions differ. The dissolution process does not always proceed through all the stages, nor have the stages any particular order.

Keywords: dissolution process, ending, business relationship, interaction and network approach, software industry

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The book you are now holding in your hand is a travel report from one of my journeys. This has been a journey into the world of science but also to a few other destinations. During it I went uphill and downhill, took a few wrong turns, and tried to find the right way. Luckily, I was not alone on the road; there were many fellow travellers that showed me new roads from their maps. Some walked by me while others I met only at some crossroads. I sincerely value all of you and the great help that you gave me. I am sorry that I cannot name you all here. I only hope that some day I learn to be as generous as you have been. Thanks for everything!

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säätiö, Marcus Wallenbergin Liiketaloudellinen Tutkimussäätiö, Oulun yliopiston tukisäätiö, Yliopiston apteekin rahasto, and the Finnish Center for Service and Relationship Management Graduate School. The support was not only financial, but it also warmed my heart.

For the reader, I take responsibility for all the errors you may find in this report, and wish to share all the credit with the persons and groups mentioned above. If you find the content of this study interesting, please do not hesitate to contact me. Building a network of dissolution researches is one task that I think is worth pursuing.

Tämä kirja on syntynyt monen vuoden aikana ja monet em. henkilöt ovat vaikuttaneet sen syntyyn. Elämäni ei ole kuitenkaan pyörinyt näinäkään vuosina pelkästään väitöskirjan parissa, vaikka muutamat kuukaudet kulkivatkin sumussa käsikirjoitusta kirjoittaessani. Te olette antaneet minulle mukavia hetkiä ja iloja, joita jokainen elämässään tarvitsee. Olette myös jaksaneet kuunnella niitä vuodatuksia, joita tähän työhöni liittyen olen teille pulputtanut. Nyt saan tilaisuuden virallisesti kiittää teitä kaikkia; perhettäni, sukulaisiani ja ystäviäni hyvistä yhteisistä muistoista. Toivon, että niitä on vielä paljon edessä.

Omistan tämän kirjan isälleni, Hannelelle ja Timolle.

Oulu, September 2001

Jaana Tähtinen

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Part I THEORETICAL ELABORATION

1 Introduction

1.1 Why did I make the effort?

This research aims at increasing our knowledge of the business relationship dissolution process. Within the different research approaches interested in business relationships – e.g. the IMP Interaction Approach, Relationship Marketing, and also the Nordic School of Services Marketing (Grönroos 1997a, Möller 1993, Sheth & Parvatiyar 1995) – the 'sunny side' of relationships, i.e. their early development and the benefits that they provide has been the major focus. However there is also a 'dark side' to relationships. Relationships have their problems and difficulties (Håkansson & Snehota 1995a) and sometimes they end (see e.g. Edvardsson 1992, Gadde & Mattsson 1987, Rosson 1986), whether we want them to or not. Dissolving some relationships may even be the best thing to do. Therefore managing relationships involves not only managing growing relationships, but also managing deteriorating relationships. For relationship management to succeed there is a need for proper knowledge of both the starting and the ending phase of relationship development.

There are clear indications that ending relationships deserves further research. Firstly, we have an incomplete understanding of the dissolution phase as such. Of the phases of a business relationship, which according to Dwyer, Shurr and Oh (1987) can be called awareness, exploration, expansion, commitment and dissolution (see also Heide 1994, Rosson 1986), the dissolution phase is among the least studied. Some of the conceptual models of relationship do not even include a dissolution phase (see Frazier 1983, Frazier Spekman & O'Neal 1988, Yorke 1990). Consequently, several researchers have specially pointed out the need to study relationship dissolution (e.g. Alajoutsijärvi 1996 p. 239, Dwyer *et al.* 1987, Grayson & Ambler 1997, Halinen 1997 p. 311, Liljegren 1988 p. 435, Sheth & Parvatiyar 1995). Additionally, in a very recent contribution by Stewart (1998), in which dissolution has been the object of focus, she acknowledges that there still is a need for more dedicated research on dissolution. Also Hedaa (1993), Håkansson and

Snehota (1995a), and Morgan and Hunt (1994) state that relationship dissolution research would certainly contribute to a more complete understanding of business relationships.

Secondly, dissolving business relationships is currently viewed as an element of marketing. A definition of the Nordic School of Services Marketing (Grönroos 1997b) explicitly states that marketing is about not only establishing but also terminating relationships. In a similar vein, the customer portfolio approach (e.g. Fiocca 1982, Olsen & Elram 1997) sees dissolving customer relationships a marketing task. It is also argued that, because of the costs involved, a company should not have a relationship with every one of its potential or current customers (Dwyer *et al.* 1987, Hunt 1997). However, terminating customer relationships is not in itself a complete solution to customer profitability problems (Storbacka, Sivula & Kaario 1999 p. 51).

Thirdly, although one could claim that relationship dissolution would be the reverse of relationship development, some argue that these processes are market by important differences (see e.g. Duck 1981 p. 11, Dwyer *et al.* 1987) and that dissolution therefore merits special research attention. As the German sociologist Simmel (1950 p. 123) has stated, two actors are needed to develop a relationship, whereas one actor alone can initiate dissolution. While forming a relationship, the actors increase their knowledge of each other; however in the dissolution phase, this knowledge does not decline significantly. Instead, it is likely that the previous knowledge is re-interpreted and acted upon in a different manner (Duck 1981 p. 11, Baxter 1985 p. 259) and that, consequently, business relationship dissolution follows its own unique processes (Tähtinen & Halinen-Kaila 1997).

Fourthly, the existing research on dissolution does not provide us with a good overall and holistic picture of the dissolution process because the research contributions are few in number and quite narrow in their foci. The three main research interests have been: (1) the antecedents, factors, events, or conditions leading to or influencing the dissolution (e.g. Hocutt 1998, Keaveney 1995, Michell, Cataquet & Hague 1992, Mittal & Lassar 1998, Perrien, Paradis & Banting 1995, Ping 1993, Ping 1995, Ping 1997, Stewart, 1998), (2) the dissolution as a cognitive decision making process (e.g. Heide & Weiss 1995 Perrien, Lalonde & Filatrault 1994), and (3) the communication strategies used during the dissolution process (Alajoutsijärvi, Möller & Tähtinen 2000, Giller & Matear 2000, Helper 1993). Although the above mentioned studies are significant contributions, they certainly do not reveal all aspects of the phenomena.

This study is closely connected to a fourth and still evolving stream of research focusing on the dissolution process, which incorporates all three previously mentioned approaches into more holistic models. The main contribution of this research is the in-depth study of the process of dissolution, incorporating factors that influence the stages of the process as well as the nature of the relationship that is dissolving. Previous examples of process-oriented dissolution research are: Ping & Dwyer (1992), who focused on established channel relationships, Roos's (1999) study of consumer relationships with supermarkets, and Tähtinen & Halinen-Kaila's (1997) work concerning triads, i.e. small nets of relationships.

Finally, from the management point of view, research into dissolving relationships provides valuable knowledge that can be applied in multiple ways and situations. Skilful relationship management is a means to secure a company's position in constantly changing business networks. To achieve a good business performance, relationship

managers need to master the establishment and development of relationships as well as their termination. The way in which a dissolution process is managed will have varying and significant consequences for the companies involved. It will affect the actors themselves, with regard to e.g. their future profitability, current image in the market, or capability to handle other relationship dissolution situations in the future. The surrounding network i.e. the other relationships to which the companies are connected, may also be notably affected.

An understanding of the various stages of the dissolution process would thus help those managing the process towards a desired end. If the first signs of a partner's wish to exit can be spotted at an early stage, it may still be possible to stop the process by engaging in restoring actions. On the other hand, a company may want to deliberately end a specific relationship. Within the customer portfolio approach (e.g. Fiocca 1982, Olsen & Elram 1997) relationships that are not sufficiently profitable are seen as candidates for termination, which enable the company to concentrate on its more profitable business. As relationship maintenance includes costs and demands resources (Blois 1996, Blois 1997, Ford, McDowell & Tomkins 1995), ending some of the relationships frees resources for other, better uses. In such situations, understanding the dissolution process helps in directing the relationship to a desired end.

The above mentioned reasons for studying relationship dissolution apply to all kinds of relationships, be they business-to-business, other interorganisational, business-to-consumer, or consumer-to-consumer relationships. However, the focus of this study is on business-to-business relationships, which will also be called business relationship for the sake of brevity.

1.2 What did I want to know?

As previously mentioned the current body of research on business relationship development lacks a thorough description of one of the phases, namely the dissolution phase. This research will therefore contribute to the pre-existing IMP models of relationship development (e.g. Axelsson & Easton 1992, Håkansson & Snehota 1995b, Möller & Wilson 1995a) by adding to the body of knowledge about the relationship dissolution phase. Both relationship development and dissolution are understood here as neutral terms, i.e. as having neither positive nor negative connotations. This is because, as I see it, relationships develop all the time, and the direction of their development can vary. Thus the development itself is not inherently positive or negative. If we take into consideration that a number of actors are involved, we realise that different actor levels (e.g. involved individuals, both companies, connected companies) may perceive relationship development differently. Relationship development may actually be positive and negative at the same time – for different actors. The same applies to dissolution.

This study also applies the network view as it views dissolving relationships as embedded in a broader network of relationships (see also Halinen & Törnroos 1998). Relationship dissolution is thus not solely a matter of the two focal companies. It also involves the companies' other relationships with e.g. customers, sellers, and competitors.

These interconnected relationships form a network within which the relationship dissolution takes place (Anderson, Håkansson & Johanson 1994, Håkansson & Snehota 1995b p. 20). Relationship dissolution thus influences the focal net, thereby changing it (see also Halinen, Havila & Salmi 1999). Additionally the focal net, in turn, also influences the dissolving relationship (see Felmlee, Sprecher & Bassin 1990, Kelley, Berscheid, Christensen, Harvey, Huston, Levinger, McClintock, Peplau and Peterson 1983). These dyad – focal net connections provide the link between the IMP Interaction Approach and the Network Approach and therefore both are being used in this research. However, this research does not focus upon the network change aspect of relationship dissolution.

Relationship dissolution is still a fairly new area of study, and especially the process of dissolution behoves efforts of theory building (see Easton 1995, Eisenhardt 1989 p. 548). For building such a theory a contextual approach is needed. There are two reasons for developing a context-related process model: (1) dissolution is a complex process embedded in a context (Bonoma 1985, Pettigrew 1992) as well as (2) a process in which the context is the product of action and vice versa (Pettigrew 1990). Thus, in order to understand relationship dissolution process, one has to study the context of the relationship because it is interwoven with the process. The empirical context of this research is the software industry in Finland and more specifically the design, development, and marketing of tailored software in a relationship between a seller and a buyer company. The selection of a single industry reflects the view that context and action are inseparably intertwined (Pettigrew 1992, Pettigrew 1998).

A business relationship between a tailored software supplier and its customer company is an interesting arena for the study of business relationship dissolution. However project business in software is not the same as e.g. construction project business. My interviews with software professionals (Appendix 1) suggest that it is common that relationships between buyers and sellers of tailored software are long-term and include several successive software projects as well as the maintenance of the tailored software. The time between the projects is often short, because new features are added to the first version of the software and/or new ways of improving the software are put into use as the technology develops. However, as a single project may take years to complete and as the interaction during a single project is most often very intensive, involving several individuals from both companies, the relationship between the two companies (the links, ties and bonds) usually develops quickly during their first joint project. Thus, two kinds of business relationships can be studied within the same context: relationships that have lasted for several successive projects and relationships concerning a first project. Both can be regarded as relationships, due to the nature of the task, i.e. software design and development requires intensive interaction between both parties as well as the trust of the buyer in the software vendor's ability to perform the task.

The tailored software industry as an empirical context provides the needed amount of variety in the relationships to inspire the theory development. Its relationships are of cyclical nature in that they are very intensive during projects and less intensive in between (cf. Alajoutsijärvi 1996 pp. 213–218). Therefore they offer an excellent platform to examine different kinds of relationships as well as different types of dissolution. A business relationship in software acquisition can dissolve at least at three different points in time. The first and most dramatic point is during an acquisition project. If the parties

are not able to resolve problems occurring during the process of design and development, the project may be cancelled and the relationship may end there. A second more natural point is during a sleeping phase (see Hadjikhani 1996) i.e. after the completion of a software project, if there is no need to buy maintenance services from the vendor and no new project is set up between the buyer and the seller later on. Thirdly, when a need for new kind of tailored software arises or when a new technology is taken into use, the buyer may be willing or forced to change its software vendor if the current provider cannot deliver. In addition, the relationships may end because of either or both parties' decisions, as Finnish software vendors are in such a position that they also can choose the company they wish to sell to.

The purpose of the research is to build an empirically grounded process model for understanding the dissolution of business-to-business relationships in tailored software business. In other words, the aim is to describe the process of business relationship dissolution in tailored software business by answering the following questions:

1. Which features characterise a dissolved business relationship?
2. Which factors influence the dissolution process?
3. How does the dissolution process evolve over time in the context of multiple actors?

A context-related framework is created; it contains all elements mentioned in the three sub-questions. The framework also models the relations between these elements, in other words how they influence each other. In order to create the model, the three sub-questions are first addressed one after another, on the basis of the empirical tailored software business material.

The proposed model addresses the content, the context, and the process of dissolution (Pettigrew 1990). Business relationship dissolution cannot be studied without studying an existing business relationship, because such a relationship is the starting point of the dissolution process. The content in the framework describes what an existing business relationship in software acquisition is and when it can be considered dissolved (the first sub-question). Thus the conceptualising of a dissolved relationship is done on the basis of the conceptualisation of an existing relationship. Moreover, as relationships have different nature, a typology of different types of relationship dissolution is also proposed.

By analysing the content as well as the context of relationship dissolution, the factors influencing the dissolution can be identified (second sub-question). The factors influencing the relationship dissolution are either reasons for the dissolution or attenuating factors. It is assumed that the type of the factors affects the process of dissolution. Because of this, the reasons as well as the attenuating factors are essential elements in the model of relationship dissolution. However, no reason(s) are seen to cause the dissolution as such; instead the reasons are seen as engendering and/or influencing the process of dissolution. Although an engendering factor may exist from the beginning of the relationship, it may not *function* as a reason for the dissolution, if the parties do not perceive it as affecting the relationship or if some other factors are perceived to attenuate the reason. In other words, causal powers, which generally generate dissolving actions, can be present although they do not generate such dissolving actions in a particular situation.

As relationship dissolution is not an event, but a process (see Pettigrew 1990, Pettigrew 1998, Van de Ven 1992), a processual research design has been chosen. A theoretical model of a business relationship dissolution process is constructed, incorporating both the time dimension and the multiplicity of the actors (individuals, companies, and other relationships) involved into the model (third sub-question). Previous research on business relationships has predominantly been cross-sectional and applied only the viewpoint of one actor. Thus it has been frequently argued that as business relationships evolve over time, more processual research is needed to capture the dynamic aspects of relationships (see e.g. Easton 1995, Halinen & Törnroos 1995, Halinen 1997 p. 311, Rosenbröijer, 1998 p. 242). Moreover, as relationships involve at least two (or more) active parties, they should both (all) be incorporated into research designs.

The process of dissolution describes how dissolution happens, i.e. how the changes from an existing relationship to a dissolved relationship take place. The process of dissolution is viewed in this research as encompassing the actions performed by the involved actors, their perceptions and decisions concerning the future of the relationship, as well as the consequences of these actions, perceptions, and decisions with regard to the relationship. The underlying assumptions are that during a dissolution process the business relationship changes and that these changes manifest themselves in the substance of the relationship. Using the concepts of Pettigrew (1992), the actions change the inner and the outer context. In other words, what happens in the relationship changes both the relationship itself and the focal net of other actors in which the relationship is embedded.

The dissolution process is modelled using stages, which describe the different action and time periods of the process, and using levels, which describe the different actors, that bring about the process. The process model thus helps to understand more or less concurrent events and the interconnection between them (see Pettigrew 1992, Stake 1995 p. 38 p. 42). Causality is understood in this research as holistic explanation: thus it is viewed as being neither linear nor necessarily singular (see Pettigrew 1992). Furthermore, although the process is modelled by using stages, this does not imply that the dissolution process always proceeds through all of these stages or in the exact order. The stages as well as the actor levels are used to reveal the complexity of the process while at the same time keeping the model comprehensible.

1.3 From where and how did I look for answers?

Three areas of dissolution literature were used as a source of inspiration in developing the theoretical model: previous research on business and consumer relationships in marketing, studies in the social psychology of intimate relationships and organisational research concerning the failure of inter-organisational arrangements and the ends of organisations. This section will first shortly describe the main sources of literature used in this research. Thereafter some of the relevant features of the empirical context, the tailored software business in Finland, are presented.

1.3.1 The theoretical basis

In the business administration literature, studies on relationship dissolution have focused on the antecedent conditions of dissolution (e.g. Heide & Weiss 1995, Ping 1993, Ping 1995, Ping 1997) as well as factors and events that lead to relationship dissolution (e.g. Michell *et al.* 1992, Perrien *et al.* 1995). These findings are used in this study as a basis for describing the factors that influence the dissolution process.

Pre-existing contributions have approached dissolution mostly as a cognitive process, emphasising decision-making concerning termination (see e.g. Heide & Weiss 1995, Perrien *et al.* 1994). Different dissolution strategies have also been investigated. Helper (1993) built upon Hirschman's (1975) exit and voice strategies, viewing these as two types of responses to the problems that arise in a business relationship. In contrast, Alajoutsijärvi *et al.* (2000) studied various disengagement communication strategies in order to facilitate 'beautiful exits' from a relationship whereas Giller & Matear (2000) focused mainly on the complexity of the termination and concluded that companies do not consciously select an exit communication strategy to gain a particular outcome.

In a network context, Gadde & Mattsson (1987) identified different exit patterns, describing the gradual replacement of the supplier. The effects of a dissolved relationship have also been under study; Goodwin, Mayo & Hill (1997) addressed relationship dissolution as a negative life event from the viewpoint of salespersons.

The *process* of relationship dissolution has been largely ignored in both business-to-business and consumer behaviour research (see also Dyck & Starke 1999), although several authors have emphasised the need to study it (Dwyer *et al.* 1987, Halinen 1997, Keaveney 1995). In consumer research, customer exit has recently attracted increasing research attention (e.g. Hocutt 1998, Keaveney 1995, Maute & Forrester 1996, Roos 1998, Roos 1999, Stewart 1998). However, although several authors use the concept of process model, only Roos (1999) directly addresses the dissolution process. She suggests a catalytic switching model (Roos 1999 p. 246), with different outcomes of switching paths: a partial switching from a revocable path, a conditional switching from a conditionally revocable path, and a total switching from a irrevocable path. In the business marketing research the process models to be found are Ping & Dwyer (1992) concerning relationship termination in marketing channels, Halinen & Tähtinen (1999) and Tähtinen (1999) presenting conceptual models, and Tähtinen & Halinen-Kaila (1997) concerning the dissolution of three interrelated relationships, i.e. triads.

As the body of relationship dissolution literature within academic marketing research is small, a more inter-disciplinary view of sources will be applied here, as suggested by Stewart & Colgate (1998). Interpersonal relationship models developed in social psychology have already been used in theory development concerning buyer-seller relationships (see e.g. Mummalaneni 1995); they also offer a potential basis for theory development in a business context. Duck's relationship dissolution model (1982 p. 16) has paved the way for a stream of research on the dissolution of intimate relationships. Duck proposed that individuals progress through four broad phases on their way to terminate a personal relationship: intra-psychic, dyadic, social and gravedressing. This processual model has already been applied and further elaborated on in business settings by e.g. Dwyer *et al.* (1987), Ping & Dwyer (1992), Tähtinen & Halinen-Kaila (1997), and

Tähtinen (1999). These models concerning business relationships will be used as the main sources for the theory development in this study.

Further support for theory development can be found in studies concerning the reasons for failure in alliances and joint ventures (e.g. Serapio & Cascio 1996, Park & Russo 1996) or the process of organisational death and decline (e.g. Keyton 1993, Sutton 1987, Weitzel & Jonsson 1989). In organisational and inter-organisational research, the need for further research on the process of dissolution has also been acknowledged, although little has been done to alleviate the need. One of the reasons for this is the problem of gaining access to dying organisations and relationships.

1.3.2 The selection of the empirical context

In selecting the industry, the following four guidelines were used: dyadic relationships should be common in the industry, many different relationship dissolutions should have taken place within the industry, access to dissolved relationships should be possible, and the industry should be of general as well as of subjective interest. As the subject of inquiry might be considered commercially sensitive, great weight was put on the potential of getting access when selecting the case industry. Due to the researcher's background and her personal networks, the software and advertising industries were suitable potential candidates. Both industries also met the other two guidelines of dyadic relationships and multiple dissolution processes. The final decision was made in favour of the software industry because of its increasing importance to the region of Oulu, as well as to the whole of Finland.

The selection of a single industry reflects the view that context and action are inseparably intertwined (Pettigrew 1992). When studying relationship dissolution, inevitably two contexts have to be considered, as both affect the focal relationship: the context of the buyer and the context of the seller. I selected the tailored software industry; therefore the context of the two seller companies in the two dissolved relationships would be the same (although the network does not remain constant over time). By reducing the number of contexts, I aimed for a more manageable research design, which would also facilitate the understanding of the cases.

Several factors underline the relevance of studying relationships and their dissolution in the software industry. An acquisition process of tailored software can best be described as a business relationship, as its interaction intensity quickly creates the activity links, resource ties and actor bonds typical to relationships[1]. In information management literature, Peltola (1992) has described the nature of the relationship between a buyer and a seller in a tailored software acquisition as close, continuous and complex. Thus this type of professional service relies heavily on the interaction between a customer and a seller. In addition, large numbers of individuals are involved in the interaction process,

[1] The conceptualisation of the business relationship in tailored software business is done in section 2.1. The concepts of actor bonds, resource ties, and activity links have been presented by Håkansson & Snehota (1995a).

and because of the size and complexity of the systems, no individual or small group can create or even understand them in detail (Krant & Streeter 1995). In order to be able to produce tailored software, the seller company must familiarise itself with the customer firm, its business and personnel at very early stages of the process.

The acquisition process of tailored software is time consuming (1–3 years) and also entails considerable financial investment by the customer – from 100 000 FIM up to millions (expert interviews, see Appendix 1). It is also very common that projects follow each other and that, consequently, the relationship between the vendor and its customer lasts for several years. The first project for a new supplier is a chance to show its capabilities. If it succeeds in this, maintenance as well as new software design and development tasks may follow.

Moreover, intensive interactions during the development of the requirements for the software system take place, even before any transactions in terms of software and money are made. During this initial communication exchange, trust and commitment are bound to develop; otherwise the continuation of the relationship would be endangered (see subsection 1.4.3, concerning the process of tailored software development).

In tailored software business different kinds of dissolution processes can be found; this aids theoretical representativity. The software vendor's relationships with its customers can occur either continuously or on a single project basis (Kilpeläinen & Sell 1985 p. 24). A project-based relationship ends once the software has become operational and the warranty period is over, unless the seller continues to maintain the software. However, in such maintenance cases, the nature of the relationship is in many ways unique. The interaction intensity is lower than in the development phase, as the need for interaction is related to the malfunctioning of the software. In addition, the number of people involved in the relationship is considerably smaller, i.e. as little as only one person from each side. Therefore, sometimes a maintenance relationship is closer to a sleeping relationship (see Hadjikhani 1996) than an existing business relationship. Such a relationship may also end during the maintenance period. Unless new project(s) are awarded / expected to be awarded to the seller, the maintenance contract may not be profitable enough for the seller. Therefore the relationship may become a candidate for termination on the part of the seller.

Dissolution may also happen unexpectedly during the software development project. This requires the emergence of serious problems in the project, which the companies are unable to solve or e.g. one partner's bankruptcy. A rough estimate of the failure rate of information technology projects is as high as 50 %, including one-party, in-house projects (Keil 1995, Lyytinen & Hirscheim 1987). Acquiring tailored software is a complex, risky, and time-consuming investment, and problems like cost and schedule overruns are fairly common (Curtis, Krasner & Iscoe 1988, Hokkanen & Telama 1989, Ledgard 1987 p. 131, Marciniak & Reifer 1990 pp. 9-10). These types of difficulties seem to be so common and frequent that customers have grown to expect a lower level of quality than would be acceptable in other types of business (The Two Faces of Software 1996). There are even examples where the third try for a particular customer was successful (Hasi 1995). Additionally, the atmosphere among the individuals during the process affects the perceived quality of the service (Sääksjärvi & Saarinen 1994). These and other issues may affect the whole acquisition to the extent that the process is either cancelled or the

invested money turns out to have been wasted (see Savolainen 1996, Siltala 1996a, Siltala 1996b, Telian laskutusjärjestelmä pitkittyi katastrofiksi 1996).

In addition, prior to project cancellation, a project escalation can take place, which further increases the sunken costs (Keil 1995, Lyytinen & Hirscheim 1987). Project escalation refers to the situation in which, despite negative information concerning the likelihood of success, the project is allowed to continue. In other words, no actions are taken to stop the investments due to still existing feelings of commitment, although it is likely that they will result in nothing. Moreover, software failures are common during the first two years when the software has been installed and it is in production use (Bilinski 1987). As it is impossible to fully test any complex software system, the initial operational version of any software will have some inherent design flaws (Bilinski 1987). These flaws may also burden the relationship between the buyer and the seller.

The previously mentioned problems common to tailored software development are just one type of factors that can put the relationship between the buyer and the software supplier at risk. The project business itself also has natural break-up points, i.e. times when the buyer company is more likely to evaluate its relationship to the software vendor and to change its supplier. These points can be the results of technological developments (e.g. the introduction of client-server technology, the Internet etc.), changes in society and/or the business environment (e.g. Finland joining the European Monetary Union), and changes in the buyer company itself (e.g. changes in work-flows because of business process re-engineering). Also the year 2000 problem (Y2K) created demands on companies' software systems. All these changes led to the need to change companies' adp-systems; they can therefore be seen as such points where changing one's software supplier is more likely.

1.3.3 Scientific approach and research strategy

Easton (1995) urges researchers to explicitly state their underlying assumptions and values, as these influence their decisions concerning research strategy. I aim to follow his advice in this section. First, I will briefly describe my scientific approach - a term Tikkanen (1996) has used - or philosophy of science (in Hunt 1990), namely scientific realism. Second, I will explain the research method to be followed when building the tentative process model. The scientific approach and the research method are discussed in this same chapter to show their compatibility.

There are two major reasons for choosing scientific realism as the guiding epistemology of this study. The reason is the compatibility between my own personal thoughts concerning what science is and the principles of scientific realism as presented in Sayer (1992 pp. 166–189, also Lloyd 1988 pp. 99–177, Stockman 1983 pp. 166–189). After reading Sayer (ibid.), I felt like my rambling thoughts had found a home, a family, and order in scientific realism. My 'finding' was also confirmed via the views of distinguished marketing scholars, as presented as a part of a larger discussion on whether or not marketing is a science (see Anderson 1983). Also Hunt (1990, 1992), Peter (1992), and Zinkhan & Hirscheim (1992) took part in a debate in the Journal of Marketing. Hunt

(1990) argued that many marketing researchers already are, either explicitly or implicitly, guided by scientific realism, and that this philosophy indeed would be appropriate for guiding marketing theory and research. Later on, Hunt (1992) responded to the comments provided by Peter (1992) and Zinkhan & Hirscheim (1992), by concluding his reply with the following statement defending his original arguments. "The realism I advocate defends only human reason, its use in academic discourse, its application to evidence, and its potential for helping us understand the world we inhabit."[2] However, it is interesting to note that this debate did not refer to Lloyd (1986, reprint 1988), nor to Sayer (1984, second ed. 1992), Stockman (1983) or Bhaskar (1986) although their viewpoints on realism in social science had already been published.

Thus the choices made in this study are guided by the principles of scientific realism. Among those principles there are some which I would like to state explicitly in order to crystallise my standing:

> "The world exists independently of our knowledge of it. Our knowledge of that world is fallible and theory-laden. Concepts of truth and falsity fail to provide a coherent view of the relationship between knowledge and its object. Nevertheless knowledge is not immune to empirical check, and its effectiveness in informing and explaining successful material practise is not mere accident. There is necessity in the world; objects – whether natural or social – necessarily have particular causal powers or ways of acting and particular susceptibilities. The world is differentiated and stratified, consisting not only of events, but objects, including structures, which have powers and liabilities capable of generating events. These structures may be present even where, as in the social world and much of the natural world, they do not generate regular patterns of events." (Sayer 1992 pp. 5 - 6.)

Following the principles of scientific realism, knowledge is fallible and theory laden. Thus the world is never seen as it is, but is enacted through the theories we apply. Those theories or models can be further developed through critical evaluation and empirical scrutiny (Hunt 1990, see also Sayer 1992 p. 143). This means that because theories try to capture the events, objects, and structures capable of generating a phenomenon, they can be compared according to their ability to explain the phenomenon (Zinkhan & Hirscheim 1992).

My research question – How to describe the process of business relationship dissolution in tailored software business? – guided my decisions concerning research approach and data analysis. In order to answer the research question, I judged that empirical and contextual knowledge was needed concerning the factors influencing relationship dissolution and the subsequent events and activities forming the process of dissolution.

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[2] However, Hunt (1990 and 1992) does not suggest that all marketing researches should adopt scientific realism, and I agree with him. Indeed, other philosophies have and most certainly will be applied. For example Tikkanen (1996 p. 65) has associated the Network Approach with conventionalist/relativistic and constructivist scientific orientation.

The focus of this research is on the understanding of the meaning of relationship dissolution in the social world, not on the frequency of the phenomenon (see Stake 1995 p. 85, Van Maanen 1993 p. 9). Thus, this research aims at constructing context-related theory by building an empirically grounded process model for understanding the dissolution of business relationships in the context of tailored software acquisition. The research was carried out as follows. First, a theoretical, tentative model of the process of business relationship dissolution was created via conceptual analysis using the existing literature and the knowledge of the context. The tentative model addresses the content, the context and the process of dissolution (see Pettigrew 1990). Second, the tentative process model was tested vis á vis the empirical material acquired from a case study. A multiple case study of two theoretically representative cases was conducted. In order to reach theoretical representativeness (Stake 1995 p. 4), the conceptual model was used as a guiding force in selecting the cases. Third, the findings of the case study were compared with the tentative process model; thereafter the model was adjusted. Thus an empirically-grounded process model of business relationship dissolution in software context was developed as pictured in Figure 1.

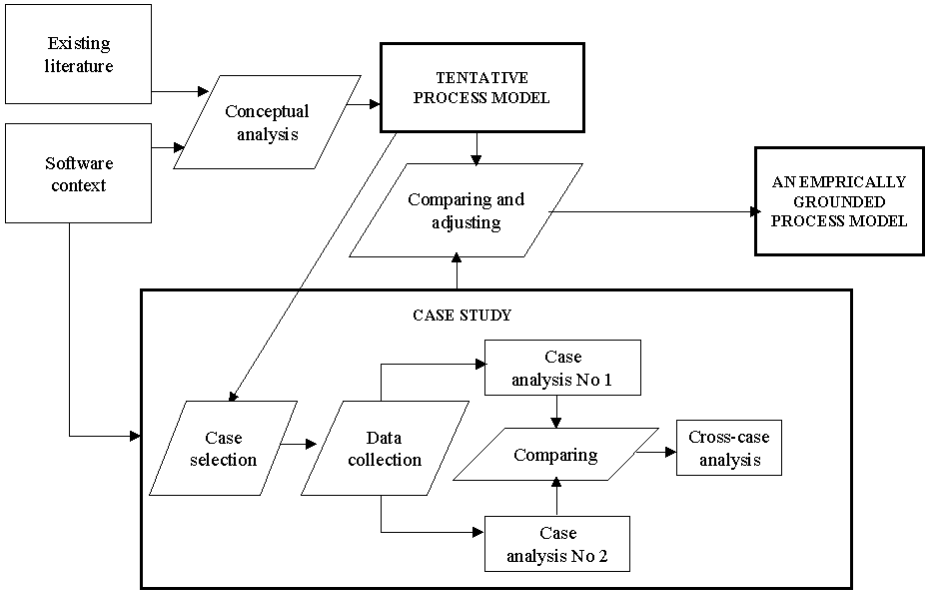


Fig. 1. Research strategy

The choice of the research strategy, starting with a theoretical framework and grounding it empirically, reflects the view that our knowledge of the world is theory-laden. Thus the research strategy is in line with the principles of realism as presented above. The research method applied in building the theoretical framework was conceptual analysis. Zinkhan & Hirscheim (1992) suggest that marketers should return to the task of building comprehensive models. Sayer (1992 p. 50) argues that it is appropriate to see theory in (social) science as examined conceptualisation. Thus “to theorise means to prescribe a

particular way of conceptualising something" (ibid. p. 50). Moreover, the production of effective conceptual change, in other words new knowledge, requires us "to 'explicate' problematic concepts; that is, give concise definitions to important but vaguely understood terms through re-working their relations with other terms in the network" (Sayer 1992 p. 81).

In the following I will construct the logic of the conceptual analysis which is applied in this study. Cook & Campbell (1976) state that both theoretical and empirical analyses are needed to specify the meaning of a concept. Moreover, the conceptual and the empirical aspects cannot be treated as entirely separate from each other (Sayer 1992 p. 58).[3] Sayer (ibid.) expresses the reason for this in the following three points:

1. "Answers to empirical questions presuppose answers to questions about the scientific (and other) concepts used in identifying their objects."

2. "In the case of concept-dependent social objects, empirical knowledge presupposes understanding the constitutive concepts."

3. "Any kind of question about concepts must take account of the (empirical) circumstances in which they are used."

The conceptualisations made in this study are all connected to the empirical circumstances of the Finnish tailored software business, because the theoretical framework was developed and empirically grounded contextually. I familiarised myself with the empirical context by conducting a series of expert interviews (Appendix 1.) and by reading several industry newspapers and magazines (e.g. Tietoviikko, Kauppalehti, Talouselämä, Purchasing, MicroPC, Taloussanomat, Itviikko, Systeemityö) as well as existing research on IT-industry. I linked this information to my previous knowledge gained through personal relationships with individuals working in the industry. Because of this rich contextual knowledge, the empirical scrutiny was constantly taking place during the construction of the theoretical framework.

Conceptual analysis is a process whose aim is to solve a conceptual problem; the solution can be a new concept, refinements of existing concepts or a new conceptual system (Näsi 1980 pp. 10–12, Tamminen 1993 p. 149). According to Näsi (1980 pp. 9–10), the basic elements in conceptual analysis are the concepts that others have developed and the concepts that the researcher herself develops. As stated in the previous paragraphs, I also used an additional element, the empirical circumstances, which were derived from existing empirical studies and from actors in that particular field.

Näsi (1980 p. 12) suggests that conceptual analysis proceeds through three phases, namely problem setting, explication and argumentation (English translation by Tikkanen, 1996 p. 58). In the problem setting, the existing studies and these concepts are problematised. In this study, the problem setting has been done in the previous sections of this first chapter. Additionally, the next chapter discusses further existing concepts. In the explication phase, the new concepts are analysed, specified, classified and formulated

[3] This has also implications for the assessment of the study, which will be discussed in section 8.1.

clearly (Näsi 1980 p 14). This phase will be described in Chapters 2 and 3; there the main concepts of an existing relationship, a dissolved relationship and a business relationship dissolution process are analysed, empirically grounded and subsequently combined to form a framework. This framework also clarifies the relationship between the concepts, i.e. their influence on each other. In the argumentation phase, the researcher evaluates the solution of the conceptual analysis; this is done in the final chapter of this study.

The empirical part of the study is an instrumental and multiple case study, consisting of two different relationship dissolution processes. There are several factors connected with this research which favour the case study; 'how'-research question has been posed, the researcher has no control over events which have occurred, and the phenomenon is to be studied in its real-life context (Yin 1989 pp. 16–20). Relationship dissolution is still a fairly new area of study, and therefore especially the process of dissolution requires theory building (Eisenhart 1989 p. 548). Furthermore, dissolution is a complex process embedded in context and therefore cannot be studied outside its natural context (Bonoma 1985, Pettigrew 1992). For these reasons a case study was seen as the most appropriate method for conducting this research.

Generally speaking, in an instrumental case study, a particular case is studied to provide refinement of theory (Stake 1994). Here the purpose of the instrumental case study is to empirically ground the previously presented theoretical framework of business relationship dissolution. Theories are usually generated by some form of comparative analysis (Layder 1993 p. 42). In this study, the comparative analysis is done within the phenomenon, by studying and comparing the dissolution processes of two separate business relationships. The selection of the two relationship dissolution processes is done on theoretical basis, in order to allow comparison and thereby theory development on a firm basis.

Rescher (1987 p. 150) states that "processes rather than things best represent the phenomena that we encounter in the natural world". I would argue that this is especially true in the case of relationships and their dissolution (see also Halinen 1996). By process, I mean a time-dependent sequence of events, which in this case has an end - the dissolved relationship itself. However, the outcome of an ongoing process is determined by the process itself (MacKenzie 2000) and thus is unknown in advance. Therefore the outcome of an ongoing dissolution process is not always a dissolved relationship.

As relationship dissolution is not an event, but a process, this research design takes a processual approach. Longitudinal case study method was used as it facilitates the attempt to establish causality (Halinen and Törnroos 1995, Pettigrew 1992), in this case, the local causality between certain factors or events and the dissolution of the particular business relationship. Causality is understood in this research as a holistic explanation; thus causality is neither linear nor singular (Pettigrew 1992). The aim is to understand events and processes occurring more or less at the same time as well as the interconnection between them and to identify patterns in these processes across chosen cases (Pettigrew 1992, Stake 1995 p. 38, p. 42). A case study allows researcher to examine causal processes directly, i.e. in their context (Pettigrew 1992).

A historical, retrospective study was conducted due to the nature of the phenomenon. As there is no way of telling in advance whether and when an ongoing relationship will be terminated, a follow-up study or a future study design would have entailed great outcome uncertainty and was thus rejected. Even in cases where the relationship is meant

to end once the software is functioning, time-schedules often vary up to three years. Thus, bearing this in mind, I judged that it would have been too time-consuming to conduct my research as a follow-up study. Another difficulty connected with the follow-up study design is the access problem. Although the end of a relationship would be predetermined, the tentative end is often not public knowledge. Thus the presence of a researcher might mean the unwanted dissemination of that knowledge to other actors in the network. Moreover, the relationship might be continued after the first project, even if that had not been the original plan. Finally, with regard to relationships already in dissolution phase, the dissolution process may still be stopped, leading to the end result of a non-dissolved relationship.

The selection of the two cases to be studied was undertaken based on the criteria of theoretical representativeness and contribution to increased understanding of the dissolution processes (Stake 1995 p. 4). The selection was done in a step-wise process; first the industry (as described in sub-section 1.3.2), then the companies, and finally the dissolved relationships were selected. The last two decisions were, however, linked together, so their temporal order is not 100% unequivocal.

The main criterion in selecting the company was the possibility to get access. Thus I chose to contact a large customer company, because I anticipated that a customer would perceive a dissolved relationship with a software vendor more neutrally than the vendor. After getting access to one customer company, the two different dissolved relationships were selected among the potential ones together with the contact persons of the customer company. These procedures will be reported in more detail in Chapter 3, Empirical research design.

The cases, two different dissolved tailored software acquisition relationships, are analysed at two levels. First, both cases are described and analysed individually. Second, the cases are compared to each other to reach a more abstract level of description and thus to aid the theory building. This description is created and at the same time compared with the *a priori* model developed in Chapter 2. Although presented here as three separate steps, these analyses are iterative or 'nested'. During the data collection, the researcher was constantly analysing the data, in order to guide its collection and vice versa. On the basis of the modifications to the *a priori* model, an empirically based model of the process of business relationship dissolution in tailored software acquisition is presented. Thereafter its implications and possible avenues for future research are discussed.

1.4 The empirical context: the software business

1.4.1 The Finnish software business

The software service business in Finland grew rapidly during the nineties. According to official statistics (Atk-palveluyritykset 1996, 1998), the number of software and computing service firms in Finland was 2,579 in 1997, these employed a total amount of

15,511 persons. In 1998 the industry employment had grown to 22,185 persons (Tilinpäätöstilasto 1998, 2000). The total turnover of the business was in 1995 about 8.9 billion FIM (Atk-palveluyritykset 1996, 1998) and approximately 14.8 billion FIM in 1998 (Tilinpäätöstilasto 1998, 2000).

The Finnish software industry is polarised, as it consists of a few large companies and a considerable number of small companies. Turnover of the largest companies is in the billion category, whereas the rest of the companies reach, at best, a turnover of 100 million FIM (Vuola 1998). The number of companies has increased through the 1990s, but the new entrants are mostly small (Atk-palveluyritykset 1996, 1998). The number of companies in the software and computing service industry increased in the nineties, although the total number of companies in Finland fell considerably during at the same time. This development probably reflects the profitability of the business. In 1997, compared with the other companies among the 500 largest in Finland, the information technology sector was the most successful sector measured by the growth rate in terms of turnover (over 20 %) and by returns on investments, which was over 20 % (Tähtenä tuikkii tietotekniikka 1998).

In Finland the growth of the IT business has been so rapid that the availability of new personnel is a serious threat to the computer service companies (Tipal, http://www.tipal.fi 10.11.1997, Siltala & Oksanen 1996, Sinervä 1998). This lack of skilled professionals has lead to increase in wage levels. The average monthly salary of a full-time employee in the branch was over 4.000 FIM higher than the average salary in the private sector in general (Atk-palveluyritykset 1996, 1998). Wages and other personnel costs form the largest share of business expenditures, ca. 35 % (Seppänen 1996, Tilinpäätöstilasto 1998, 2000); this reflects the high labour intensity of the software and computing service industry.

1.4.2 The business logic of tailored software business

The business logic and the characteristics of software applications business differ depending on the type of software produced, e.g. whether it is purpose-built / tailored, customised packages or off-the-self packages. As the industry has matured, more and more software packages have been developed to cover the needs of businesses. Nowadays software packages cover the information systems' needs in e.g. accounting and wages payment bookkeeping reasonably well, but sales, production and order management are areas in which Finnish companies rarely have depended on software packages (Mattila 1997, see also Pollari 1997). Therefore companies continue to have tailor-made software systems built in areas close to their core competencies (Savolainen 1998b, Siltala 1998). Another option is to acquire enterprise solutions, which then are customised to the company by adding additional features (see also Savolainen 1998a).

Alajoutsijärvi, Mannermaa & Tikkanen (2000) have compared the polar opposites of software project business and product business. Tailored software business is project business, in which the software is developed jointly by the vendor and the customer company. Off-the-self-packages follow a product business logic, meaning that they are

developed by the vendor and thereafter duplicated for a large number of buyers. However, it has to be noted that in Finland most of the large and middle-sized software companies produce both tailored software and modified packages, but not to a large extent off-the-self packages.

Table 1 presents a comparison of the two types of business, project and product business, based on Alajoutsijärvi *et al.* (2000), the views of the industry experts that I have interviewed (see Appendix 1), and Hoch, Roeding, Purkert, Lindner & Müller (2000). However a third type of business could be added into the table: enterprise solutions. Although enterprise solutions are classified as products, I would place them closer to project business that to product business. This is because of the great need for tailoring that enterprise solutions entail.

Table 1. Tailored systems business vs. packaged software business.

	Project business: Tailored systems	Product business: Packaged software
Central Capabilities	Constructivist project marketing and project management (including software engineering).	Productisation, channel management, alliance building (e.g. pilot companies), strategic partners in the industry.
Object of Exchange	Unique software designed and developed in co-operation with the customer for a specific platform. Can include training and maintenance. Service content high.	Standardised and/or modular products designed for several different platforms. Service content low.
Nature of exchange	Interactive, mutual, multifaceted, long-term oriented, project-related exchange, successive projects with same customer(s).	Opportunistic, simple, short-term oriented, product-related exchange, successive exchanges with new versions (updates)
Production	Activities within projects, sold before produced, connections with all functions of the vendor, deadlines according to project plans, almost constant and high marginal costs, capacity utilisation rate important	Duplication, version control, sold after being produced, production function is rather independent from other vendor functions, low marginal costs.
Type of organisation	Project organisation, business units specialising in customers' industries.	Market, product, or matrix organisation.
Nature of markets	Familiar, domestic, closed and networked, little race for market leadership	Distant, global, open, competitive, market leadership important
Customer base	Narrow, well-known, and fairly large customer companies.	Broad, faceless end-customers.
Branding	Not important, market assets concentrated in key individuals and their personal relationships.	Central area of interest.

Since this research is about tailored software business, I will now describe some of the characteristics of project business from the Table 1 more carefully. Alajoutsijärvi et al. (2000) consider the central capabilities in tailored software business to be project marketing and project management, but do not elaborate these any further. I suggest that constructivist project marketing (see e.g. Azimont, Cova & Salle 1998) would more explicitly express the kind of project marketing essential to tailored software vendors. In constructivist project marketing the customer and the seller jointly formulate the specifications, as they do in tailored software business.

The second central capability is project management (Alajoutsijärvi *et al.* 2000). I include software engineering in project management, as I consider it to be an integral part of project management in this line of business. Software engineering is understood as the interpretation and application of sound engineering discipline and practise to the design, development, testing and maintenance of software systems (e.g. Pressman 1992, Vick & Ramamoorthy 1984). The aim is to manage the production of software in a way that decreases the common problems related to the activity (e.g. cost and schedule overruns).

The fact that software needs hardware or a platform to run on has obvious bearings on software business. There are two possible courses of action. A vendor either has a 'partnership' with hardware/systems software producer(s) or develops software which runs on any platform the customer has or is acquiring, no matter who has produced it. The first case is nowadays more common in product business. However, the latter alternative, more common in project business, has its advantages. The software supplier is considered to be 'independent' and thus somewhat more flexible because technical incompatibility should not create any problems.

As for the remaining characteristics of tailored software business, the object and the nature of exchange as well as the production and the way it is organised are closely related. These characteristics are described in more detail in the next section. The fact that the customers of tailored software companies are domestic is understandable if we consider the nature of exchange (see also Hoch *et al.* 2000 pp. 42 – 45). Aside from the language barriers the bigger the physical or the time distance between the partners, the more difficult it is to co-operate in such a close interaction. Close interaction and the human-intensive nature of the production also reduces the number of customers a single vendor may have, especially if the company is a small one, which is often the case in Finland.

1.4.3 The nature of tailored software acquisition

To familiarise the reader with the context of the study, the next sections will describe the two most important elements of tailored software acquisition: the process and the people. The process of tailored software acquisition consists of several sub-processes: the project management, pre-development, contractor selection, development and post-development sub-processes. These processes are implemented by number of individuals usually in at least two groups, the steering committee and the project group. The different roles of these groups are also presented below.

1.4.3.1 The process

A single software acquisition process with a new vendor can be compared to the project marketing cycle, as both pass through similar stages. According to Holstius & Cova (1990), the cycle includes search, preparation, bidding, negotiation, implementation, and transition stage. From the buyer's perspective, the stages are need awareness, research on suppliers and contacting for advice, specifications, bidders list, request for proposal, exchange of information with the suppliers, analysis of proposals, short-listing, negotiations, new proposals, analysis of new proposals, negotiations, final assessment, final selection, and awarding the contract. However, the stages proposed by Holstius & Cova (1990) are numerous, and the software acquisition process rarely passes through all the mentioned stages.

In this study, instead of using the project marketing cycle, I will apply the processual description provided in the information management literature. According to Marciniak & Reifer (1990 p. 34) the process in software system sales consists of the project management, pre-development, contractor selection, development, and post-development sub-processes. All sub-processes are important in any tailored software acquisition, with the exception of contract selection. If the project is to be performed for a customer that the buyer company already has a relationship with, there is seldom a need for a contractor selection process. In the following sections, each sub-process is described.

The *project management* sub-processes start the project by preparing it for implementation, but are also in action during the whole project, thus sustaining its management (Marciniak & Reifer 1990 p. 34). Project management activities include project initiation, project monitoring, and control and software quality management. The buyer mostly undertakes the initiation activities, but the project management is a joint task.

Pre-development processes include identifying needs, developing the requirements for the system and developing system architecture. One or several potential sellers may work with the buyer to help determine the requirements, evaluate alternatives and establish concept feasibility. Requirements are not easy to specify, because at that point it is difficult to know exactly what is needed e.g. in situations where the software, once operational, will change the work flows (see also Kuisma 1996).

In order to *select the contractor*, the buyer releases a request for proposal (RFP), and after responses and negotiations chooses a contractor to develop the system (Marciniak & Reifer 1990 pp. 50–51, Ragowsky & Stern 1995 p. 52). Both parties make considerable efforts to prepare and respond to RFPs and to negotiate a contract.

There are three basic types of acquisition strategies for software systems: competitive, two-phase and sole source. If totally new software is being designed and developed, a competitive acquisition strategy can be used. Software vendors' competition for the project is based on an open solicitation that specifies definitive system requirements (Marciniak & Reifer 1990 pp. 52–53). The sellers' proposals are evaluated on the basis of predefined criteria, negotiations are held and one contractor will be awarded the project. An important characteristic is that the seller must already at this point convince the buyer that it is able to design and develop the required software according to all the terms of contract. The buyer has no means of being absolutely sure about the quality of the sellers'

performance, unless both parties already have a relationship to each other. Thus the buyer must trust the vendor in order to award the company with the contract (see also Ragowsky & Stern 1995 p. 52). This means that the relationship between a new potential seller and the buyer starts to develop already before the actual contract concerning the software is signed.

In a two-phase acquisition strategy, the project is divided into the following two phases: (1) the concept definition and (2) design and production of the software (Marciniak & Reifer 1990 pp. 54–55). The first phase is a competitive one, in which two or more suppliers are selected to further define the requirements, systems concepts, and possibly a design. After this phase, the buyer evaluates the performance of the seller or different sellers and usually selects only one supplier to continue the work in phase two to conduct the full-scale development.

The third type of acquisition strategy is sole-source acquisition; here the buyer negotiates and awards the contract to a single seller. Typically this strategy is applied when the buyer has a long-term relationship with the software supplier and wishes to continue this relationship. The sole-source strategy has its advantages for the buyer. Because the vendor is already familiar with the buyer's business processes, personnel, and the adp-environment (both existing software and hardware), the 'learning costs and time' will be smaller. In addition, working with one software vendor per one application is less complicated. Otherwise, during the transition time when the old system is still operational and the new one is being created, there would be two software suppliers in the buyer company working with the same system at the same time. This situation could be considered problematic; although large corporations use more than one software vendor, they are usually responsible for developing and/or maintaining different systems.

After the contract has been awarded to a certain seller, the performance, in other words the *development* of the software itself, begins. While the software is being created, the buyer monitors the seller's progress and compliance with the contract's provisions; these are the project management processes (Marciniak & Reifer 1990 pp. 50–52). The buyer and the seller identify problems and work as a team to correct them, if possible.

There are several models of developing software: a waterfall model, an incremental development model, an object-oriented model, a prototyping model, and concurrent engineering (Modelling a Software Quality Handbook 1991). If and when a certain model is followed in the software creation phase, it has an influence on the performance management phase because the model influences the relationships between the representatives of the customer and the individual designers. Irrespective of the model used, the working format is mostly project work, and it is also expected to remain the main format in the future (Merilä 1996). Therefore the acquisitions are commonly referred to as projects.

The acquisition project is not finished until *post-development* activities have been performed. These processes include installing the software, operating, supporting, maintaining, and – sometime in the future – also retiring the software (Marciniak & Reifer 1990 p. 35). These activities can be performed jointly by the buyer and the seller or the buyer can be responsible for the post-development as a whole.

Other not yet mentioned activities, e.g. verification (reviews and audits), validation (testing), documentation development, and training, are so-called *integral processes*. These processes are considered to be mainly management-oriented activities that support

the core processes of software development, as described above, and that take place either during the whole project or towards the end of it (in the case of training). They are performed mostly co-operatively but e.g. training can be organised so that the seller trains one person from the buyer company and that person then continues by training the rest of the users.

The project is normally considered finished when the seller has delivered an acceptable product and the system has become operational. However, the business relationship often continues due to maintenance activities and/or the development of new versions of the software or completely new systems.

1.4.3.2 The people involved

The process of tailored software acquisition described above involves a number of individuals from both the buyer and the seller company. These individuals have different roles in the process and are thus actively involved in different phases of the project. Individual roles and the types of groups typically formed are described in the following.

From the buyer company, following groups of employees are normally involved in the process: IT personnel, the management of the business unit or department which is acquiring the software, and the users of the software. Depending on the size of the buyer company and the type of the software, different department, business unit and headquarter levels can be involved. The larger and more expensive the software, the higher the level of management usually involved. In smaller companies, the number of individuals can be small, yet still the different roles are normally represented.

The IT personnel and the management are usually involved in every phase of the project, the IT personnel more in hands-on and the management usually more in project management type of tasks. The users are interviewed or their opinions concerning the requirements for the software are otherwise gathered during the planning phases, e.g. already before the contract is awarded to a vendor, but also during the more detailed design phase. Users also take part in testing the software. User training eventually involves all the users of the software, whereas in the previous phases only a sub-group of users can represent the total user base.

From the seller's side, the account/sales manager or the manager of the respective business unit usually has the first contacts with a new customer. He or she also negotiates the contracts, sometimes with the higher management and/or the project manager (if already appointed). The software consultants/developers design and create the software in co-operation with the customer's representatives and are guided by the project manager. Depending on the case, the buyer may offer project space, in other words office space for the seller's consultants/developers so that they are literally working within the buyer company. Otherwise the developers work at the vendor company and only visit the buyer company for e.g. meetings and user training sessions. The largest vendors may have special technical staff to install the software on the customer's hardware as well as trainers to ensure that all the users eventually learn the new software. In smaller vendors,

the software developers also train the users. Customer support answers the users' questions when the software is in operation.

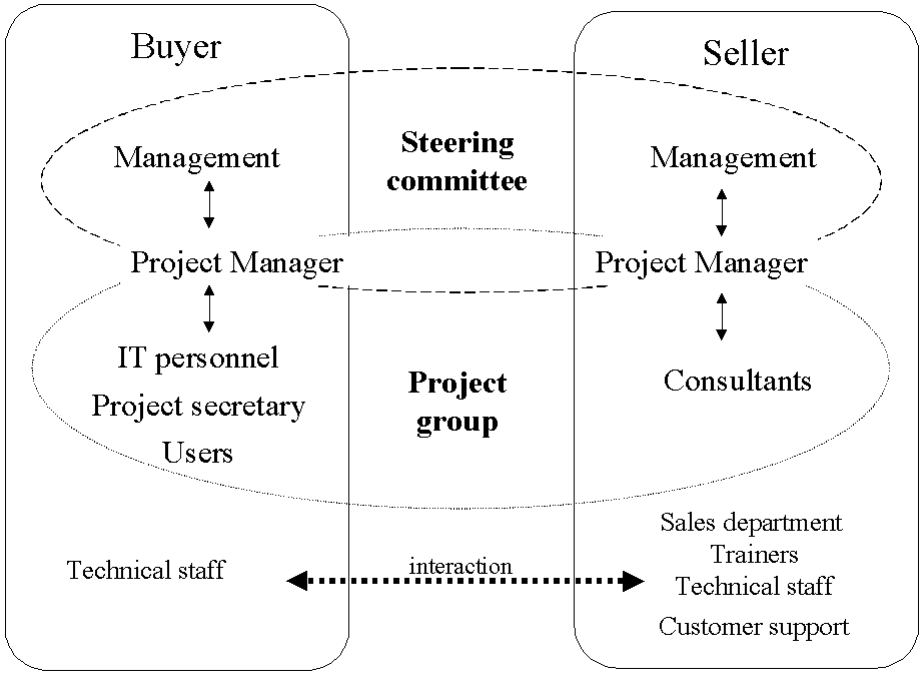


Fig. 2. The organisation of a tailored software project

The interaction between the individuals involved is usually organised in two main groups, the steering committee and the project group (see Figure 2). The general terms of agreement in computer business (Atk-94, drawn up by The Finnish Central Chamber of Commerce, The Finnish IT Services Association and The Finnish Information Processing Association[4]) requires a steering group to be set up containing empowered representatives of both companies. The general terms also require both companies to name a project manager. The project managers' responsibility is to insure that the project group executes the tasks stated in the project plan. The project managers report the status of the project to the steering group according to an agreed schedule or at least once a month. Thus, as they are members of both groups, the project managers link the work of the two groups.

[4] I use the ATK-94 general terms of agreement in computer business, because it was the agreement in effect during the two empirical cases.

1.5 Outline of the study

The first chapter of this study has shed light on the problem theme, i.e. relationships and their dissolution. The importance of the theme as a research topic and the objective of modelling the dissolution process have been discussed. The context of the study, tailored software acquisition, has been presented to the reader and its suitability for this research setting has also been addressed. Finally, the research question and its three sub-questions have been introduced.

The second chapter deals with the concepts of existing and dissolved business relationships in order to create the foundation for the building of a theoretical framework. The chapter continues with a discussion of the different natures of relationships and their ends. The original motivation for the establishment of a specific relationship may be closely connected with its dissolution; therefore this aspect requires attention. In addition, the factors influencing relationship dissolution are presented and classified as inherent elements of the dissolution model. The same chapter also contains the discussion of the process of dissolution. The nature of the process is elaborated and the different stages of the process are discussed. In addition to the description of the different stages that the process encompasses, the model also includes the different actor levels (individual, company, business relationship and network) in which the process is embedded.

Part 2 describes the empirical part of the study. First the case selection and the data collection is described, followed by a description of the methods of the analysis. Thereafter the two empirical cases are presented and analysed by comparing the empirical material with the *a priori* process model. The adjustments to the theoretical model that the case study prompts are also presented. The last chapter in Part 2, Chapter 6, compares the analysed processes and finalises the empirical grounding of the process model.

he third part of the study summarises the earlier discussion and presents an empirically grounded model of business relationship dissolution containing all the three elements: the nature of the relationship, the influencing factors, and the stages of the dissolution process. The study as a whole is assessed in Chapter 8. Finally, both the theoretical and managerial conclusions are presented together with suggestions for future research.

2 A tentative process model for business relationship dissolution in software business

2.1 Defining a dissolved business relationship

Relationship dissolution in a business-to-business context has been approached via terms such as switching behaviour or relationship break-up (Michell *et al.* 1992), disengagement from a relationship (Dwyer *et al.* 1987), withdrawal (Dwyer *et al.* 1987), termination (Michell *et al.* 1992, Ping 1995, Ping & Dwyer 1992) and dissolution (Ping & Dwyer 1992, Perrien *et al*. 1995). In this research, I have chosen to use the terms dissolution and ending interchangeably. Dissolution is a term commonly used in inter-personal relationship research on ending relationships (Duck 1981, Duck 1982), so I regard it as a suitable term for research interested in endings in a context of business relationships. Ending will be used interchangeably to avoid repetition. As for the remaining terms; switching behaviour is used more in consumer research (e.g. Keaveney 1995, Popkowski Leszczyc & Timmermans 1997). Disengagement will be used in this research to refer to one stage within the dissolution process. Withdrawal has already been used to refer to one disengagement strategy by Alajoutsijärvi *et al.* (2000) as well as Baxter (1985); thus this term will also be used here accordingly.

None of the above-mentioned studies presents an explicit definition of dissolution or a dissolved relationship. This indicates how little attention the topic of relationship dissolution has attracted. It also shows one of the major flaws of relationship studies, namely a lack of interest in defining the business relationship phenomenon itself. In this area Tähtinen and Halinen-Kaila (1997) have made an effort to define a dissolved business relationship.

A definition of an existing relationship in the tailored software context has been presented by Tähtinen (1997, 1999), using the so-called A-R-A Model by Håkansson and Snehota (1995b) as a starting point. “A business relationship in tailored software acquisition consists of interaction processes producing activity links, resource ties, and

actor bonds between the companies" (Tähtinen 1999 p. 69). This definition is also used in this study as a basis for defining a dissolved relationship.

Interaction processes refer to repeated exchanges, both economic and social, which are performed by the actor companies. These repeated exchanges create interdependence between the actors and as an outcome of that interdependence the actors themselves, their activities, and resources become connected. Consequently actors develop mutual bonds of commitment and trust; they adjust their activities to the partner's activities; and they connect their resources into chains.

Thus it is logical to state that all the elements from the conceptualisation - repeated exchanges or interaction processes, outcomes of interdependence (e.g. activity links, resource ties, and relational infrastructure) together with perceived continuity or relational actor bonds - are needed for a relationship to exist. However, the interest of this research lies in the non-existing relationships. Therefore, these are discussed next.

If one of the elements from the existing relationship is missing, a change in the relationship's nature has taken place. If a party no longer perceives the relationship as continuing in the future, and this is manifested in broken relational bonds of attraction, commitment and trust (Halinen 1997 pp. 240–272), the relationship is considered to be in a dissolution phase. If the interdependence erodes, i.e. the activity links, the resource ties, and the relational infrastructure between partners also are loosed, the relationship can be considered dissolved, although some exchanges might take place. This is because, according to the conceptualisation of an existing relationship (Tähtinen 1999 p 69) repeated exchanges form an essential, but not a sufficient element of a business relationship. In the situation, where no exchanges take place between the ex-partners of a relationship, the companies are no longer directly connected with each other.

To conclude a business relationship has entered a dissolution phase when at least one partner no longer views the relationship as continuing (i.e. reciprocal relational bonds have been broken) or the interdependency has otherwise critically decreased. This conclusion is in line with the definition of a dissolved relationship of Tähtinen and Halinen-Kaila (1997): "A business relationship is dissolved when all the activity links are broken and no resource ties or actor bonds exist between the companies.".

As Tähtinen and Halinen-Kaila (1997) state, it is probable that some personal relationships are maintained after the dissolution (see Havila 1996, Havila & Wilkinson 1997) and a lot of knowledge will remain in the actors' organisational memory, which continues to influence the way the ex-partners perceive each other. For example, a supplier may even keep the former customer's name in its reference list (Salminen 1997 p. 324) if the ex-customer allows it. The relational bonds created and maintained in actual intercompany interaction between parties fade away without the interaction, and along with them the bilateral expectation of relationship continuity.

The definition of a dissolved relationship by is irrevocably bound in time (Tähtinen & Halinen-Kaila 1997). If, at a certain point in time, a relationship can be considered to have ended and the parties have no mutual expectation of its future reactivation, the relationship is dissolved. This does not however rule out the possibility that the dissolved relationship could be re-activated at some point in the future. As time passes, the actors themselves, the business environment, and the surrounding network of relationships change, which may result in a need and willingness to rebuild the relationship.

Mutual expectation of relationship continuity is crucial for a relationship's existence (Tähtinen & Halinen-Kaila 1997). As the sociologist Simmel (1950 p. 123) has stated, it takes two parties to form and maintain a relationship but only one to end it. This means that the actions of one actor are sufficient to dissolve a relationship, even if the other actor still wishes it to continue. Of course, there may be situations where one partner is not able to end a relationship although it wants to. It may be too dependent on the other partner or experience some other reason, which hinders it. Despite this, it may be said that an actor may end a relationship but not start one on its own.

Mutuality also distinguishes a sleeping relationship (cf. Hadjikhani 1996) from a dissolved one. In a sleeping relationship, where activity links and resource ties may have been considerably weakened (or completely vanished), the parties still share a will to keep the relationship alive. This is manifested in the mutual relational bonds that still connect the companies because they continue to communicate with each other and may even carry out joint activities to keep the relationship alive.

It is important in the tailored software business context to distinguish between a sleeping relationship and a relationship, which is in a dissolution phase or has dissolved. Sleeping relationships can be re-activated through a new software development project, but they can also dissolve. A business relationship in tailored software business is in a sleeping phase when no project business exchanges take place, but social exchanges or e.g. few maintenance activities keep the personal relationship(s) alive, and both parties wish to continue the business relationship. A relationship is in a dissolution phase, if the buyer or/and the vendor are no longer committed and attracted to each other, although business exchange may still be going on. In other words, the relational bonds between companies are breaking. This means that no new software projects are being planned together. A relationship is dissolved when the activity links, resource ties, and actor bonds that once connected the companies are broken. This means that the vendor or/and the customer no longer take each other into consideration when planning their internal operations e.g. new software projects. It has to be noted that e.g. some occasional software maintenance can still be executed by the vendor, but that those exchanges are insufficient to keep the above mentioned connections alive.

It has to be noted that it is a very difficult task to completely define when a business relationship no longer exists. Still, the question is important from the view of theory development, and that is why it was taken up in this study. In practise, it is more useful for managers to understand when a business relationship has entered a dissolution phase.

Before discussing the reasons for relationship dissolution, I will examine the unique characteristics of relationships in tailored software business. The definition of an existing relationship refers to a process. A business relationship is not a static thing, but an ongoing and changing process. In processes, antecedent conditions shape the present and future (Pettigrew 1992). Thus, in relationships, history affects the present as well as the future. Therefore, the nature of the business relationship is assumed to affect also its dissolution phase and it will be discussed next.

2.2 The nature of a business relationship and type of ending

Various factors can pave the way for business relationship dissolution, either individually or in combination with other factors. In order to understand the factors influencing relationship dissolution, or the ending process, it is necessary to first consider the nature of the dyad and the original motivations for relationship establishment. The nature of the relationship may already entail some of the reasons for its dissolution. As the reasons are assumed to affect the course of the dissolution process, the nature of the relationship merits attention.

Tähtinen and Halinen-Kaila (1997) have, based on Caplow (1968 pp. 5–7), distinguished three types of business triads: continuous, terminal, and episodic. On the basis of this classification, Halinen and Tähtinen (1999) have identified different types of relationship's ending: chosen, forced, natural, desired, and predetermined. Another classification of dissolution types is presented in Hocutt (1998). She names three basic types as consumer's decision, seller's decision and mutual decision. However, this classification is problematic, because relationships can also dissolve without any purposeful decisions by the parties. In fact, Hocutt (1998) herself describes such situations (e.g. when a buyer involuntarily terminates or is forced to terminate), but still sees these as representatives of the consumer's decision-type of endings. In contrast, the classification of Tähtinen and Halinen-Kaila (1997) is based on the assumption that an actor cannot always make a decision about terminating a relationship. It may not have any other option. Moreover, other actors in the network may force a vendor or a customer to end a certain relationship. If this is the case, it is not the partners that make the decision, but the other actors in the network. In order to keep this distinction clear, I will apply the classification of Halinen and Tähtinen (1999) to dissolved business dyads (see Table 2).

Table 2. End of a relationship - a classification. Source: Halinen & Tähtinen (1999)

The nature of a relationship	Type of ending
Continuous	Chosen, Forced, Natural
Terminal	Desired
Episodic	Predetermined

In *continuous dyads*, the actors are oriented towards each other for the time being; thus the dissolution comes unexpectedly from both parties' initial point of view. The reason for dissolution may be the other actor's dissatisfaction with the relationship and desire to exit from it. This type is labelled as chosen end (see also Hocutt 1998). Dissolution may also take place without any decision having been made on the part of the actors. For instance, a change in the broader network in which the dyad is embedded may force the actors to end their relationships (forced death). The end of a relationship is also forced if the partner company ceases to exist (e.g. goes bankrupt, see e.g. Buttle & Ahmad 1998)

leaving the ex-partner widowed. A relationship may also gradually become obsolete, as the need for business exchange diminishes; this is labelled as natural end (see also Hocutt 1998).

Terminal dyads are unwillingly extant as the actors would prefer to operate independently. Thus dissolution is their desired outcome, to be realised as soon as circumstances permit (desired end). *An episodic dyad* is established for a certain purpose and/or time period, and thus dissolves when it has served its purpose or the time period has elapsed (see Duck 1981 p. 14, Serapio & Cascio 1996). The dissolution of an episodic dyad is thus predetermined, although the dyad may also break up before the predetermined point of dissolution. In such cases the ending may be characterised as chosen or forced.

A few words have to be said about the element of continuity in terminal and episodic relationships. At first glance it may seem that there is no continuity if a dyad is a terminal one. But let us have a closer look. In terminal dyads the actors are aware that their relationship has continuity, not only in the past, but also in the future, because of the circumstances which do not allow them to end the relationship. Thus the relationship is perceived to continue unless the circumstances change and it can be terminated. The element of continuity is not solely related to the partners' wishes concerning the future of the relationship, but also to the fact that the present interactions affect future interactions.

In an episodic dyad, the continuity is limited in time. The partners assume that their relationship will continue until it has served its purpose or a certain time period has elapsed. During this period, interactions are affected by earlier interactions and also affect future interactions. Moreover, a relationship meant to be episodic in nature can change into a continuous one, if its intended purpose changes. So a relationship can also change its nature during its lifecycle.

A business relationship between a company acquiring tailored software and a software producer can be classified in principle in each of the three categories depending on whether it is agreed that the software producer provides the customer continuous maintenance of the software produced or not. If the purpose of the relationship is only to produce the tailored software and the relationship is to end when the system becomes operational, it is an episodic dyad by nature and its dissolution is predetermined. On the other hand, if the business relationship is meant to continue with maintenance, new versions of the software, and/or new applications, the relationship is continuous by nature, and its possible end is either chosen, forced or natural, depending on the causes. However, it seems unlikely that many business relationships in tailored software would be a terminal. Unless a software vendor has to obey some greater forces, e.g. headquarters' decisions it can select the customers it wants to have a relationship with, at least in Finland.

This chapter has discussed the concepts of a dissolved business relationship, a sleeping business relationship and a business relationship in the dissolution phase in tailored software business. It has been suggested, that the nature of the relationship influences its potential dissolution process. In tailored software business, relationships are most likely to be continuous or episodic, and thus their deaths will probably be chosen, forced, natural or predetermined. However, this classification presents, as classifications often do, the ideal types of relationships and their dissolutions. As already mentioned, a

relationship can change its nature thus influencing its future, whether it be further development or dissolution.

In the next section the elements of business relationship dissolution are conceptualised. The section starts with a discussion of the reasons for relationship dissolution. It also presents a counterforce to the reasons, namely the attenuating factors. The potential disengager may find the attenuating factors more significant than the reasons for terminating the relationship, and decide not to continue the dissolution process. The latter part of the section is devoted to the process of dissolution.

2.3 The reasons for relationship dissolution

In taking a closer look at the reasons for dissolution, a distinction can be made between two groups of factors that underlie dyadic dissolution: predisposing factors and precipitating events[5] (Tähtinen & Halinen-Kaila 1997, see also Duck 1981 pp. 17–24). *Predisposing factors* already exist when companies enter into a relationship and form a dyad. They can be related to the task the relationship is set up to accomplish, to the actors themselves, to their dyadic relationship or to the network they are embedded in. Predisposing factors make the relationship more prone to dissolution (cf. Duck 1981). Episodic (and also terminal) dyads carry with them a predisposition to termination by their very nature, but predisposing factors may also be less visible and less consciously perceived.

Precipitating events, for their part, bring change to the relationship and accelerate the process of dissolution (Tähtinen & Halinen-Kaila 1997). They function as impulses for actors to terminate their co-operation. Precipitating events may emerge within the companies themselves, in their dyadic relationship or in the broader business network in which the dyad is embedded (see also Felmlee *et al*. 1990, Håkansson & Snehota 1995a).

2.3.1 Predisposing factors

Studies on business relationships have revealed a number of predisposing factors that seem to incline a relationship to dissolution. These factors can be divided into task-related, actor-related, dyad-related, and network-related factors.

In the context of the tailored software industry, the task can turn out to be a predisposing factor. The task of creating tailored software is highly abstract. The customer is not usually able to specify the requirements fully, not even when working with the seller, because in the beginning of the project no one knows exactly what is needed to solve the problem (Kotovirta 1997). After the requirements have been stated, both actors may understand them differently, because they still are formulated at an

[5] For a three class categorisation of customer switching determinants: a pushing, a pulling determinant, as well as a swayer, see Roos 1998, 1999.

abstract level. Furthermore, during the project, the requirements are often changed or refined. All this means that the task of developing tailored software includes complexity and uncertainty (Lyytinen, Mathiassen & Ropponen 1993 pp. 8–9, Ropponen 1993 pp. 71–72). In addition, when the size of the task increases, so do its complexity and uncertainty. These are examples of task characteristics that inherently bear the potential for creating favourable conditions for precipitating events to occur during the relationship.

Certain company characteristics (e.g. lack of professional competence or poor economic performance) seem to make companies more prone to experience relationship dissolution (cf. Duck 1981 p. 17). Lack of competence may here refer to missing interaction experience of a company (Håkansson 1982 p. 18, Möller & Wilson 1995b p. 30) or its poorly stated or complete absence of an operational overview of factors governing relationship maintenance. Poor company performance may also foster relationship termination (see Michell *et al*. 1992, Perrien *et al.* 1994). In a marketing channel context, Ping (1995) found that poor retailer performance – e.g. low total revenue or revenue per employee – positively affected a retailer's intention to exit a relationship.

A poor choice of partner is a dyad-related predisposing factor because relationship establishment always concerns two parties. A poor partner choice means mismatches and dissimilarities between the partner companies. Dissimilarities refer, for instance, to differences in company culture(s) and management style(s) (Serapio & Cascio 1996) or in company size(s). In tailored software business, the buyer companies are large, yet the vendor can be considerably smaller. In addition, different interests and expectations regarding the relationship and/or incompatible needs and resources between the parties may later lead to relationship dissolution (Halinen 1997 p. 181, Möller & Wilson 1995b p. 37, Park & Russo 1996). On the other hand, Park and Ungson (1997) have suggested that significant operational overlaps or rivalry in some aspects can create a predisposing mismatch between the partner companies.

The nature of the larger network in which the evolving relationship is embedded may also be a predisposing factor. If the number of available alternatives is high, and if the ‘rules’ of the network allow frequent relationship terminations, a new relationship is more prone to dissolution than it would be in some other network (Håkansson 1982 pp. 19). Concerning the Finnish software industry, the number of alternative suppliers who also have knowledge of the customer’s industry is not high, but, on the other hand, the software industry itself is dynamic with constant technological changes. Technological changes may offer a customer company a chance to re-evaluate its relationship with a software vendor. However, the present state of the Finnish tailored software business industry does not encourage buyers to switch their vendors (see sub-section 1.4.1).

Duck (1982 p. 5) associates the actor-related predisposing factors with a latent model of dissolution which he terms "pre-existing doom". It refers to the assumption that actors lacking certain characteristics will be likely to experience relationship dissolution. Similarly, the absence of certain dyad-specific characteristics may be assumed to increase the possibility of business relationship dissolution. Moreover, the present characteristics (e.g. mismatches between partners) or the absent characteristics (e.g. a lack of competence) may create favourable conditions for a variety of precipitating events to occur, to be received and to be acted upon.

2.3.2 Precipitating events

Precipitating events bring into a business relationship a change which accelerates its dissolution. These events may be sudden and singular, causing radical change in the relationship, i.e. its dissolution (see Halinen *et al.* 1999), or they may be part of a series of events that gradually create pressure on one or both of the actors to take measures to break up the relationship. This means that one precipitating event can start a 'domino-effect', which creates more severe effects than the original event itself. It is essential to acknowledge that it is not the precipitating events *per se* that cause the break-up, but the behavioural and/or attitudinal responses of the partners to these events which lead to the dissolution (see Duck 1981 p. 20, Halinen *et al*. 1999).

Precipitating events may originate in both partner companies. For instance, bankruptcies or changes in company strategy, organisation, ownership, or personnel may potentially lead to dyad dissolution (see e.g. Halinen *et al*. 1999, Michell *et al*. 1992, Perrien *et al.* 1995, Rosson 1986). When for example, the strategies and goals of a company are modified, extant business relationships may no longer fit the new strategy nor satisfy new needs and are therefore terminated (Maute & Forrester 1996, Michell *et al.* 1992, Seabright, Levinthal & Fichman 1992, Serapio & Cascio 1996). Unpredicted changes in the buyer company's business strategy or organisation during the development of tailored software may even make the software obsolete (Oksanen 1998, Salmela 1996 p. 193). In service companies in general, personal relationships and changes in them have often proved influential in both relationship maintenance and termination (Halinen 1997 p. 209, Michell *et al*. 1992, Perrien *et al.* 1995, Reichheld 1993). Especially in tailored software business, the personal relationship between the contact persons from both companies is very influential (see sub-section 1.3.2).

Performance failures are potential precipitating events emerging from dyadic interaction. Poor performance in singular exchanges (see e.g. Keaveney 1995) in projects or dissatisfaction with the entire relationship (e.g. Dowling 1994, Halinen 1997, Michell *et al*. 1992) may result in dissolution. Dissatisfaction may be due to factors such as undesired relationship management, e.g. unfair use of power in a relationship, or violation of the procedures and norms established in previous interactions (Serapio & Cascio 1996). Typical performance failures in the software industry include the inability to keep the budget and/or to meet the schedule as well as failures in the technical quality of the software (Hokkanen & Telama 1989, Ledgard 1987 p. 131, Marciniak & Reifer 1990 p. 10). Performance failures may also be due to another precipitating event in either company. A company may e.g. suffer from a decrease in its ability to perform the task due to an increased employee turnover (Seabright *et al.* 1992). Changes in the relationships include also any changes in the contracts between the partners; e.g. price increases or changes in the delivery arrangements are potential precipitating events (see Buttle & Ahmad 1998).

A dyadic relationship itself includes inherent quandaries that can turn the relationship into a burden (Grayson & Ambler 1997, Han, Wilson & Dant 1993, Håkansson & Snehota 1995a) and thus function as precipitating events. One partner may perceive that the relationship no longer promises the future gains it is expected to achieve, and that it hinders the possibility to engage in a better exchange relationship, which might become available in the future, if not at present. Loss of control due to becoming too dependent, uncertainty about outcomes, and high costs of relationship maintenance may also be too much for a partner to take. In other words, the party may perceive the relationship commitment and rewards to be too asymmetrical to be acceptable (Gundlach, Achrol &Mentzer 1995, Maute & Forrester 1996).

Precipitating events emerging from the broader network include different circumstantial events and the effects of other linked actors on the focal dyad. Circumstantial events refer to changes in the economic, political, social or technological conditions of companies, which are mediated to the focal relationship through its many links with other actors in the business network (see Halinen *et al.* 1999, Mattsson & Hultén 1994, Rosson 1986). Various changes may occur in the position of the actors within their network, which then precipitate relationship dissolution. Important actors may for instance disappear or new actors enter the network. Competitors may make attractive offers to either one of the two partners and break up the existing relationship (Håkansson & Snehota 1995a, Keaveney 1995, Ping 1993, Seabright *et al*. 1992). The network can be highly structured, so that a change in one relationship travels through the whole network. An example of this is U.S. hotel industry; during the years 1995–1996 nearly every major hotel chain changed its advertising agency (Gleason 1997)[6]. One change that can be observed in today's Finnish software company network is that larger IT-companies buy smaller IT-firms, and therefore the network is in a constant change (Anttila 1998).

Although a fairly clear-cut classification of the sources of precipitating events is used here, it should be noted that these sources are highly interdependent (Tähtinen & Halinen-Kaila 1997) and perhaps overlapping in practise. Change always takes place in interactions between business actors. It is generated in business dyads, received in them and potentially transmitted to other connected relationships (Easton & Lundgren 1992, Halinen *et al*. 1999). This means, for instance, that the response of a single actor to an event arising from the broader network may bring about changes in one or more of the actor's relationship(s) and create pressure to dissolve it (them).

2.4 Factors attenuating the reasons for relationship dissolution

In the previous sections, the reasons for relationship dissolution were described and divided into predisposing factors and precipitating events. Although these reasons exist

[6] The reason was that no hotel chain allowed its ad agency to have competing accounts. Therefore the first switch caused the advertising agency to break up with another hotel chain they had been working for. That chain had to choose yet another agency, which had to let their hotel account go and so on.

and/or may enter a relationship, this does not mean that the relationship necessarily starts to dissolve. There are also factors that moderate the effect of the causes for dissolution; they are generally termed attenuating factors. They may explain why some dyads are terminated in response to a precipitating event while others survive the very same event. The perception of strong attenuating factors may even influence an actor to stop or stall the dissolution process. Attenuating factors relate to the actors themselves, to their dyadic relationship or to the surrounding business network (see Figure 3).

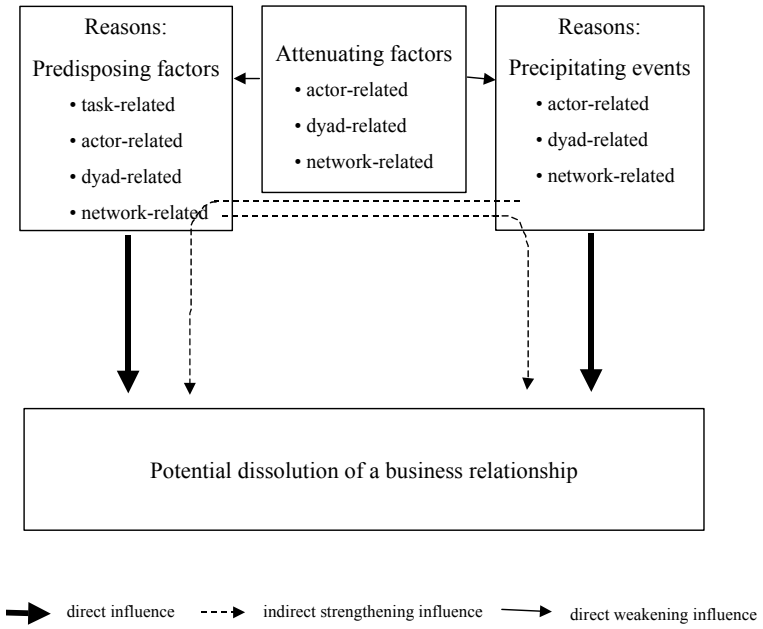


Fig. 3. Attenuating factors and reasons for business relationship dissolution.

Actor related attenuating factors – i.e. certain company and even individual's characteristics – can contribute to the company's efficiency and effectiveness in relationship maintenance. A company having a considerable amount of experience in managing relationships, and perhaps also their dissolution, has had opportunities to learn from its experience (Möller & Wilson 1995b p. 30). Thus it should be better prepared to take the actions needed to save and maintain relationships. In tailored software industry, a company can e.g. specialise in customers within a few industries, say finance (banks and insurance companies) or consumer goods retailing. In this way the company gathers industry-specific knowledge, and with this knowledge it may be better prepared to manage its customer relationships.

However, the fact that a relationship is a process involving two companies complicates the issue further. Company A might have little interaction experience prior to forming a relationship with Company B. Company B might already be very experienced, and during their relationship this factor related to B attenuates the potential predisposing factor of

Company A being inexperienced. On the other hand, if both actors are experienced in relationship maintenance, they might be able to maintain their relationship in spite of some performance failures, which otherwise could result in dissolution.

The state of a relationship, an example of a dyad-related factor, is likely to moderate the effects of precipitating events on potential dissolution (see e.g. Halinen 1997 p. 277). The state of a relationship may vary from strong to weak, depending on the nature and strength of the bonds between parties as well as the interdependencies created by activity links and resource ties. In relationships with strong relational actor bonds of trust and commitment these bonds, as well as personal relationships can function as attenuating factors (Hocutt 1998, Maute & Forrester 1996, Seabright *et al.* 1992, Håkansson & Snehota 1995b). If the overall relationship quality is perceived to be high, it also moderates the effects of the events and factors, which might otherwise lead to relationship dissolution (Bowman 1997, Ping 1993, Withey & Cooper 1989). On the whole, strong actor bonds, resource ties, and activity links increase switching costs, which attenuates the effects of precipitating events and predisposing factors (Bansal & Taylor 1999, Heide & Weiss 1995, Jones & Sasser 1995, Ping 1997). However, Weiss and Anderson (1991) present tentative evidence that the manager may emphasise the costs of establishing new relationship more than the costs of dissolving the old one in her or his cognitive model of switching costs.

In tailored software business switching costs are highest during a software development project. Although relationships have been known to break even in the middle of a project, they are usually very costly. Often the situation is that even a failed project is difficult to stop because of project escalation. In project escalation, individuals become emotionally attached to the project and gain status as members of the project, which affects their way of assessing the benefits the company itself receives from the relationship (Keil 1995). The dissolution is less costly in between projects, during a sleeping period, when the software can be maintained by the customer company, and when the connections between the partners are mainly social.

A lack of alternative partners functions as a network-related attenuating factor (Withey & Cooper 1989). A company may have to remain in a relationship although it would prefer to end it, if no alternative partner is available. In relationships in which technology plays an important role, this can also set tight limits on the number of the alternative partners. Moreover, the network may put social pressure (if my friends are not your friends, you are not my friend) on an actor to remain in a relationship even if reason(s) for dissolution exist (Felmlee *et al.* 1990). The focal relationship may be of great importance to the other actors in the network; therefore they use pressure to protect their own interests.

Sections 2.3 and 2.4 have discussed the factors affecting relationship dissolution, either promoting it, as the reasons do, or hampering it, as the attenuating factors do. The reasons were divided into more static predisposing factors and dynamic precipitating events, which also affect each other. In the tailored software context, the most probable predisposing factors are related to the complex task of developing tailored software and the dyad-related factor of mismatch in the partners' sizes and/or resources. The most probable events that can promote relationship dissolution in tailored software business are changes in partner companies' personnel and performance failures in the relationship.

Cost overrun, inability to meet the time schedule and failures in the technical quality of the software are common in tailored software development.

Attenuating factors moderate the effects of the above reasons. A buyer-seller relationship in tailored software is a project-based relationship. Therefore, as the relationship itself has more intensive (during the development of new software) and less intensive (during the software maintenance) phases the influencing factors may follow the same fluctuation. The process of relationship dissolution can thus be initiated by a different combination of reasons. Depending on the software project's status, i.e. whether it is ongoing or not (sleeping relationship), different factors may affect the dissolution process with different force.

2.5 The process of relationship dissolution

2.5.1 The nature of the process

By process I refer to the nature, sequence, and order of activities and events that unfold over time (Halinen 1997 p. 15, Van de Ven 1992 p. 170). The process of dissolution disconnects the former partner companies from each other by cutting the activity links, the resource ties, and the actor bonds that have kept them together. The deterioration of these bonds also affects the interaction between the companies. To be able to analyse a dissolution process, or any process, it is useful to divide it into smaller and shorter periods, for example activities, events and stages. Thus I will now describe the different periods that will be used in this study.

As the focus of the analysis in this study is those changes in a relationship through which the relationship dissolves, I have modified a categorisation of the aggregation levels of a relationship presented by Holmlund (1997 p. 95). Her categorisation has its roots in service and relationship management as well as the Interaction and Network Approaches and is therefore a suitable basis for this study. The modification is done to emphasise the processual focus on dissolution and to bring the time aspect more explicitly to the surface. This is also my reason for using the concept of period instead of level, which is a more hierarchical concept and will be used when referring to different actor aggregations (individuals, departments, companies etc.).

My model of the different periods in a dissolution phase of a relationship is pictured in Figure 4. The different periods in a relationship contribute to the dissolution of the relationship, thus forming the process itself. The process weakens the activity links, the resource ties, and the actor bonds until they break down and no longer connect the companies.

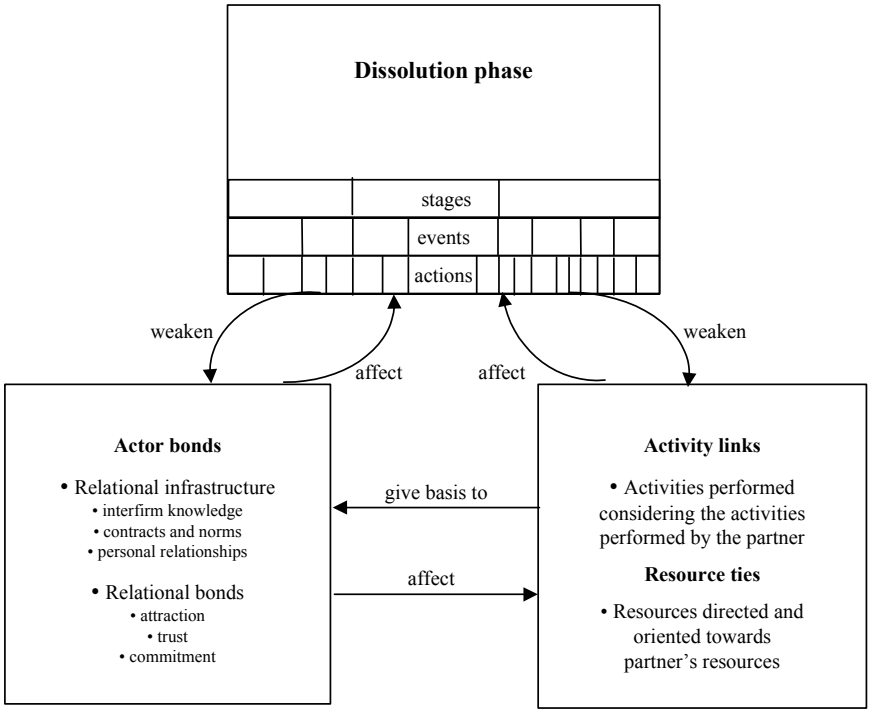


Fig. 4. Different periods (actions, events, stages) in the dissolution phase of a relationship and their effects on the connections between the focal actors

The shortest period, actions, is the same as in Holmlund's (1997) model. It refers to individual acts, e.g. an e-mail or a single discussion between the representatives of a buyer and a seller. I see it as also referring to specific decisions made in the companies.

The next period is labelled 'events' ('an episode' in Holmlund's model). Several interrelated actions form an event, for example, several discussions, meetings, and the actual signing of a contract constitute a contract negotiation event. An event, according to The Advanced Learner's Dictionary of Current English (Hornby, Gatenby & Wakefield 1972) refers to "a happening, which is usually something important". By using the concept of event, the researcher's focus of analysis dictates what s/he considers to be important. In this study, only those events considered to be influential in the dissolution process are analysed.

The next period is labelled 'stages' (corresponds Holmlund's 'sequence level'). A stage refers to "a point, step or period in development" (Hornby *et al*. 1972). A stage consists of interrelated events. A stage is defined as a part of software project, e.g. when a requirements analysis and a feasibility study are awarded to the seller as a part of the total project. On the other hand, depending on the time frame of the analysis, a long relationship between a seller and a buyer of tailored software can consist of several

projects, which could also be analysed as stages. So the different levels of interaction can be used as a flexible tool when analysing relationships and relationship portfolios.

The acts and events can also be interrelated in other ways. When analysing a dissolution process, the issue that interrelates individual acts, events, and/or sequences is not always the task they are to accomplish, but the 'side-effect'. For example, some disagreements may arise between the buyer and the seller during a meeting. These disagreements, if not resolved, can influence the meetings to follow, although the meetings otherwise would not have been interrelated. As a result, several acts can be interrelated from the viewpoint of the tension that stemmed from the original disagreement. In this way, acts and events can form stages. Another example would be the development of commitment. There may be several acts forming several events, which are important in the development of the bond, yet other events occurring at the same time can hinder the emergence of commitment. Thus the relation between different acts and events can vary depending on the focus of the analysis. In this study, a stage is seen as a period in the dissolution process.

Before reaching the period of the relationship, I suggest another time period to be added into the model. 'A phase' refers to "a stage of development" (Hornby *et al*. 1972) but I use it to describe the different periods in a relationship's development. Dwyer *et al*. (1987) have already used the term in their relationship model to describe the awareness, exploration, expansion, commitment and dissolution phases. Thus in this study, the dissolution phase refers to the dissolution process.

If we want to extend the time period, the relationship itself would be the next logical period, referring to the dyadic process and containing all the phases the focal relationship can travel through. In the next section, the actions performed by the parties during the relationship dissolution phase are described in stages. Each stage interrelates those actions and events that together contribute to the dissolution process. Different stages affect relationship interdependence differently and thus form distinct periods within the dissolution process.

2.5.2 Existing literature on relationship dissolution process

Within social psychology, Duck's (1982, 1998) models of dissolving personal relationships have started a stream of research into human relationship dissolution. Duck describes dissolution through four stages, namely the intra-psychic, dyadic, social and grave-dressing stages[7]. Duck's models are not directly applicable to business research because of the differences in business and personal relationships, with respect to their nature and the number of actors as well as the actor levels involved. However, they have provided a good starting point for business research on dissolution.

Duck's models have been incorporated into marketing research in studies by Dwyer *et al.* (1987), Ping and Dwyer (1992), and Tähtinen and Halinen-Kaila (1997). The last two

[7] Duck uses the term 'phase', but here the period is labelled 'stage', as described in previous section.

models have focused on relationship dissolution and thus merit extra attention. In describing the models I will also explain that they have some drawbacks in this research setting and thus cannot be directly applied. However, they can and will be used as a basis for model building.

In a model of channel relationship termination, Ping and Dwyer (1992) suggest two phases – committed and dissolution – which are further divided into seven stages, namely the positive, negative, intrapersonal, intracompany, intercompany, public, and aftermath stages. The model concerns established, committed channel relationships. A single actor's chronic dissatisfaction with a relationship is proposed as the primary explanation for relationship dissolution.

Business relationship research has, however, shown that termination may occur in any of the phases of a relationship's development (see e.g. Halinen 1997 p. 282, Rosson 1986 p. 211). The most vulnerable time seems to be the first years of existence (Bowman 1997, Rosson 1986)[8]. Moreover, Duck's (1982) as well as Ping and Dwyer's (1992) models both describe the dissolution process of a continuous relationship, in which one actor has taken the decision to end the relationship. Business relationships may, however, end in several ways and without any purposeful decision by the partners, as in forced and natural death.

The model of triad dissolution by Tähtinen and Halinen-Kaila (1997) includes seven stages. In six of these the dissolution advances, namely in the intrapersonal, intracompany, dyadic, triadic, network, and aftermath stages. The triadic stage describes the progression of a dissolution process within a net of three relationships. The seventh stage describes the repairing process, which may end or at least stall the relationship dissolution.

With the exception of aftermath stage, the labels of the stages do not actually reveal much about their contents, i.e. the events that take place and the actions that are performed during the stages. In addition, the visual presentation of the above-mentioned dissolution models is rather straightforward; it neither reveals the complexity of the process nor its different actor levels. Moreover, the research approach in the study based on the channels literature by Ping and Dwyer (1992) differs from the one used in this research. However, the study of Tähtinen and Halinen-Kaila (1997), which models triadic dissolution applying Interaction and Network Approaches is closer to this study. In this study the single relationship is the focus, but it is also acknowledged that other relationships are connected to the dissolving one, and that the network of relationships affects the dissolution and vice versa.

2.5.3 The stages of relationship dissolution process

The dissolution of a business relationship is likely to be a complex process, since it always involves not only the partners, but also various actor levels and network actors

[8] For recent contradicting results concerning consumer relationships see Palmer, Keown-McMullan and Beggs, 1998.

(people, companies, dyads and broader networks). As Dwyer *et al*. (1987) suggest, more than just one stage would be necessary to describe the process over time.

In Figure 5 the stages of the dissolution process, their levels of appearance and the various ways in which the process may proceed are presented. The model distinguishes seven stages in the dissolution process of a business dyad. Both the assessment and the decision-making stages occur within one company, whereas the communication and disengagement stages occur in intercompany interaction between the two parties. The network communication stage broadens the perspective to the network of actors surrounding the dyad, and finally, the aftermath stage potentially involves all of the levels identified.

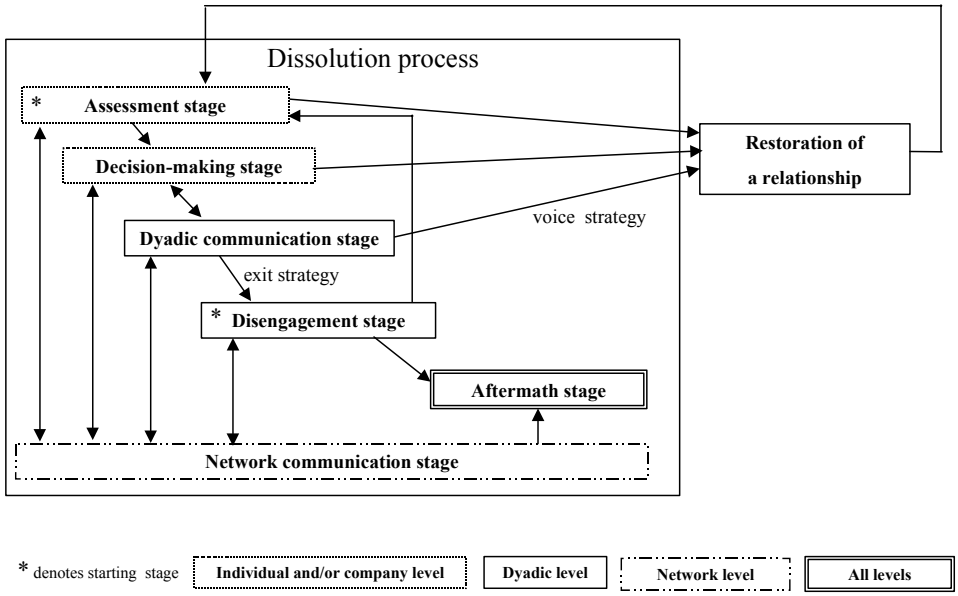


Fig. 5. Stages of business relationship dissolution process

It is suggested that the process starts with the assessment stage and continues to the decision-making stage and to the dyadic communication stage. The dyadic communication stage is the last of the three stages during which the dissolution process may be stopped and the relationship moved into a restoration process. Unless restoring actions are taken (or if they are unsuccessful), the dissolution process continues. If an exit strategy is chosen in the dyadic communication stage, the disengagement of the connections between companies will begin to take place. Communication with other actors in the network can take place already after the initial assessment stage, but also during and after any other previously mentioned stage. The message, which is communicated during the network communication stage, or the information that is sought from the network actors may be different depending on which stage preceded this one. The dissolution process ends in the aftermath stage.

However, it has to be noted that the stages presented here are a combination of all the stages the dissolution process may travel through. Not all the stages occur in all dissolutions, and their order of appearance can also vary. The nature of the relationship and the reasons for its dissolution affect the process, its stages and their order of appearance. Therefore, what is presented next is a description of only one kind of a dissolution process. The stages themselves are described in the following sections by referring to the actors' actions during the important events at each stage. As an example I will use a continuous relationship with a chosen end where the process starts from the assessment stage.

2.5.3.1 The assessment stage

In the assessment stage the reasons for dissolution and the attenuating factors are considered. A competitor can make an attractive offer thus triggering the assessment, or the individual with a day-to-day responsibility for the relationship's maintenance can perceive it as negative (Ping & Dwyer 1992 p. 223). This individual (or several people in boundary-spanning roles) assesses the relationship and the possibilities for ending it. The person(s) in charge may have the authority to end the relationship or may need to suggest its dissolution to a superior; this moves the dissolution process to a company level. Here the initiator will try consciously and/or unconsciously to convince the organisation of the necessity or the benefits of the dissolution.

The company's potential to break activity links and resource ties with the partner and replace that partner with some other actor will then be considered. Perceived switching costs have an important role in this assessment (see Hirschman 1981 p. 234, Hämäläinen 1993). If the termination of a relationship is not considered possible or profitable because of the attenuating factors, the actor will not continue the dissolution process but the maintenance of the relationship.

While the relationship and its potential ending are being assessed, business exchange and other interactions with the partner continue (Tähtinen & Halinen-Kaila 1997). However, the assessment in itself may also distract the initiator's attention from the relationship maintenance, and the partner may also perceive this. The initiator's willingness to make further adaptations and investments in the relationship or to exchange new information decreases, and his/her bonds of attraction, trust, and commitment weaken.

2.5.3.2 The decision making stage

In the decision making stage, either the individual having the authority or a group in the company makes decisions about the relationship's future (Tähtinen & Halinen-Kaila

1997). There are two main strategy options available to the firm: exit or voice (Helper 1993 p. 142, Hirschman 1975 p. 4)[9].

Adopting an exit strategy means that the company aims to end an existing relationship and perhaps to start to find a new partner. The voice strategy implies confronting the reason for potential dissolution together with the partner, after which both companies take steps to restore and maintain the relationship. The reasons for dissolution as well as the attenuating factors influence the strategy choice. Important attenuating factors, for example the lack of alternative partners, guide the choice towards voice. Likewise, factors such as strong dissatisfaction with the entire relationship guide the choice towards the exit.

If the restoration process is successful, the dissolution process may end there. If not, or if the actor is not able or willing to use a voice strategy, dissolution will advance. Before this, the company also has to decide how to notify the partner about its desire to exit. The company may wish to delay this notification because of attenuating factors in order to e.g. enhance the availability of alternative partners, and/or to reduce potential switching costs (see Ping & Dwyer 1992 p. 226, Sutton 1987).

2.5.3.3 The dyadic communication stage

In the dyadic communication stage the partner wishing to exit the relationship communicates its intentions to the other partner. This communication can be very direct and explicit, but it is not necessarily so. The exit intention can also be communicated indirectly, for example through changes in behaviour or even through no action at all. [10] The different ways of communicating one's exit wishes are labelled here as exit strategies (Alajoutsijärvi *et al*. 2000).

There is a limited research on the communication strategies in business relationship dissolution. Hirschman's (1975) well-known Exit-Voice-Loyalty framework serves as the basis for studying the communications strategies. The exit strategy of Hirschman (1975 p. 4) is a very straightforward one: "Some customers stop buying the firm's products or some members leave the organisation: this is the exit option.". Business relationships by definition involve interdependencies such as ties, bonds, and links, which complicate the dissolution of business relationships. The exit option as stated in Hirschman (1975 p. 4) is

[9] Some authors (e.g. Ping 1993, Withey & Cooper 1989) use also loyalty (Hirschman 1975 p. 77) as a way of responding to dissatisfying situations. Here I use only the two main responses presented by Hirschman: exit and voice. Hirschman (1975 p 77) defines loyalty as "a special attachment to an organisation" which influences the choice of using exit or voice (see also Hämäläinen 1993). This is also the definition that is used in this research.

[10] Communication is understood here in a broad sense, following the notion of language and body language. Communication here includes the totality of communicative behaviours (Key 1980), spoken and written communication and such acts (e.g. increasing prices to escalate relational costs) to which the other party assigns a relationship-specific meaning. In this sense, verbal and non-verbal expressions are a means of establishing and maintaining contact or interaction between people as well as breaking relationships (Key 1980 p. 4). Lack of communication is also considered communication. It can also be perceived as an act, i.e. the act of deciding not to communicate.

not able to grasp these factors. Therefore, a combination of research on disengagement strategies used in intercompany relationship dissolution (Alajoutsijärvi *et al*. 2000, Helper 1993, Hirschman 1975) and in interpersonal relationship dissolution (Baxter 1985) are applied to construct different communication strategies available in the dyadic communication stage. Table 3 distinguishes four different exit strategies, two of which are indirect (disguised and silent exit); the remaining two are direct (communicated and revocable exit), as well as a voice strategy.

Table 3. Exit and voice strategies in business relationship dissolution – a classification. Source: Alajoutsijärvi et al. 2000

		Other-oriented	Self-oriented
Indirect	Disguised exit	Pseudo-de-escalation	Cost escalation Signalling
	Silent exit	Fading away	Withdrawal
Direct	Communicated exit	Negotiated farewell	Fait accompli Attributional conflict
	Revocable exit	Mutual state-of-the relationship talk	Diverging state-of-the relationship talk
	Voice	Changing the relationship	Changing the partner

The way in which the exit intention is communicated varies in its directness and other- versus self-orientation (Alajoutsijärvi *et al*. 2000, Baxter 1985). Other-orientation refers to the extent to which the disengager takes its partner company's outcomes into consideration. A very self-oriented strategy concentrates only on maximising the positive outcomes for the disengager, no matter what the consequences to the soon to be ex-partner are. The choices between direct/indirect and other/self-orientation are influenced by the factors that also attenuate the reasons for dissolution, e.g. the strength of relational bonds and the type of relational infrastructure built by the parties over time. The higher the mutual consideration at this stage of dissolution is, the more the other-oriented exit strategy is likely to be applied.

Indirect strategies are used when the disengager does not state its desire to exit explicitly, but tries to achieve the same result through its actions (Alajoutsijärvi *et al.* 2000). Indirect communication offers the initiator a chance to respect the partner's 'face' (Baxter 1985), because it involves no face-to-face communication about the dissolution. However, if a very self-oriented strategy is applied, despite its indirectness, the effects may be the opposite. In the dyadic stage a partner's face may be saved, but in the aftermath stage the partner may feel betrayed if its interests have been damaged in dissolution.

The desire to exit may be communicated to the partner indirectly by using either the disguised exit or the silent exit strategies. In a disguised exit three strategies are available: pseudo-de-escalation, cost escalation and signalling. Pseudo-de-escalation means that the

disengager expresses wishes to change the relationship, but not the real wish to end the relationship. A more self-oriented disengager might try to increase the other party's relational costs up to the point where the partner itself starts to dissolve the relationship (cost escalation). In signalling the disengager uses public media or other actors in the network to communicate the decision to exit (Ping & Dwyer 1992). The signalling strategy seems to correspond to the customer complainer categories of "Wait and Squawk" and "Squawkers" in Hansen, Swan & Powers (1997).

The exit strategy can be labelled as silent if there is no intention or need for communicating exit wishes. Like Alajoutsijärvi *et al*. (2000) have stated, this may happen in project selling in a situation where a project is ending, but the parties do not discuss the continuation of their relationship as a whole. This situation can also occur in tailored software business. In such cases, there can be an implicit understanding that the relationship is going to end (fading away) once the project ends.

When using withdrawal, the disengager expresses its intentions through changed behaviour. One's partner is supposed to perceive one's exit intentions e.g. from changes in openness, frequency of communication and/or from a vanished investment initiative. This can be the case when, e.g. after completing a certain tailored software development project, the software vendor no longer keeps in touch with the customer company, although the customer company may have some plans for future applications.

Direct communication (communicated or revocable exit), on the other hand, does not leave the partner with any doubts as to the wishes of the initiator (Alajoutsijärvi *et al.* 2000). As in indirect strategies, also here the disengager has a choice of self- or other-orientation. A strongly self-oriented way is to state explicitly to the partner that our relationship is over, leaving the partner no opportunity to discuss the matter further (fait accompli). This notification of a relationship termination can be delivered face-to-face and/or formally in writing. Balachandra, Brockhoff, and Pearson (1996) discovered that the more formal ways of communicating were used in R & D project termination decisions after failed projects. They suggested several reasons for this formality: a need for documentation, an ability to establish responsible for the failure, and the manager's feeling uncomfortable about communicating negative decisions in a face-to-face situation. In a Finnish tailored software setting, fait accompli could be used if the contact person has left the customer company and someone in a higher position decided to dissolve the relationship(s) this contact person had been responsible for. Most likely, in this situation, the buyer company has already found a vendor to replace the existing partner.

If the relationship dissolution is made the subject of joint discussion, the orientation of the conversations can be either self-oriented or other-oriented. In case of self-orientation, the discussion may bring about disagreements about the reasons for dissolution and whose fault it may be (Alajoutsijärvi *et al*. 2000). Thus the strategy is labelled as an attributional conflict. In a negotiated farewell the discussions about relationship dissolution do take place, but in an other-oriented atmosphere without hostility and arguments. Both the parties may e.g. share the view that an off-the-self package will satisfy the needs of the customer company better.

Revocable exit is the strategy closest to using voice[11]. The disengager explicitly states its intentions concerning dissolution, yet still has a desire to discuss the reasons and the problems related to the relationship (mutual state-of-the-relationship talk). This means that the relationship may be saved if restoring actions are taken. An example of this is when a relationship has been less intense, encompassing only software maintenance, which is not profitable for the vendor, who nevertheless still sees potential in the customer if new applications could be developed. In a state-of-the-relationship talk the vendor might offer the buyer company two alternatives, either to slowly dissolve the relationship, giving the buyer some time to select a new vendor, or to start to restore it via new software development projects.

Revocable exit is other-oriented when the disengager is willing to discuss the matter and look at it also from the partner's perspective. In other words, one might call the mutual state-of-the relationship talk voice with a threat of exit added. In contrast, in diverging state-of-the-relationship talk, the partners views are so distant that continuing the relationship is possible only if one or both partners change their views and reduce self-orientation.

2.5.3.4 The disengagement stage

Unless the parties agree on performing restoring actions, the disengagement stage starts already during the dyadic communication stage. In this stage, usual business exchange starts to decline and therefore the existing resource ties begin to weaken (Tähtinen & Halinen-Kaila 1997). Other interactions between the companies, such as communication, co-ordination and adaptation, may however, temporarily intensify (Halinen 1997 p.281). These interactions are necessary because the actors have to adjust to the decline in exchange activities. Further negotiations regarding contract annulment or disengagement may be needed, unless these issues have been already negotiated or are regulated in the contract. Proprietary rights, copyrights, contract penalties, and/or final invoices have to be discussed, which may require a great deal of time and considerable adaptations on the part of both parties involved. Both actors will also start to make internal preparations for diminishing business exchange.

The speed at which these activities occur may vary considerably, depending on the reason for dissolution and the availability of or need for alternative partners. In tailored software business, the need for an alternative partner depends on the development stage of the software when the relationship with the vendor is dissolved. If the application(s) are already in the maintenance stage, it/they may be taken care of by the buyer company itself, which means there would be no need to replace the vendor immediately. Alternatively, the buyer company may replace the ex-vendor with another vendor already familiar with the company. From the vendor's point of view, if the customer has been a significant buyer, it has to be replaced relatively quickly, or the company's survival maybe threatened. If we think about an average, small vendor, it cannot survive a loss of a

[11] Voice will be discussed later on, under the subheading 2.5.3.7, The restoration stage.

major customer who has ‘employed’ a large share of the vendor’s personnel, unless it can either gain more business from existing customers or acquire new customers.

Depending on the way the exit decision has been communicated to the partner, reciprocal bonds will deteriorate either quickly or slowly. If a very self-oriented communication strategy has been used, it can be assumed that the actor bonds will suffer. On the other hand, individuals involved in the business relationship may have developed strong personal relations, which they wish to keep alive (Keyton 1993). In a forced death, for instance, where both parties can be reluctant to end their relationship, the relational bonds between the companies as well as between the individuals may temporarily grow even stronger, despite the measures already being taken to break the activity links and resource ties. In tailored software business, the relationship between the contact persons from both companies can survive, although e.g. a company merger would force them to dissolve the business relationship between the companies they represent.

The disengagement stage can also be the first stage in the dissolution process. Although the chosen example was a decided death of a continuous relationship, the stage where the process starts also depends on the reasons and the attenuating factors. If one of the main reasons for dissolution is dissatisfaction with the whole relationship, the process probably starts from the disengagement stage. The attraction, commitment, and trust may, however, actually have already started to diminish long before the company starts to assess the continuation of the relationship and makes the decision to exit. The disengagement stage can also be considered as the starting stage in natural death, where the decline in exchanges has gradually eroded the connections, although no conscious assessments or decisions concerning the relationship’s future have been made.

2.5.3.5 The network communication stage

In the network communication stage, the partners manage the consequences of dissolution for the other actors in the network. The dissolution of the relationship may need to be announced to the other actors in the network, if it has not yet become apparent (Tähtinen & Halinen-Kaila 1997). Even at the earlier stages of dissolution, actors may consider not only the consequences with regard to themselves, but also the implications for the broader network. The dissolution itself changes the structure of the network and the position of ex-members within it. If the relationship termination entails considerable changes to the initiator's position in the network as a whole, the company may reject the idea and engage in repairing actions instead. In order to safeguard a favourable future scenario, both ex-members need to establish and reinforce other relationships within the network (see also Sutton 1987).

The dissolution is thus highly likely to affect the network, but the network itself may also affect and modify the dissolution process. The network actors may apply pressure on the initiator so that the dissolution is abandoned. In addition, as mentioned earlier, in forced death the requirement itself for dissolving a relationship may originate from the network of the other relationships one or both of the actors have.

2.5.3.6 The aftermath stage

The dissolution is finalised in the aftermath stage (Tähtinen & Halinen-Kaila 1997). Although business activities have by now ceased, and resource ties and actor bonds have been broken, the process of dissolution is not over. In the aftermath stage, both of the actors create an *ex post facto* account of the relationship dissolution to be disseminated within their companies and to the other members of the network (Ping & Dwyer 1992 p. 221). The actors mentally go through the dissolution process in order to make sense of what has happened in the process and what was achieved during the relationship (Keyton 1993). This is a way of protecting the social and psychological identities of the individuals responsible (Duck 1982 p. 28, La Gaipa 1982 pp. 196–197). This phase is also a part of a tailored software development process, as it is common to review each process once the software is in production use. Formal questionnaires are sent to the customer company's individuals involved in the process. In addition, a joint meeting takes place during which the project as a whole is assessed and closed. Thus even a company level aftermath stage in each software project is common practise.

At its best, this 'story creation' is part of the learning process within each company and helps in managing other relationships and potential dissolution processes (cf. Sivula 1997). It may also be used as a means to polish company image and protect the identity of the company within the network (Tähtinen & Halinen-Kaila 1997). In such cases, actors often create two different stories, one to be told inside the company and another for public dissemination. It should be noted that, for example, in a natural death, the aftermath stage will not necessarily occur unless another actor from the network raises the issue.

Tähtinen and Halinen-Kaila (1997) emphasise that their model should not be viewed as a deterministic description of relationship dissolution; the same applies for the model presented in this study. Several trajectories are possible; the stages can occur in different order; and not all of the stages necessarily occur. For example the network communication stage is likely to be enacted at the same time as the assessment, dyadic communication, and aftermath stages. As for natural death, when the need for exchange has gradually diminished and no explicit decision has been made about dissolution, the assessment, decision making and dyadic communication stages play minor role. In predetermined deaths, where the decision to end co-operation was embedded in the relationship's establishment, the assessment, decision making, dyadic communication, and aftermath stages are all likely to be of less significance than the disengagement stage.

2.5.3.7 The restoration stage

One element of the model of the dissolution process has not yet been described. If the initiating company decides to use the voice strategy, either in the assessment, decision making or dyadic communication stages, the dissolution process may stop or at least stall (see Figure 5, p. 60). As literature on voice and business relationship restoration is even

scarcer than the business relationship dissolution literature, I also draw on insights from the research on consumer and industrial complaining behaviour.

The extensive literature on consumer complaining behaviour (for a review, see Singh 1990b) usually divides consumers' responses to dissatisfaction into complainers or non-complainers. Complainers' actions can be public (complaining to the seller, a consumer agency, a lawyer etc.) or private (boycotting the product or seller, negative word-of-mouth to friends and relatives). Hansen *et al.* (1997) have extended Singh's (1990a) work to an organisational setting, describing the buyer's complaining behaviour. They conclude that companies that are likely to request the supplier to take care of the problem are also the most likely to decide not to deal with the supplier again.

Hansen *et al*. (1997) thus suggest that companies that are likely to use a voice strategy, are also more prone to end the relationship. However, in business relationship dissolution process, the buyer's behaviour is only one side of the story. Both the buyer and the seller company can initiate voice, and the other partner's response to voice may lead to restoring actions or not. Moreover, as the theoretical model suggests the restoring action may not be successful, and the dissolution process may continue after all.

High levels of trust, commitment, and satisfaction with the relationship and available channels of communication encourage the use of voice strategy (Helper 1993, Ping 1993, Ping 1997, Withey & Cooper 1989). The decision to use a voice strategy depends also on the perceived success of the strategy (Blodgett, Wakefield & Barnes 1995, Singh & Wilkes 1996). During the relationship, the actors have already had some complaints or even conflicts, unless the relationship is still in its very early days. In tailored software acquisition, problems are common; thus procedures to solve the problems are vital to the continuation of the task. Therefore the parties have often established rules and patterns of behaviour when addressing voice. The partners' perception of the likelihood of success in using the voice strategy depends on how successful the earlier complaints have been. The higher the likelihood of success, the more likely the partners will choose voice.

Another factor affecting the choice is the perceived importance of the relationship. When a relationship is considered to be of value to the company, even if its value has temporarily declined, a voice strategy is more likely to be used than taking no action at all (see also Hansen *et al.* 1997). Most tailored software applications are central to the functioning of the company's processes, so a certain continuity in software must be guaranteed, even if a supplier will be changed.

If a voice strategy is used, the success of the restoration of relationship depends on the reactions of the partner. First of all, the voice must be heard and listened to. Good communication links are thus essential in maintaining a relationship (Anderson and Weitz 1989, Hansen *et al*. 1997). The project managers have a great responsibility for preserving the open communication links within their own companies as well as between the project group and the steering committee. The voice must be responded to in a way that satisfies the voicing partner; this often requires empowering the contact persons to act. If the partner wishes to continue the relationship, voice should be encouraged, because it gives the company in question a chance to save the relationship. Of course another option is, that the partner company assesses the costs and the benefits of restoring the relationship, and decides not to take actions to save it.

It has to be noted that the early signs of dissolution are difficult to detect and that even where they are addressed and perhaps voiced, the actor may understate the problem and

therefore not take sufficient measures to repair the relationship (Weitzel & Jonsson 1989). If e.g. a silent exit strategy is used, it can remain unnoticed by the opposite party, thus this opposite party may continue to invest its time and effort in the relationship although the disengaging company may already be building new relationship(s).

Also in cases where the relationship is satisfactory but, for example, a network related precipitating event triggers the assessment, the conclusion of the assessment may be that there is either no need or no possibilities to continue the dissolution process. Network pressure may prevent the ending even at the network communication stage. Thus the dissolution is not final until the process has reached the aftermath stage.

In this section, the theoretical framework for understanding the dissolution process of a business relationship in tailored software has been built. The dissolution process's stages and actor levels have been modelled. The stages describe the different time periods during which the connections between the vendor and buyer company erode, and the actor levels reveal the performers of the dissolving actions. The next step it that the concepts discussed so far are joined together to form a model of the dissolution process of a business relationship in tailored software business.

2.6 Summary of the tentative process model

This section first summarises the tentative process model for understanding the dissolution of a business relationship in the tailored software industry. The framework combines all the elements conceptualised in previous chapters and depicts their relations to each other. The elements include the starting point, i.e. the existing business relationship; the outcome of the dissolution process, i.e. the dissolved business relationship; the reasons for dissolution; the attenuating factors; and finally the stages of the dissolution process.

Figure 6 presents the conceptual framework of business relationship dissolution. It combines the concepts of existing and dissolved business relationships with the concepts of reasons and attenuating factors as well as the stages of the dissolution process. However, although the different actor levels the process includes (individual, department, company, relationship, and network) were included in the model of dissolution process (Figure 5, p. 60) for the sake of simplicity they have not been incorporated in Figure 6. Instead the relevant actor levels are discussed in the text.

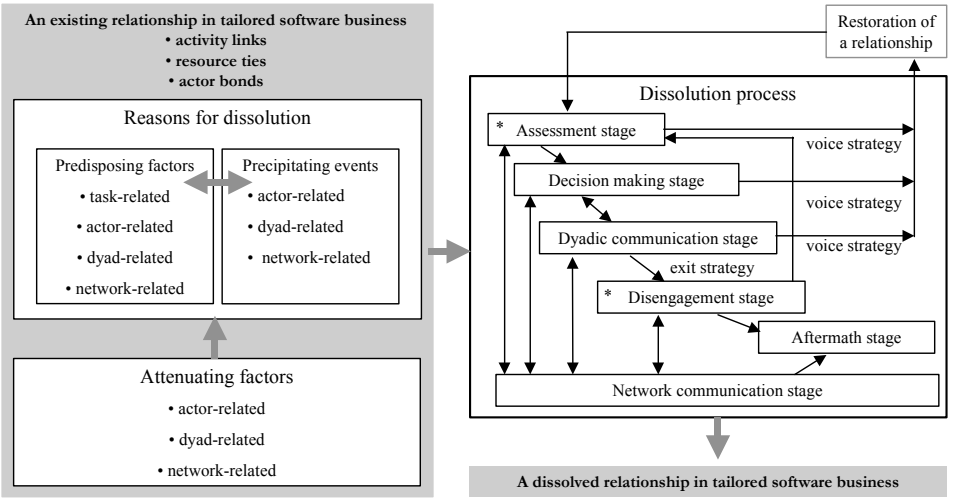


Fig. 6. A conceptual model of the existence and the dissolution of a business relationship

Business relationship dissolution starts from an existing business relationship. This study has conceptualised a business relationship between a tailored software vendor and a customer company as follows: A business relationship consists of interaction processes producing activity links, resource ties, and actor bonds between the companies. This conceptualisation stresses the processual nature of business relationships as well as the internal dynamics it creates. The conceptualisation is also connected to the substance of a business relationship, i.e. the activity links, resource ties and actor bonds.

A business relationship dissolution process changes an existing relationship to a dissolved relationship. If one of the elements of an existing relationship is missing, a change in its nature has taken place. If a part of the actor bonds, namely the relational bonds are broken, this indicates that the parties no longer perceive the relationship to have continuity. This means the relationship has entered a dissolution phase. A relationship is dissolved when the activity links, resource ties and other actor bonds between companies have also eroded.

Business relationships may dissolve because of different combinations of various reasons. In this model a division into predisposing factors and precipitating events has been used. Predisposing factors are already extant when companies enter into interaction with each other; those factors extend their influence on the future of the emerging relationship. Precipitating events emerge during the relationship's existence, accelerating its dissolution. Whatever the reasons or their combinations, attenuating factors moderate the dissolution. They can lead to postponing or abandoning the dissolution process.

An evaluation of whether to end the relationship is made at the assessment stage, at the individual, at the department and/or the company levels. This evaluation may disturb the activities performed in the relationship. An alert partner may interpret these changes as early warning signs of a forthcoming dissolution. Counteractions that are directed towards restoring the relationship might still save it.

When a dissolution decision is made in one company, it has to be communicated to the partner sooner or later, either directly or indirectly. The process advances to the dyadic communication stage, where the other partner becomes actively involved. When the initiator company expresses its desire to exit, the response of the partner can still interrupt the dissolution process. The dissolution process may be stopped or slowed down in the dyadic communication stage, but if both the actors share a desire to dissolve the relationship, it may even be accelerated. In the disengagement stage, the breaking up of links, ties, and bonds is completed. Depending on the nature of the relationship this may take a longer or a shorter time period.

The consequences of relationship dissolution are handled at the network communication stage. The missing activity links, resource ties, and actor bonds may need to be replaced with new relationships with other potential partners, if the actors wish to safeguard their positions in the network. Part of this also happens in the aftermath stage, when the companies create stories about the dissolution process to be communicated both internally and externally to the other important actors in the network. These stories are created because of the pressure from the network and/or because of the actors' own need to protect their identity.

It has to be noted, that not all the suggested stages necessarily occur during a particular process, and they may happen in a different order or in part simultaneously. Whatever trajectories are followed, the dissolution phase does not end until it reaches the aftermath stage.

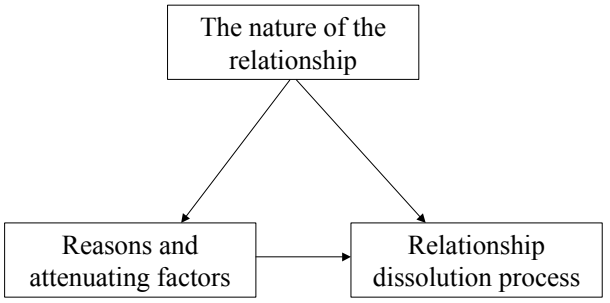


Fig. 7. Major elements in the business relationship dissolution process

All and all, the nature of the relationship, be it continuous, terminal or episodic, and the particular factors and events that engender and/or hinder dissolution all have an impact on the dissolution process and the stages it may pass through. To conclude this chapter, Figure 7 models the three major elements and their interrelationships.

Part 2 EMPIRICAL RESEARCH

In this second part of the study, the empirical grounding of the model will be described. The first chapter, Empirical research design, will present the selection of the two empirical cases, the data collection, and the methods of analysis. As previously mentioned, the empirical part of the study consists of two different cases of dissolved relationships. The case descriptions include the existing relationship periods as well as the phase of their dissolution.

In Chapter 4, the case of a chosen ending of a continuous relationship is described and analysed. Chapter 5 describes and analyses the case of the predetermined ending of an episodic relationship. In both chapters, the cases are compared with the tentative process model and the model is adjusted accordingly. During the both analyses the reader will, similar to the researcher, discover that the relationships and their ends are not exactly what they appeared to be at the beginning of the case study. These discoveries are also incorporated into the empirical grounding of the process model, which is finalised at the end of this part, after comparing the two empirical dissolution processes with each other. Chapter 6 compares the dissolution processes in order to discuss the three main elements of the process model – the nature of the relationship, the influencing factors, and the stages of the process – and their interrelationships.

3 Empirical research design

3.1 Selection of empirical cases

The empirical part of this study is an instrumental case study, consisting of two different relationship dissolution processes. The former relationships were of a different nature; therefore the empirical grounding also includes the influence of the nature of the relationship on its dissolution process. In selecting the first company to be approached, the possibility to gain access was the main criterion. Therefore instead of selecting one software company and studying its dissolved relationships, I chose to start with a customer, as I reasoned that a seller might consider the relationships dissolved during the acquisition process as great failures and thereby prohibit access to such information. In contrast, a buyer company might not perceive the dissolved relationship as its own failure, in this case, access would be granted more easily. It was assumed that once a buyer company had granted access, selling companies would be more willing to present their viewpoints. This presumption proved to be correct, as both the software vendors that I contacted later on were happy to be involved in the research process.

In selecting the potential customer companies two guidelines were used; the size and the possibility to get access. The customer had to be a large company, in order to have had more than one relationship with software producer, let alone more than one dissolved relationship. This requirement restricted the number of potential customer companies in Finland. The possibility to get access was the second criteria. From the group of large customer companies, there was one that seemed to be most promising concerning the access problem. The researcher knew some of the individuals involved in tailored software acquisitions in the company in question and that facilitated the access.

After the pre-selection, the researcher made some field excursions to the company in question. These discussions provided her with the information that the company had experienced different relationship dissolutions with its software producers and thus was a suitable company for the study. To secure the confidentiality of the customer company, the field excursions and the discussions are not reported in the dissertation nor in any appendix.

The customer company in question was formally approached by sending its IT management a letter (Appendix 2) in the summer of 1997. This was followed by phone calls and personal visits to the company. The customer company granted me access in October 1997, and it was agreed that both the name of the company, its industry, and the names of the individuals involved are to remain confidential. Therefore this information is not included in this dissertation.

By selecting only one customer company, it became possible to keep constant some of the contextual factors influencing the relationships and their dissolution. The customer's network as well as the customer company characteristics would be the same in both dissolved relationships. This is of importance, due to the comparative nature of the empirical research. When some of the contextual factors remained the same it was easier to study whether the nature of the relationship influenced its dissolution.

The selection of the two cases to be compared was undertaken with emphasis on their theoretical representativeness and their ability to further understanding of the dissolution processes (Stake 1995 p. 4). In selecting the cases, the classification of different endings (see Table 4) was used as a guideline. In software industry, typical customer relationships are either continuous or episodic by nature. Therefore the potential cases were to choose from were chosen, forced, or natural end (in a continuous dyad) as well as predetermined end (in an episodic dyad). To ensure theoretical replication (Yin 1989 p. 53), I selected the cases so that they would produce contrary results but for predictable reasons. As I propose that the nature of the relationship influences its dissolution process, the selected cases were to represent continuous and episodic dyads.

Table 4. Framework for case selection

Nature of the relationship	Type of ending	Selected cases	Dissolved relationships
Continuous	Chosen, Forced, Natural	Chosen end	The Customer Division – Sellcom
Episodic	Predetermined	Predetermined end	The Customer Division – Conscom

Time, resource and access restrictions did not allow me to select cases from all different types of relationship endings. Therefore a selection was made concerning the dissolution of continuous dyads. Bearing in mind that the second case should be as different as possible from the predetermined end to ensure comparison, I selected a chosen end. In chosen ending, the process of creating the software may still be ongoing at the time of dissolution, separating this type of ending from all the other types. In addition a forced end does not seem to be very common in the context of tailored software, as companies' actions are not in any way seriously restricted by forces outside the dyad. If, in the case of forced end, the ending would be caused by another partner's bankruptcy, this would have made the data collection very difficult. It was also assumed that the process would be

more straightforward and less revealing in natural end than in chosen end. Therefore the cases selected using theoretical sampling were predetermined end and chosen end.

The selection of the first empirical case of a dissolved relationship was done during November 1997. The buyer company, hereafter called the Customer Division, was a Finnish independent business unit of a Nordic concern called Buycom. The seller company, hereafter called Sellcom, was a Finnish subsidiary of a large international software group. Their relationship was established in the beginning of 1996 to develop a data warehousing solution for the customer company. The relationship ended up lasting less than two years, although it was originally meant to be continuous.

The second case selection was completed in August 1999. Here, too, the buyer company was the Customer Division. The supplier company in the second case will be called Conscom. Conscom was a small Finnish subsidiary of a Nordic software consulting group. This relationship is connected to the first case, because the task of the relationship was to put the data warehouse application into production use. The relationship was meant to be episodic and only to last for a few months. It started in December 1996 and ended in May 1997.

As discussed above, the theoretical sampling scheme described in Glaser and Strauss (1968) is not applied here in its pure form. The logic used is instead abductive, theory is understood as theoretical tools (framework, models, and concepts) for understanding a phenomenon (see Vaughan 1992 p. 175). Layder (1993 p. 122) suggests that a multitheoretical approach helps the researcher to reach a higher density of analytic viewpoints. In other words, by borrowing from different theoretical domains, as I did while developing the theoretical model of relationship dissolution, the researcher can see the empirical reality in different ways. In this way, the picture that is formed through the study will neither be partial nor one-sided.

I have used the multidisciplinary material collected from existing theoretical knowledge on relationship dissolution by combining it with my own pre-understanding of the context and analysing it, thus forming a theoretical framework for this study. Now I will extend my data collection and analysis to the selected empirical cases of relationship dissolution.

The theoretical framework of relationship dissolution was used as a guideline to restrict the complexity of the phenomenon and thus to aid the data collection and selection. This way there was greater clarity concerning what is to be researched, thus speeding and making the data collection more efficient (Easterby-Smith, Thorpe & Lowe 1995 p. 36, Yin 1989 p. 20). This does not, however, imply that the framework was used to restrict data collection and analysis, thus limiting the validity of the research. The framework was instead considered as a starting point, and it was modified during the research process to fit the data, however disconfirmatory the data was (see Easterby-Smith *et al*. 1995 p. 40). This is in line with Layder's (1993) realist approach to grounded theory, which suggests that the use of background or sensitising concepts and typological models is useful in theory development (Layder 1993 pp. 129–150).

3.2 Data collection

Data was collected from various sources, e.g. from both seller and buyer organisation through interviews and from written and oral sources (content analysis) in order to ensure methodological triangulation (Denzin 1984). In addition, I collected and used background data about the software industry (e.g. personal interviews, industry newspapers and magazines), about the customer company's industry[12], as well as about all the companies involved in the study (e.g. their customer magazines and press releases). This information gives the research "higher empirical coverage", as Layder (1993 p. 122) expresses it. Higher empirical coverage in this study also relates to the use of the Network Approach, as my research intention is to not only study the dissolution from a dyadic perspective, but also from a network perspective, as far as the network influences the dissolution process. Therefore the study has to take the larger empirical context into consideration by gathering and analysing data about it.

Several persons involved in the dissolved relationships from both companies were interviewed (see Appendix 3, Case study interviews and discussions). These persons were selected from a total number of 46 individuals involved in the former relationships, resulting in 26 interviewees. In the first case the total number of informants was 20, of which 2 were interviewed in a telephone conversation. In the second case the total number of informants contacted specifically was 6, of which 1 was spoken to in a telephone conversation and 1 by e-mail only.

I used three criteria when selecting the informants (see Huber & Power 1985, Kumar, Stern & Anderson 1993, Leonard-Barton 1990): (1) the persons had to be knowledgeable about the relationship and its dissolution, (2) the persons had to represent different organisational levels, (3) the persons had to represent different emotional involvement with the focal issue. I also aimed to interview all persons that had been involved in the relationship during the entire period of its existence. These selection criteria and the high number of informants improved the validity of the constructed narratives, i.e. the case descriptions (Miller, Gardinal & Glick 1997).

Semi-structured interviews were conducted based on my pre-understanding, i.e. the theoretical framework of relationship dissolution (see Appendix 4, The discussion themes). The themes were organised to cover the whole history of the relationship and the project in question as well as to give background information about the interviewee, her/his company, and the process of dissolution. Topical guides of discussion were posted in advance to the interviewees to refresh their memories and to aid the collection of additional material connected with the relationship (memos, old calendars etc.). The topical guides structured the interview, but as they pertained only *etic issues*[13] from the outside of the case, they needed some alterations as the *emic issues* emerged from the cases. After the first two interviews, I added a stage of 'review process' to the interview

[12] The customer's industry and the information sources cannot be revealed due to the confidentiality agreements.

[13] *Etic issues*: research questions initiated or brought in from the outside by the researcher; *Emic issues*: research questions revealed by the focal actors (Stake 1995 p. 20).

topics; this was a project stage that I had not anticipated while writing the first topic guide.

Moreover, the interviewees were first encouraged to tell the story of the relationship in their own words, that is to give free reports. Miller *et al*. (1997) suggests that free reporting should be used more often, as it increases the validity of the retrospective reports. For the same reason, the topic guide concentrated on the events, not on the interviewees' past opinions or beliefs (Miller *et al*. 1997). Whenever the permission was granted (in all but one interview), interviews were tape recorded and afterward transcribed word for word. In five interviews, the tape recorder did not function properly and I wrote notes during and immediately after the interviews. Later on the notes were typed into MSWord documents.

Interviews were considered to be appropriate methods of data-collection in this research, because the actors consider the subject matter both confidential and commercially sensitive. The confidentiality in a one-on-one situation was needed in order to get lifelike stories about dissolution. Moreover the software industry has created its own language (see Appendix 5); thus it is necessary to understand the constructs used and the world the software professionals live in to be able to analyse the data generated (see Easterby-Smith *et al.* 1995 p. 74). The inherent problems of historical studies; e.g. unavailable data (company files missing etc.) or inconclusive data, can also be minimised by using personal interviews. On the other hand, personal interviews have their problems; they are always personal interpretations and attempts to remember 'how did I feel' (Duck 1985 p. 14, Halinen & Törnroos 1995). At the same time, the personal interpretations bring out the different perspectives the individual actors had on the same subject, in this case the dissolution of the business relationship they all were involved.

By using both interviews and archive material (contracts, minutes of meetings, e-mails, etc., see Appendix 6), I attempt to minimise the problems related to collected data. The nature of software acquisition, with its different kinds of project plans, reviews, and audits aided the collection of data. When using archive material one must bear in mind who the writer was and for what reason the document was written (Yin 1989 p. 88). The difficulties of recollecting events and their timing can be minimised if the events have been documented in archived material.

Before presenting the methods of analysis that I have used in this study, I will briefly describe the stages of the entire empirical part of this study. Although the case study describes two dissolved business relationships, the data gathering and the analysis of these two cases were not done at the same time. I started to work on the first case in November 1997, after the customer company granted me access. I first interviewed the individuals from the customer company and from the companies that were important network actors involved in the case. These interviews were conducted during the time period of 17.12.1997–2.10.1998. Some of the individuals had changed their jobs and therefore they were interviewed later than the other actors. In January 1998 I contacted the software vendor and started the vendor interviews on the 4th of February 1998. After each interview, the taped interview was transcribed, I listened to it, and read the transcript through, thereafter sending it to the interviewee for her/his comments.

In all but one interview, the comments prompted only minor changes in the transcriptions (misspelled names, mistakes concerning dates etc.). The interview that was

done without recording received more comments and some answers were deleted in accordance with the interviewee's wishes. The deleted changes were not crucial.

Reading the transcribed and checked interviews, some events still remained unclear to the researcher. Therefore a list of clarifying questions was sent to the most knowledgeable persons from the seller and the buyer company. Their answers were then incorporated into their original interview transcriptions. After this, the first part of the data analysis commenced.

The second case was selected in August 1999, i.e. after the first case had been analysed. As in the first case, I started the data collection from the customer's side. Because the two cases were connected to each other and some of the same individuals in the customer firm were involved in both cases, I started my data collection by reading through the interviews from the first case. Thereafter I placed those parts of the interviews that were about the second case in a separate data bank. This interview data bank was the start of my data collection for the second case. After familiarising myself with the existing data, I started interviewing the customer company's individuals on 9.9.1999. I contacted the software vendor the same day and had my first interview on 21.9.1999. In these interviews I followed the exact same procedure as in the first case. After the participants in the dissolved relationship checked their transcribed interviews, I started the first part of the analysis concerning the second case.

3.3 Methods of analysis

In the first part of the data analysis, the transcribed interviews were all imported into QSR NUD*IST, a software package for qualitative analysis. First I prepared key event narratives written in Finnish and I drew figures of the narratives which depicted time-sequenced chains of events (see e.g. Figure 14, p. 93). It was necessary to systematically reduce the extensive data gathered from interviews and written sources in order to concentrate the attention to the focal issues (Parlett & Hamilton 1976 p. 148). The written sources provided good information about the facts of many events; when meetings took place, what items were discussed, and who was present. These figures and the narratives (one per case) were then sent to the contact persons of all the companies to check that the order of events was correct and that no major events in the relationship were missing from the narratives.

After the few modifications that the actors' comments prompted, I wrote the full length narratives in English. These are presented later on in this study as the case descriptions. In writing these narratives, I translated the Finnish key event narratives and added more information about the events to them. The case descriptions now include the observations about the atmosphere, perceptions of the quality of the interaction and so on. In adding these notions to the case description, I followed a rule that at least two persons had to have told the same story, and that these persons had to have been knowledgeable about the event, i.e. they had to have been personally involved. This rule was also followed during the case analysis.

The next stage of the analysis was done by coding the data in the QSR NUD*IST software according to the theoretical framework. Each concept that was included in the conceptual model presented in Figure 6 (p. 68) was used as a node to form a coding scheme or a skeleton. The coding scheme consisted of altogether 34 nodes and sub-nodes (see Appendix 7). Thereafter I wrote a short description of the node into QSR NUD*IST, to make sure that I would code the first and the last interview the same way. Later on the node descriptions proved to be very useful. As my understanding of the dissolution process advanced, I was able to see from the descriptions the original thoughts that I had had and was able to refine the descriptions for the second analysis.

Once the coding scheme was ready to be used, I started to read and code each interview of the first case which had been imported into QSR NUD*IST. At first, I coded each interview to the nodes that formed the stages and the levels of the dissolution process. Thereafter I coded each interview to the remaining 19 nodes. At first I tried to code one interview to all the 34 nodes, but that it was impossible to concentrate on so many nodes. By dividing the coding into two sets, I was able to focus better. During the coding, I included so-called free nodes into the scheme. These were such nodes that did not appear in the conceptual model, but that offered important background information (e.g. did the interviewee know any individuals from the opposite company before the relationship?). In addition, during the coding, I became convinced that some of the levels of the process needed modification and thus I added nodes into the coding scheme (see Appendix 7). This first stage of coding case number one took one and a half months to finish.

After the first coding I started to analyse each node. In other words, I printed the contents of each concept of the model, checked the coding and started to write a preliminary analysis of the process. In checking the coding, I decided to use only those extracts that were confirmed by at least one another individual or archive material. I analysed the data by identifying the factors affecting the dissolution from both actors' viewpoints as well as the decisions made and the actions performed during the different stages of the dissolution process by both actors. At this point it became very clear that the influencing factors as well as the process differed depending on the viewpoint of the disengager or the disengaged.

Especially when analysing the reasons for dissolution given by the actors interviewed, I as a researcher had to evaluate them with precaution. They were bound to be biased because they always would be a part of the stories created in the aftermath stage of the dissolution process i.e. stories told partially to secure the persons' position in the organisation. But as they are biased, they also bring out the way the involved individuals perceived the situation. Comparing the different stories by different individuals in different positions from all involved companies to the archival information available and to the theoretical model, I was able to offer my interpretation of the process as it is reported in Chapters 4 and 5's case descriptions and analysis. In writing the interpretation, I have tried to bring out the views of the partners, as they were presented to me, and not to decide whose story is the 'correct' one. A relationship is more than just one story; therefore I have tried to keep the multiple realities present in this study.

At this stage the empirical grounding of the theoretical model started to take place. During August 1998 I was able to present the first 'sketch analysis' to the buyer and seller companies involved in the first case. I discussed my view of the dissolution process with

representatives of the both companies and became convinced that the model, although at this stage not fully empirically grounded, was able to help them in understanding the process of dissolution. The respondent checking was used to triangulate the researcher's interpretations (Stake 1995 p. 115). Although the individual actors had different interpretations, they were used in triangulating, but not to prove that the researcher is right or wrong. One's research is always only one interpretation of a phenomenon.

During the further analysis of the first case, it became apparent that the theoretical model lacked some concepts and, on the other hand, included some that did not seem to offer much help in understanding the dissolution process. Thus, after coding the data according to the conceptual model, my realisation that some parts of the process remained ill understood, I started to modify the model. This meant that I added some new codes, and deleted existing ones, so that the data started to fit into categories. Thus the data analysis of the first case served as a first stage of the empirical grounding of the model. In the data analysis of the second case, I was able to use the modified theoretical framework and additionally make some small modifications to it, so that data from both the cases started to make sense through the use of the modified model.

In this dissertation the instrumental case study is first described case by case, although the first case was not analysed in full before I started the data collection for the second case. Similarly to the first case, a sketch analysis was discussed with the companies' representatives during February 2000.

After the individual case analyses, I conducted a cross-case analysis. It concentrated on comparing the similarities and differences in the process of dissolution between the two selected cases. This served as a second comparative analysis, as the first one was conducted while comparing the case data with the theoretical model. The third analysis compared the cases and the propositions derived from the theoretical model (see Yin 1989 p. 33). The aim was to generalise the results at an analytic level by comparing the empirical results with the emerging theory (see Yin 1989 p. 38).

This chapter has described how I conducted of the empirical part of the study. In Chapters 4 and 5, the two dissolution processes will be described and analysed. The first case concerns the dissolution process of a continuous relationship between the Customer Division and software supplier Sellcom. This relationship ended with a chosen death. Chapter 5 presents and analyses the dissolution process of an episodic relationship between the Customer Division and software consulting company Conscom.

4 Dissolution of a continuous relationship

In this chapter the case of a chosen death of a continuous relationship is described and analysed. The chapter starts with an introduction section, which includes a description of the focal actors and of the connected network as well as the task of the relationship. Thereafter the life of the relationship is told as a narrative, starting from the establishment of the relationship and extending out until the time when the relationship no longer existed. This narrative is then analysed by using the elements of the tentative process model. At the same time, some adjustments to the tentative model are made, as the empirical grounding proceeds.

4.1 Introduction to the continuous relationship

4.1.1 The focal parties and the task of the relationship

In this section, the two focal companies – the Customer Division and the supplier Sellcom – are introduced together with the persons who were involved in the relationship from the beginning. As the number of persons involved in the relationship during its lifetime is quite large, those who entered the scene later are also introduced later. In addition, a network of three other companies, which were connected to the focal relationship, is introduced. The reader is also briefly introduced to the task the relationship was set up to perform, namely the design and development of a data warehouse solution. In addition, the project organisation, including the steering committee and project group, is described.

4.1.2 The buyer company and its personnel

The buyer unit, hereafter called the Customer Division*, is an independent business unit of the company called Buycom. Buycom is a large Nordic company operating in rapidly changing and growing business area. Buycom is one of six fully-owned subsidiaries of Parent Ltd. During 1996, when the focal relationship was established, Parent Ltd had over 30.000 employees and a net turnover of over 11 billion FIM. Buycom itself had several subsidiaries and associated companies in Finland as well as abroad. In 1996 Buycom's net turnover was over 6 billion FIM and the number of employees was over 7,000. The Customer Division as well as Buycom's headquarters were located in southern Finland.

The continuous relationship was established to develop a data warehousing solution for the Customer Division and after that, several solutions for Buycom. Therefore two business relationships were developed, as pictured in Figure 8. The focal relationship was between Buycom's Customer Division and a software vendor, Sellcom. The relationship concerned the data warehouse application itself, in other words software consulting. Because the Customer Division negotiated and signed its own contract with Sellcom for the data warehouse (dw) solution, the Customer Division is considered in this research to be the focal buyer company and its business relationship with Sellcom the focal relationship. The second relationship was between Buycom and Sellcom; it concerned the licences for the software, in other words the rights to use the software tools with which the data warehouse solutions were to be developed.

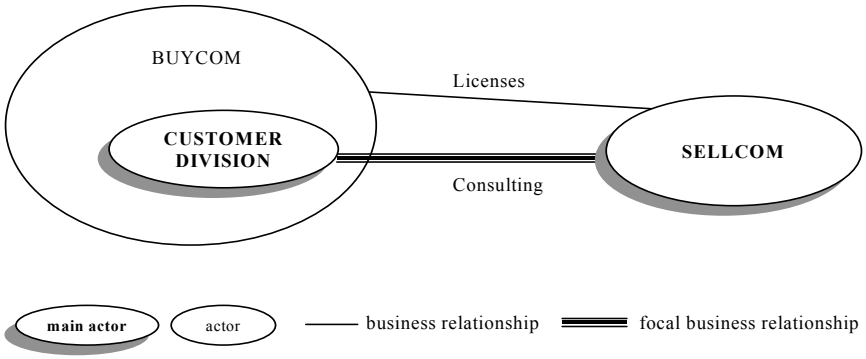
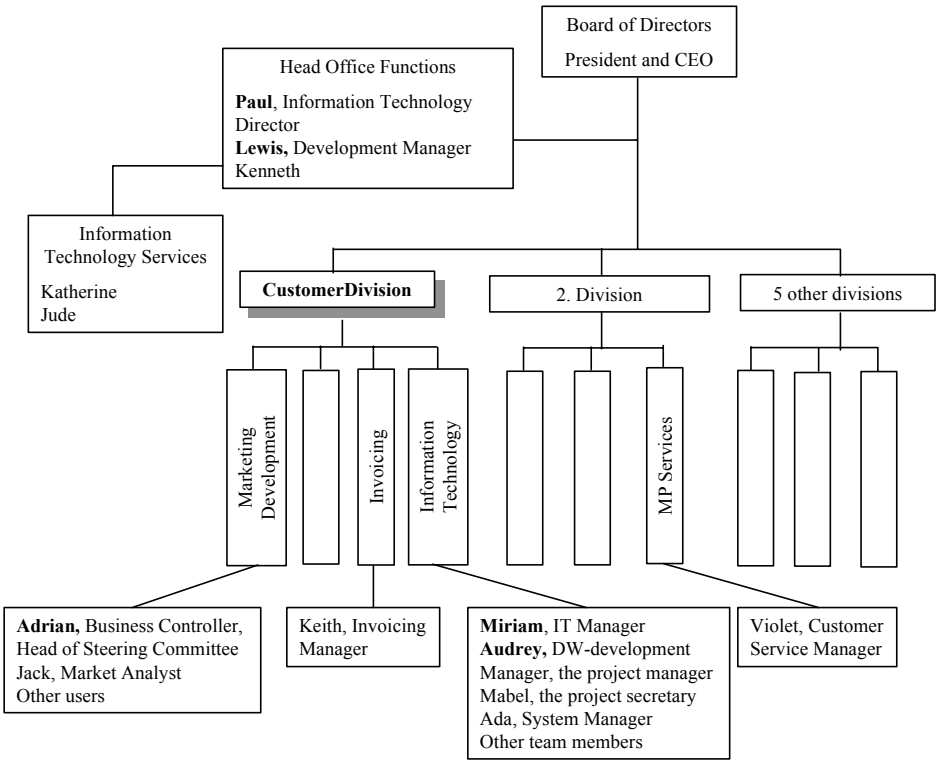


Fig. 8. The continuous relationship

The organisation of the Customer Division and Buycom as well as the persons involved in the focal relationship when it was established are described in Figure 9. The main units involved were the Information Technology Services under the Head Office Functions, the Customer Division and the 2nd Division, all located in southern Finland. The divisions were independent business units, in so far as they made most of their own business

* For the sake of confidentiality, all the company names as well as the names of the persons are fictitious. However, the chosen first names reveal the gender of the actual individuals they refer to.

decisions as well as negotiated and signed contracts with their suppliers. The company had general contract models, which the units used as models for individual contracts.



Customer Division = the focal actor

Adrian, Miriam, Audrey = key individual actors in the Customer Division

Paul, Lewis = key individual actors in Buycom

Fig. 9. Buyer company's organisation and the persons involved in the relationship in the beginning

The Head Office Functions was involved in the relationship, because it had made plans for a company-wide data warehouse system. The Customer Division's management suggested to the Head Office Functions that their division could be the first one to acquire a data warehouse solution, as they already had information needs that a data warehouse could satisfy. Already at this stage, the second dw solution was planned to be set up into the 2nd Division.

The Head Office Functions, namely Paul, as Information Technology Director, and Lewis, as Development Manager, chose Sellcom to supply the company-wide data warehousing system. Moreover, Lewis and Kenneth were involved in the discussions concerning the technical architecture of the dw-system.

The tasks of Information Technology Services-unit included IT-systems control, PC support functions, and expert services (e.g. database expertise, software installations), which they offered to all business divisions. The support personnel for the Customer Division in the dw-project were Katherine and Jude.

The Customer Division was the buyer of the first data warehouse application. The application was to help Marketing Development unit and its controllers and market analysts in marketing planning. Business Controller Adrian was the head of the unit and thus the owner of the data warehouse-project. Jack was one of the market analysts who were involved in the relationship as a future user of the application. Invoicing Manager Keith was involved because the operational databases of the Invoicing unit were some of the legacy systems (i.e. sources of data) of the Customer data warehouse. The Information Technology unit formed the core of the project group in the Customer Division. Information Technology Manager Miriam was the head of the unit. Audrey acted as the Project Manager and Mabel as the Project Secretary. Ada was in the project group because she was the manager of another legacy system. A noteworthy fact is that the information technology functions of Buycom were disintegrated, because each division as well as the Head Office Functions had its own IT units with different tasks.

The 2nd Division was planned to be the next division in which a dw-application was to be set up. Violet as Customer Service Manager was to be the owner of the application; that is why she was involved in the focal relationship already in its beginning. Violet was also a member of the Steering Committee together with Lewis, Kenneth, Keith, Miriam, Audrey and Adrian, who was the chair of the committee. The project organisation is described in detail under the sub-heading 4.1.5 The organisation in the project (see page 90).

As mentioned earlier, Buycom operated in a rapidly growing and changing line of business, marked by new competitors entering the market and increasing the competition. This meant that the organisation of Buycom and its Information Technology units were in a state of constant change. In addition, the number of personnel was increasing. Therefore, during the focal relationship, Buycom's organisation as a whole was to some extent dynamic; major re-organisations took place at the beginning of 1997 and also during the summer of 1998.

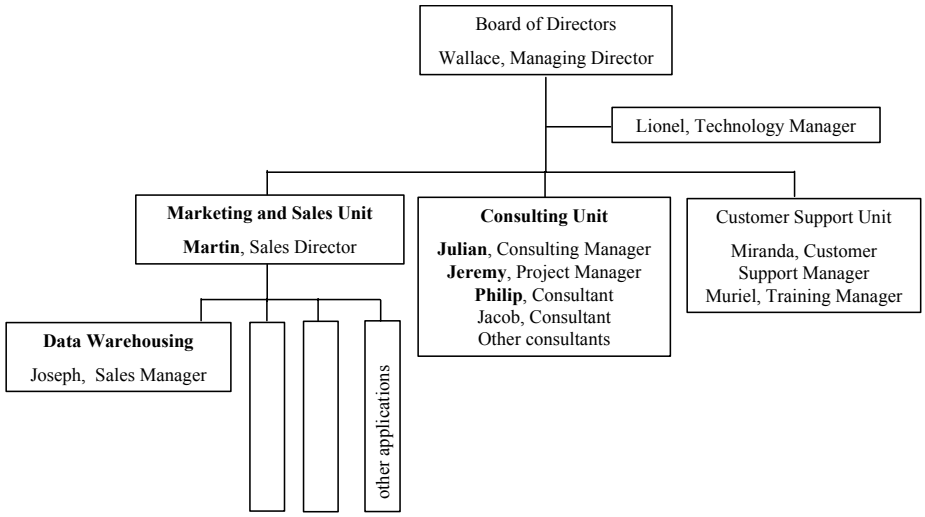
4.1.3 The supplier company and its personnel

The supplier of the data warehousing solution, hereafter called Sellcom*[*], was a Finnish subsidiary of a large international software group. Sellcom was one of the leading players in data warehouse applications in Finland. It was established in 1987; its turnover in 1996 was approximately 32 million FIM. During that time it had less than 30 employees, but the number was increasing. It was located in a town near Buycom's headquarters in southern Finland.

[*] For the sake of confidentiality, all the company names as well as the names of the persons are fictitious. However, the chosen first names reveal the gender of the actual individuals they refer to.

The type of software Sellcom had been marketing had changed from software tools to customised business solutions, including IT-consulting. It had established partnerships with several IT-consulting companies world-wide to be able to meet the increasing customer demand for IT-consulting. However, Sellcom's business policy was to set up the first data warehouse solution for a new customer company by using its own consultants and thereafter negotiate whether the customer would want Sellcom's consultants to design and develop the customer's next dw-solutions or to co-operate with one of Sellcom's IT-consulting partner companies.

The marketing and sales functions of Sellcom were organised under Sales Director Martin (Figure 10). The Marketing and Sales unit was divided into sub-units according to the different applications Sellcom was offering. One of those sub-units included data warehouse solutions; Sales Manager Joseph was responsible for these. The consulting function and thus also the individual consultants (Philip and Jacob) were organised under Consulting Manager Julian. Jeremy was appointed as a project manager for the dw-project with the Customer Division.



Marketing and Sales, Consulting = main actors at the department level
Martin, Julian, Jeremy and Philip = main actors at the individual level

Fig. 10. Sellcom's units and people involved in the focal relationship

In addition, Sellcom had a Customer Support Unit, which was lead by Customer Support Manager Miranda. Training Manager Muriel was responsible for the customer training. Technology manager Lionel took part in the relationship with Buycom. These persons, as well as the Managing Director Wallace and a two consultants, Jacob and Philip, were involved in the relationship from its early days.

4.1.4 Other actors connected to the focal relationship

Although the focus of this case is the relationship between Buycom's Customer Division and its data warehouse system supplier Sellcom, there were three other companies that influenced the relationship, namely Offcom, Softcom and Conscom. Figure 11 pictures the focal relationship along with the local net.

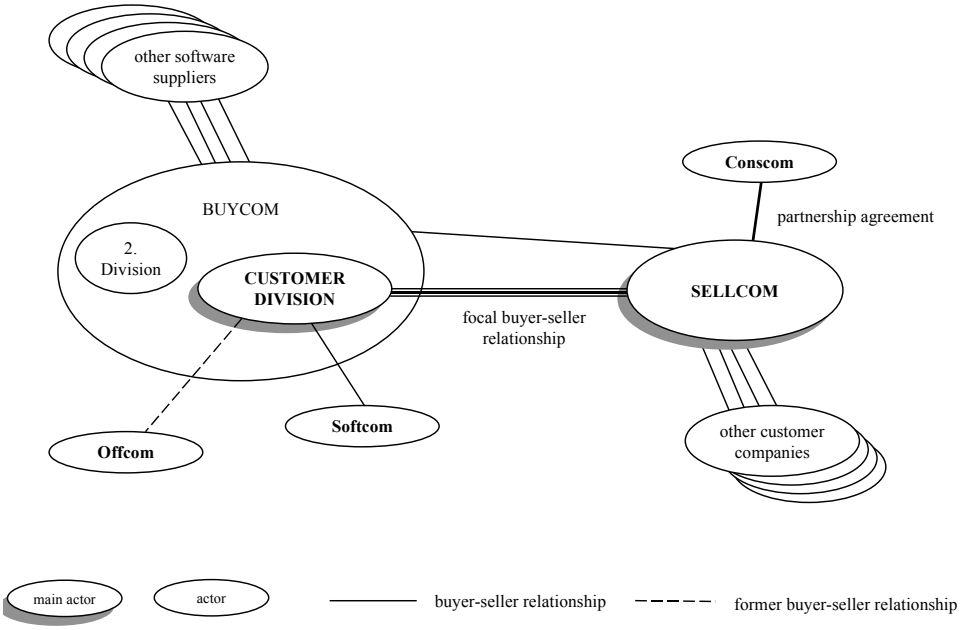


Fig. 11. The net of companies in which the focal relationship was embedded

Offcom was a Finnish subsidiary of a world-wide management consulting company, which also offers its customers data warehouse system development. Before the focal relationship started, Offcom had completed a data warehouse analysis for the Customer Division at the end of February 1996. The analysis included such issues as the benefits of data warehousing, potential legacy systems, the nature of data available from the legacy systems, possible combinations of the available data, and a technology analysis. Offcom also offered to design and develop the data warehouse system for the Customer Division, but was not selected to be the supplier. Offcom was situated in the same town as Buycom's headquarters.

Softcom was a large Nordic group offering information technology services, including software consulting, world-wide. Softcom Finland was involved in the relationship nearly from its beginning. Two of Softcom's IT-consultants, namely Fanny and Terence, were originally working in the Customer Division's other IT-projects, but took also part in the actual project work during the data warehouse development. Softcom's consultant Angus started to do consulting work in the Customer Division and the data warehouse project

during October 1996. The consultants of Softcom had their offices inside Buycom's premises, so they were easily available and almost like Customer Division's own employees. Softcom's head-office was situated in the same town as Sellcom, near Buycom's hometown.

The third company, hereafter called **Conscom**, was a small Finnish subsidiary of a Nordic software consulting company. Conscom was established in 1996 and had less than 10 employees. Although Conscom was still a small company, its mother company had a partnership agreement with Sellcom's mother company. The partnership agreement concerned consulting work, i.e. developing tailored Sellcom software; Conscom had considerable expertise in that area. Conscom was specialised in software consulting using only the software tools that Sellcom had designed. Conscom influenced the relationship between Buycom and Sellcom later on, when the relationship already was in a dissolution phase. Conscom was situated in the same town as Sellcom and Softcom.

4.1.5 Data warehouse solution

The continuous relationship was established to perform the task of developing several data warehousing solutions for the buyer company. The primary purpose of building and using data warehouses is to provide easy access to specially prepared data that can be used with decision support applications, such as management reporting, queries, decision support systems, executive information systems, and data mining (The Data Warehousing Institute 1999, Mattison 1996 p. 5). As Figure 12 shows, data warehouses are built from operational databases, and the operational data is "cleaned" and transformed in such a way that it is amenable to fast retrieval and efficient analysis (Datawarehouse.com 1999).

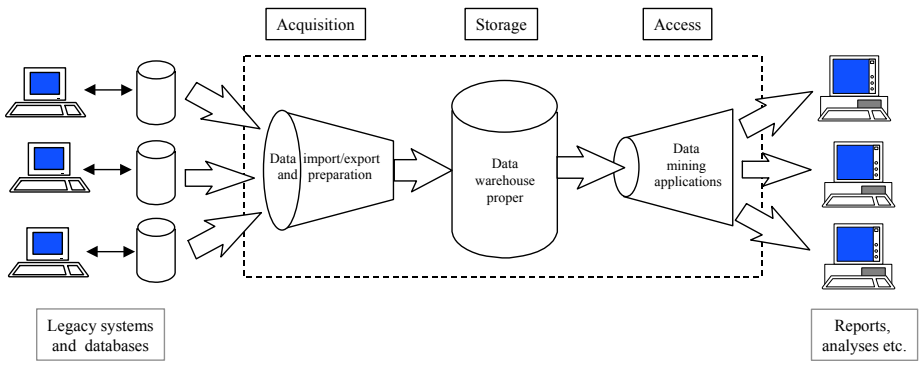


Fig. 12. The main components of data warehouse system (adapted from Mattison 1996 p. 10)

Data warehousing includes extracting data from legacy systems and other data sources; cleaning, scrubbing, and preparing data for decision support; maintaining data in

appropriate data stores; accessing and analysing data by using a variety of end user tools; and mining data for significant relationships (The Data Warehousing Institute 1999). The data from legacy systems, e.g. invoicing systems or order handling systems, and other data sources e.g. outside the company are combined to give a full picture of, for example, large customers or specific customer segments. The data warehouse also enables the user to examine the history of for instance specific customer segments. All in all, it is essential that the data and the analysis meet specific business requirements and thus aid decision making (Mattison 1996 p. 5). Therefore the needs of the managers, in other words the users, are essential in building a data warehouse.

The structure of a data warehouse system connects three types of participants in its development and maintenance (Mattison 1996 p. 30). If the dw-system is not built in-house but is acquired from a vendor, the first two participant groups consist mainly of people from the buyer company. Firstly, the management of the buyer company together with the future users of the solution have to specify the business questions which the future data warehouse system should give answers to. Secondly, persons responsible for the legacy systems' databases need to be involved in the design of the legacy system interfaces. The 'raw' data from legacy systems has to be correct; otherwise the data warehouse system provides managers with the wrong answers to their questions. Thus the benefits derived from a data warehouse system depend heavily on the quality of the data, which is imported from the different legacy systems. Therefore, in addition to the buyer's personnel, at least the supplier's project manager participates in the above-mentioned tasks. The third type of participants are the IT-personnel from both the buyer and the supplier companies. IT experts – who actually design and develop the software – are responsible for the construction of the system itself and for resolving all the technological questions (hardware, interfaces to legacy systems etc.).

4.1.6 The organisation of the project

The data warehouse project was organised into a steering committee and a project group, as software projects commonly are. The project organisation is depicted in Figure 13. Adrian chaired the Steering Committee as the 'owner' of the developed system. In addition to Adrian, the Steering Committee included Miriam and Audrey from the Customer division's IT department, Lewis and Kenneth from Head Office Functions and Keith from Invoicing department. Violet was in the Steering Committee to receive up-to-date information about the progress of this first application, because her unit in the 2nd Division was to start their dw-project after this one. The Steering Committee had three members from Sellcom: Julian, the Consulting Manager, Martin, the Sales Director and Jeremy, the Project Manager. For Martin, to be a member of a steering committee was not a typical task, as he was not involved in the consulting work in Sellcom. He became a member of this steering committee as a result of Audrey's suggestion; she knew Martin previously.

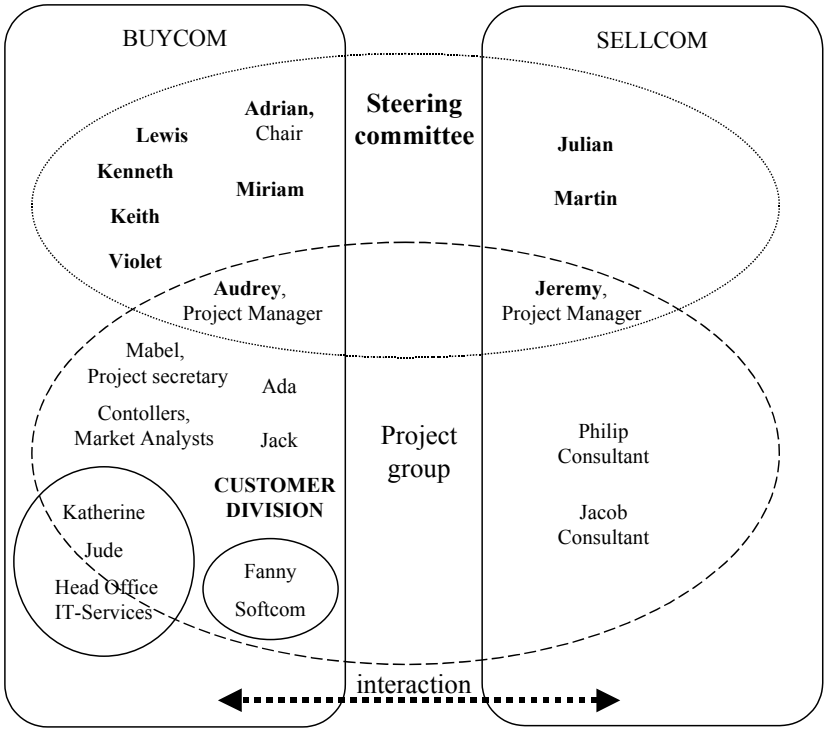


Fig. 13. The project organisation in the beginning of the data warehouse project

The project managers – and therefore the central persons in the communication between the buyer and the seller as well as between the project group and the Steering Committee – were Audrey from the Customer Division and Jeremy from Sellcom. At the beginning of the project, the Customer Division's IT department tried to recruit a full-time project manager both from within and outside the company, but no suitable applicants were found. Therefore Audrey was appointed as a project manager along with her other duties, which slowly decreased.

The project group had several members from Buycom, but in addition to Jeremy, only two appointed members from Sellcom. According to the project plan Philip was the consultant responsible for programming the interfaces of the legacy systems and the structure of the data warehouse. Consultant Jacob was to be responsible for programming user interfaces. However, Jacob worked for the project only for the first weeks.

Buycom provided Mabel as project secretary. This was the first project Mabel was involved in as well as her first acquaintance with data warehouse systems. At that time she was finishing her vocational education and was thus working only part time. However, during the summer of 1996 Mabel was working full time, and later that year she was appointed as the System Manager (i.e. main user) of the data warehouse system. Her tasks as a System Manager were e.g. user support and loading data from the legacy systems to the data base.

Katherine and Jude gave expertise support to the data warehouse project from the Head Office's Information Technology Support unit. Katherine was a data base expert; her role was to make sure that the Buycom IT-standards were followed when designing and documenting the data warehouse system. Jude was a server expert who was not appointed to the project group, but gave the project technical support when necessary. Both Fanny from Softcom and Ada, representing one of the legacy systems, took part in defining the requirements of the system and were also involved in different tasks later on. Jack and other market analysts and controllers were involved because they were the future users.

In addition to these people, yet other individuals played a role in the relationship and in the project. These persons will be introduced as they enter the scene. This is to make it easier to follow the story, in spite of the large number of persons involved from five companies altogether.

4.2 The story of the relationship

In this section, the main events of the relationship and its focal net are described chronologically. In addition, after each phase of the project, i.e. contract negotiations, the data warehouse application project, the warranty period, closing the project, and the epilogue, the factors that influenced the relationship dissolution are briefly highlighted. The story of the relationship entails a number of persons, factors, and events that influenced the persons and thus the dissolution process. Therefore I consider it necessary to offer the reader a 'pre-analysis' of the process before presenting the modified process model of business relationship dissolution in detail.

4.2.1 Contract negotiations

4.2.1.1 Main events in the relationship

Figure 14 illustrates the main events in the relationship during the contract negotiations. In February 1996, Offcom had completed the data warehouse analysis made in co-operation with Buycom's Customer Division. Offcom also offered to continue its relationship with Customer by designing and developing a data warehouse solution for them. However, during this period, Buycom's headquarters IT Department had made plans for a company-wide data warehouse system and had chosen Sellcom to supply the system. The idea was, instead of each Division having its own data warehouse solutions, to co-ordinate the development and to have a sole source acquisition strategy, i.e. only one vendor.

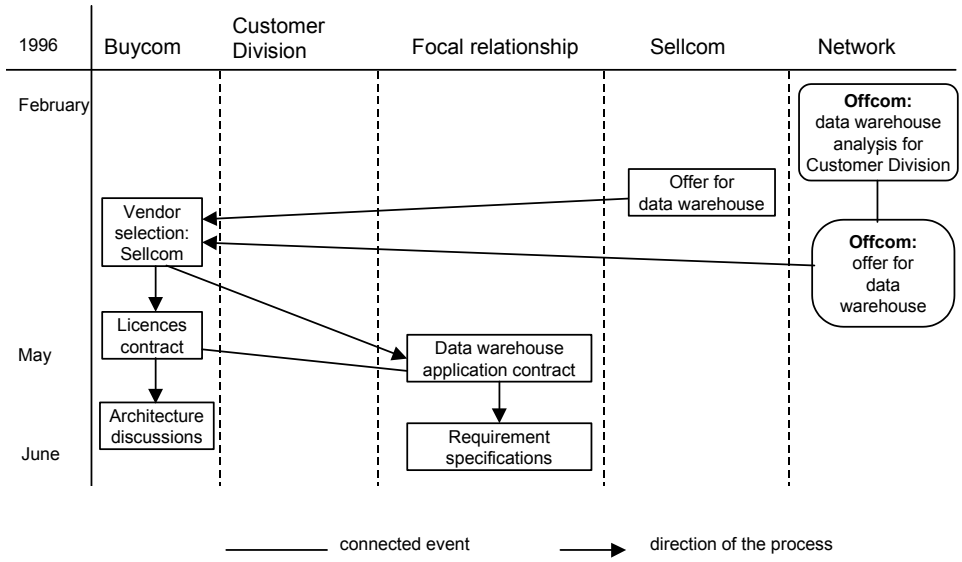


Fig. 14. The events in the relationship and the focal net during contract negotiations

Buycom's goal was also to develop its relationship with Sellcom to a business partnership level. Buycom and the Customer Division had not used Sellcom's software development tools before, nor had they designed and developed data warehouse solutions similar to that which was now planned. Therefore the buyers lacked the expertise in data warehousing that Sellcom had. One of the aims of the partnership was to increase Buycom's knowledge about data warehousing without turning Buycom's information technology staff into data warehouse experts. Moreover, the intention in Buycom was that, in addition to the software vendor, a provider of hardware would join the partnership network, which would offer Buycom a full and compatible data warehouse system.

Paul, Buycom's Information Technology Director, and Lewis, the Development Manager, negotiated the contract concerning the licences to use Sellcom's software development tools with Sellcom's Managing Director Wallace, Sales Director Martin, and Sales Manager Joseph. The value of the software licences was considerable, as the buyer was setting up a company-wide system with a considerable number of future users.

In addition to the software licences, two separate but related projects were under discussion, namely a system architecture project with Buycom and a data warehouse application project with the Customer Division. The main goal of the system architecture project was to decide the hardware and network platforms for the company-wide data warehouse solutions. Buycom's Lewis together with its IT Services Department and Lionel, the Technology Manager from Sellcom were to start the system architecture project. The project was to be finished by August 1996, but it never took flight and no written contract was signed. Thus the decisions concerning the hardware environment and other technological solutions were never made.

Nevertheless, the actual data warehouse consulting project started in May 1996. Miriam from the Customer Division and Julian from Sellcom negotiated the contract based on Buycom's standard contract models. A sole-source acquisition strategy was applied. Sellcom became the supplier of both the software tools for the design and the development of the database as well as the design and development of the application itself. The software project was divided into two sub-projects: the requirements sub-project and the design-and-development sub-project. Both sub-projects were agreed to be invoiced on an hourly basis, and the estimated maximum size of the design-and-development sub-project was 100 workdays.

Sellcom's policy in consulting was two-fold. One option was to let its own consultants do the consulting, as was done in this case. With most of the new customers, Sellcom used its own consultants to do the requirement specifications, design, and development of at least the first data warehouse application. The other possibility was to use the one of the consulting companies with which it had a partnership agreement, i.e. companies like Conscom. In the Customer Division's project, Sellcom used its own consultants. It was common for the consultants in Sellcom to do most of the programming in Sellcom's office, i.e. not in customer's premises.

Sellcom appointed Jeremy as the project manager in this project. Jeremy had recently joined Sellcom, but had had a long career within information technology, although not in a similar position. The project was slightly understaffed, because consultants Philip and Jacob were involved in other projects as well.

In addition to Martin and Julian being members of the steering committee, a follow-up committee was established within Sellcom. Because Sales Manager Joseph was responsible for Buycom as a customer company, at his initiative Sellcom set up an unofficial internal follow-up committee to ensure that Buycom's dw-project would be a successful one. Buycom was considered to be an important customer, and it was Sellcom's first project with Buycom. Other members of the internal follow-up committee were Managing Director Wallace, Consulting Manager Julian, and the Project Manager Jeremy.

4.2.1.2 Influencing factors

Already when the focal relationship was being established, a group of factors were present which can be assumed to have influenced the dissolution process. At this point, a short evaluation of those factors may help to follow the story and to bear in mind the underlying factors, which influenced the individual actor's actions and therefore the course of the events in the relationship. The fact that the relationship was meant to be continuous also influences the dissolution process as a whole, i.e. not only the events but also the predisposing and attenuating factors. First, I will describe the predisposing factors and thereafter the factors that attenuated them.

Several predisposing factors that are related to the task, the companies, the dyad, and to the network can be found already at this stage of the relationship development. The

task of building a data warehouse solution is one of them (Figure15). First of all, every tailored software project is problem-prone, because of its highly abstract and interaction-intensive nature. Cost and schedule overruns are common problems in software projects. Moreover, the development of data warehousing solutions differs in many respects from the development of operations software, for example, in addition to IT personnel, staff from the business unit and the legacy systems are needed to lead the development of the dw-software. Furthermore, it is extremely important that the data imported from the legacy systems to the data warehouse is correct, otherwise the whole output from the data warehouse is unreliable and thus cannot be used. This means that sometime a need arises in data warehouse projects to change the business processes related to gathering the data in the legacy systems. These changes are far from easy to implement, as they often involve several departments in the buying company.

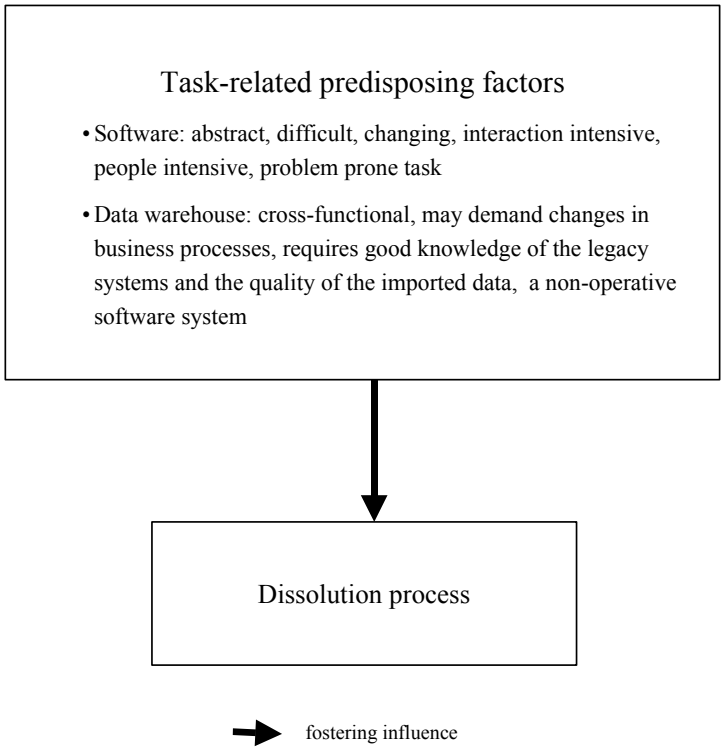


Fig. 15. Task-related predisposing factors influencing the dissolution process at the beginning of the relationship

The task-related factors also influenced the actor-related predisposing factors, which are described next (see Figure 16). Because this was the Customer Division's first full-scale data warehouse development project, the newness of the task created a platform for

difficulties in the relationship. Not only was the task new, but also the software tool that was used in the project was new to the personnel of the Customer Division. On the other hand, the personnel was very familiar with building operational software and their expectations concerning this project work were based on that experience.

This unfamiliarity with data warehousing was also reflected in Buycom's standard contracts and documentation standards that the Customer Division and Sellcom agreed to follow. They were designed to fit into buying operational software and did not include the specific features of data warehouse solutions. Moreover, as the knowledge of data warehousing was low, the future users of the data warehouse had great expectations of the new software.

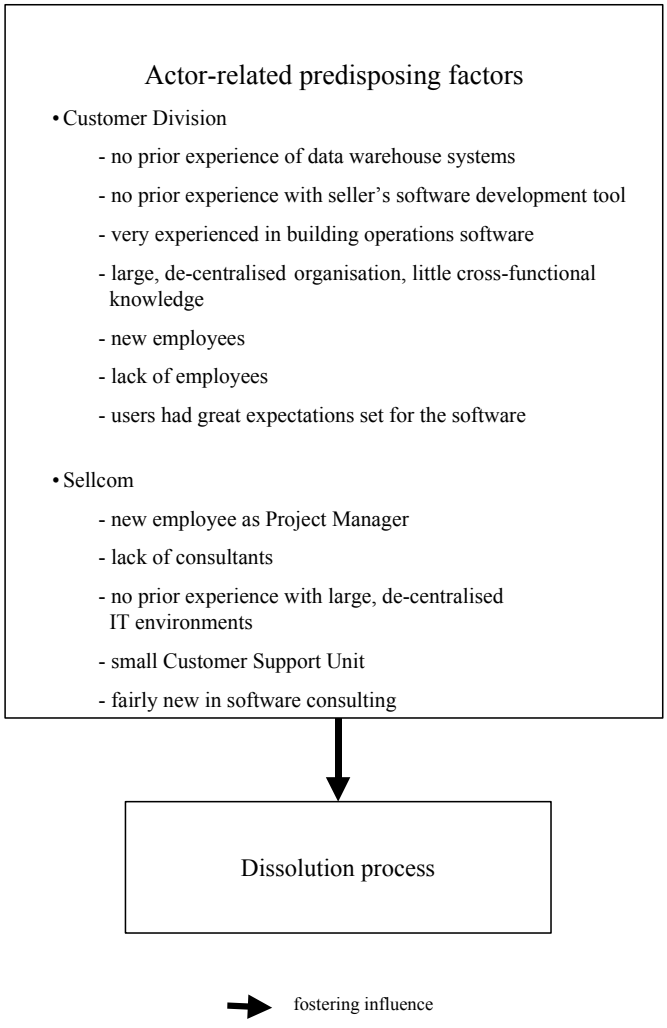


Fig. 16. Actor related predisposing factors influencing the dissolution process at the beginning of the relationship

Sellcom had no prior experience with the particular type of hardware environment Buycom had. Moreover, Buycom had decentralised its IT services, and Sellcom had no experience in working with such highly decentralised, but large organisations. Its experiences with large organisations consisted mainly of centralised data administration, where the buyer's technical personnel were also familiar with the seller's products. Another underlying factor was that Sellcom had been in the consulting business only for a couple of years, and at the time of the relationship was just increasing the amount of consulting work offered to its customers.

One actor-related factor that existed in both companies was the presence of fairly recently employed individuals. Sellcom's Project Manager was a very new employee, the Customer Division's Project Manager had been with the company for a half a year, and their project secretary was still studying at the time and was thus working only part time. Moreover, the Customer Division's Project Manager had other duties at the beginning of the project. It seems that in both companies there was a shortage of personnel, a feature that is not uncommon to the software industry as a whole.

One dyad-related predisposing factor was very apparent already the beginning of the relationship (see Figure 17). The difference in company sizes, i.e. the Customer Division having hundreds of employees compared to Sellcom's 10 consultants, was considerable. This relates also to the different organisational cultures of the two companies. Sellcom was a fairly young company and was able to have a 'flat' organisation. The Customer Division, being part of Buycom, was much older and had a more fragmented organisation. However, because of the business it was in, Buycom and therefore also the Customer Division was under almost constant organisational changes.

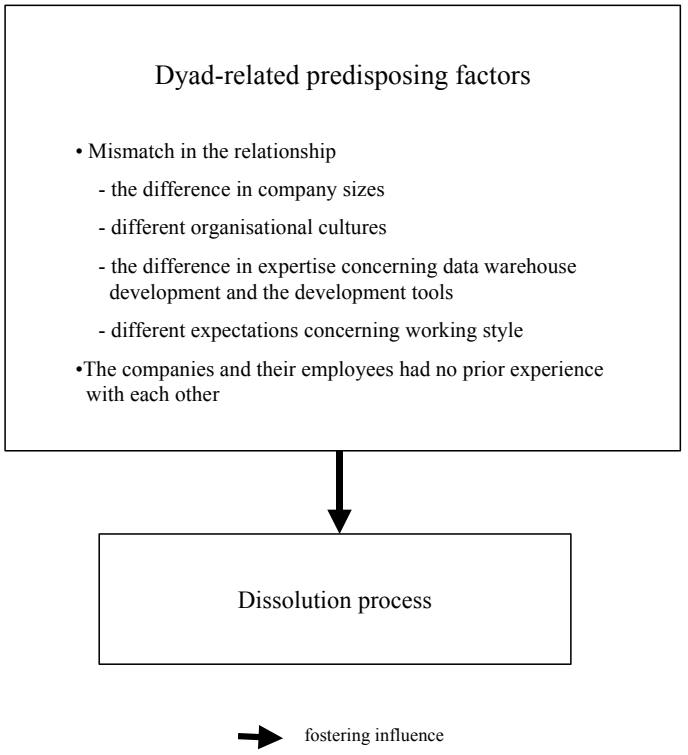


Fig. 17. Dyad related predisposing factors influencing the dissolution process at the beginning of the relationship

Secondly, the task of developing data warehouse systems and the software tool to be used were both new to the Customer Division, whereas Sellcom's speciality was data warehouse solutions, thus creating a knowledge gap between the buyer and the seller. The buyer was inexperienced and the seller company was the expert in the area. This created a situation where the Customer Division had to rely on Sellcom more than was common in their previous software projects.

Thirdly, the companies had different expectations concerning the project working style. On the basis of their experiences with other consulting companies and operational software projects, the Customer Division as well as its Project Manager were accustomed to having consultants present in the buyer's project premises on a daily basis. Sellcom's way of working was based on its consultants visiting the customer; the coding work was done on Sellcom's premises. Because the companies were starting their first joint project, these differences in the working styles were not known nor were they discussed; thus neither of the actors adapted their expectations or working style. This produced the third dyad-related predisposing factor.

Three network-related predisposing factors were also very visible already from the start of the relationship (Figure 18). Firstly, the Customer Division had had a previous

relationship with another consulting company Offcom, which was a competitor to Sellcom. The buyer had been satisfied with the relationship with Offcom. However, the relationship could not continue, because of the wishes of another actor in the network, namely the Head Office IT-Functions.

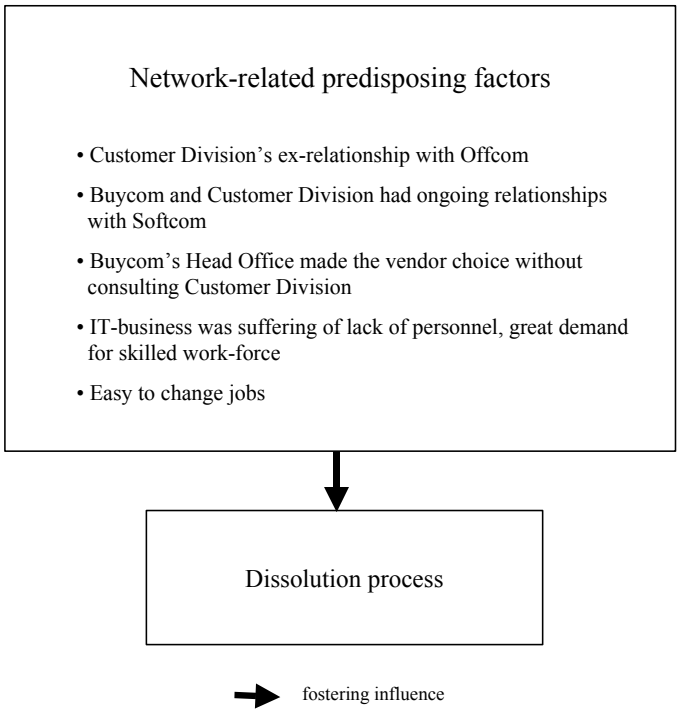


Fig. 18. Network related predisposing factors influencing the dissolution process at the beginning of the relationship

Secondly, Buycom and the Customer Division both had an ongoing relationship with a consulting company, Softcom. This relationship provided the Customer Division with a handy comparison to its relationship with Sellcom. The comparing was particularly easy because Softcom's consultants also took part in the data warehouse project, since they were responsible for some of its legacy systems.

Thirdly, because the Head Office had chosen the seller, the Customer Division had not had the opportunity to participate in the supplier selection. Thus the relationship between the Customer Division and Sellcom did not start off very happily. The Customer Division had to end their relationship with Offcom, it could not take part in the supplier selection, however if the Customer Division could have chosen, Sellcom would probably not have been their first choice. Moreover, once the relationship started, the Customer Division was in a position to very easily compare the performances of two different software vendors, namely Sellcom and Softcom.

In addition to the three factors related to the Customer Division's network, two factors related to the whole information technology industry in Finland influenced the dissolution later on. That time the labour market situation was difficult for the companies, there were not enough skilled IT-professionals on the market and the number of graduates was not enough to meet the needs of the companies. This made it fairly easy for consultants and other IT-professionals to change jobs, if they wanted to.

The factors that attenuated the predisposing factors are shown in Figure 19. An attenuating factor that was related to Sellcom was that it was the market leader in data warehousing, and its other products were also known to be of high quality. Sellcom thus represented 'the best possible' choice for a data warehouse, which at the time was a relatively new type of application.

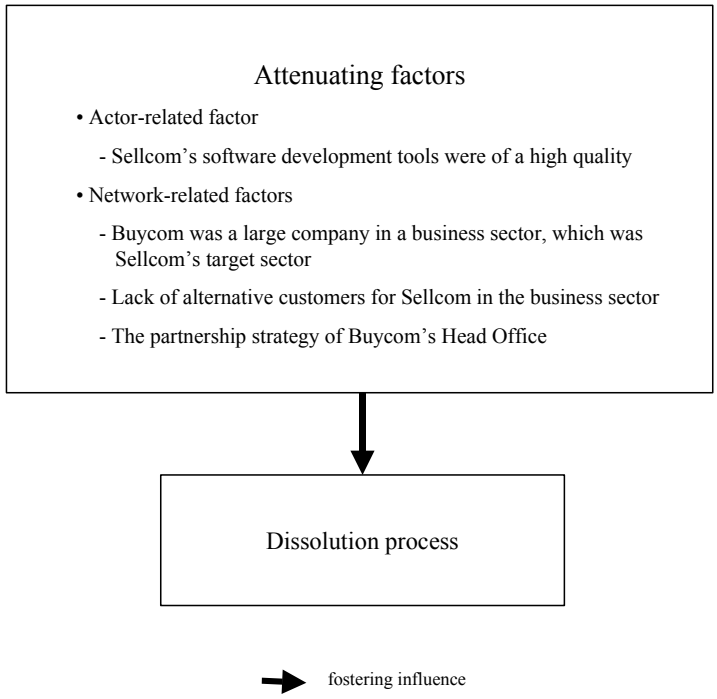


Fig. 19. Attenuating factors influencing the dissolution process at the beginning of the relationship

One network-related attenuating factor was that getting Buycom as a customer was a major breakthrough for Sellcom in that particular business sector. For Sellcom, Buycom was also an important reference company, as they were planning to increase their customer base in the sector. Thus Sellcom was motivated to have both the Buycom and the Customer Division as customers and to have long-term relationships with both of them.

The most influential factor that attenuated the predisposing factors was also network-related. Buycom's Head Office and Sellcom had an oral agreement on several data

warehousing solutions, of which the one with the Customer Division would have been only the first. This plan of building a company-wide data warehouse system with a single vendor also meant that the Customer Division would have continued its relationship with the seller after the first project, and its new development needs would have been met. As previously mentioned, designing a data warehouse solution is more a process than a project because of the continuous need for further development of the software.

Another network-related attenuating factor was related to the network of potential customers in the business sector Buycom was operating in. The business was quite centralised, so there were not many large customers like Buycom in Finland for Sellcom to have a relationship with. Sellcom's strategy was to have all the major players in the sector as its customers, since its parent company already had expertise in the particular business sector at an international level.

4.2.2 The requirement specification

4.2.2.1 Main events in the relationship

As previously mentioned, the application project was divided into two sub-projects: the requirement specification, and the design and development of the application. The project plan stated the timetable for the different phases of the sub-projects; July was reserved for summer vacation. The requirement specification phase started already in May 1996 and continued in June (see Figure 20). The deadline for the software development project was the end of September 1996.

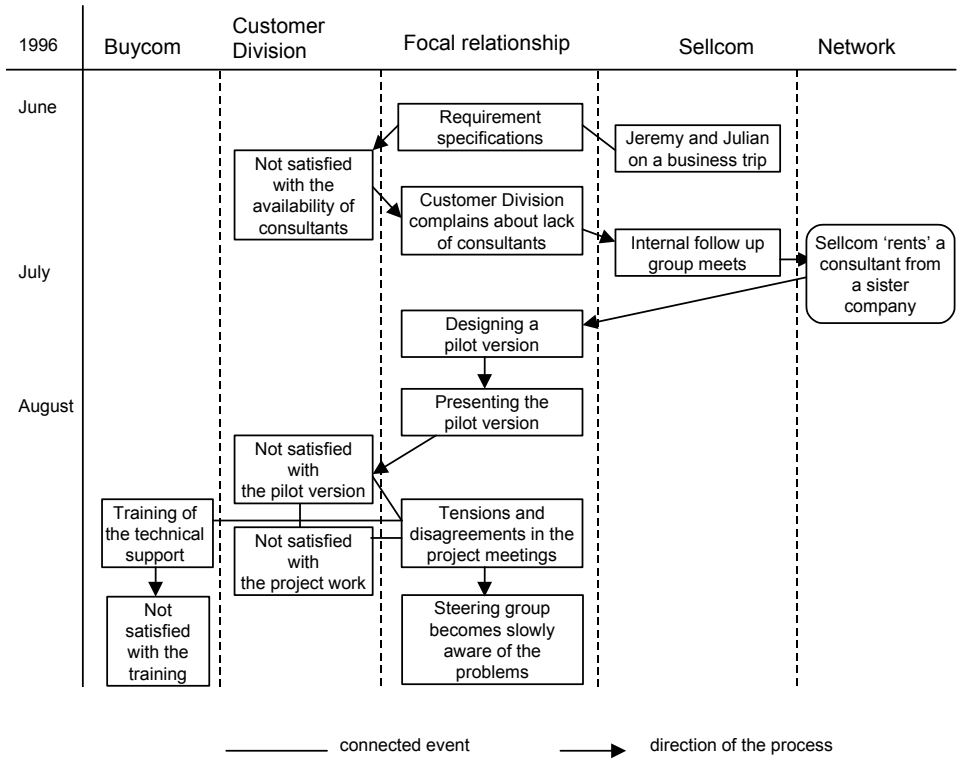


Fig. 20. The events in the relationship and focal net, June – August 1996

During the requirement definition phase, members of the project group met 2-3 times per week to interview the future users and discuss their needs. Figure 21 describes the monthly meetings of the Steering Committee. The persons who were mainly responsible for the interviews were Project Manager Audrey and Project Secretary Mabel from the Customer Division and Project Manager Jeremy and Consulting Manager Julian from Sellcom. Other persons involved in defining the requirements were Fanny from Softcom and Ada from the Customer Division, whenever the legacy systems' interfaces were concerned. Also consultant Jacob took part in the requirement specifications, but only for a few weeks. The requirement specification phase took place during May and June 1996.

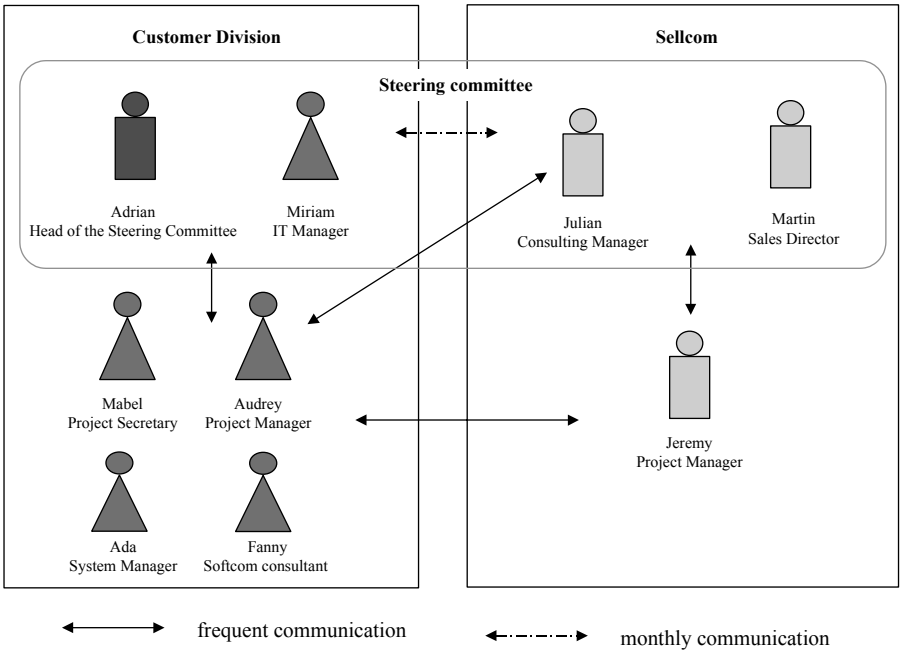


Fig. 21. The communication links during requirement specifications

The first notable event in the project work happened when the customer's Project Manager Audrey could neither reach Sellcom's Project Manager Jeremy nor Consulting Manager Julian for some time in June because both were on a business trip in the Central Europe. Audrey felt that the customer had to do more work with the requirement specifications than what had been agreed on. Sellcom's Sales Manager Joseph thus became the receiver of messages from the Customer Division, according to which the customer considered the project to be understaffed by Sellcom.

Joseph considered the matter serious enough to contact Sales Director Martin, although Martin was on his summer vacation. Martin asked Joseph to contact Managing Director Wallace, because he could ask the other subsidiaries of Sellcom's mother company for an extra consultant if necessary. Sellcom's consultant Philip had been responsible for the work, but he held his vacation during July and August. Sellcom did not completely agree with the customer that the project was understaffed, but was willing to provide an extra consultant. However, Sellcom Finland did not have any consultants available. As a result, consultant Simon, who had previously worked in Sellcom, came to work for the project from another European subsidiary (see Figure 22).

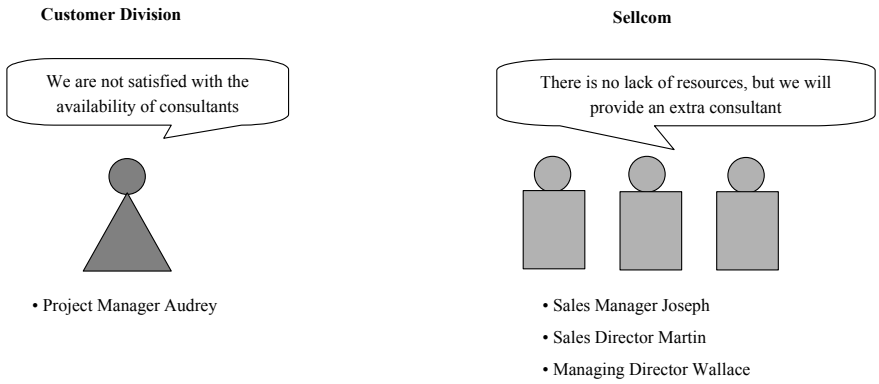


Fig. 22. The views of the actors during 'lack of consultants' issue

During his four weeks in the Customer Division, Consultant Simon developed the first pilot version of the application. However, when the pilot version was presented to the users in mid-August, the customer did not find it to be fully in accordance with the specified requirements and users' wishes, which caused criticism from its part.

Small issues that caused dissatisfaction in the customer's project personnel started to pile up. The project was running slightly late, and tensions both between the project managers as well as between other members of Sellcom's and the Customer Division's staff started to increase during the meetings of the project group. Among other things, they could not agree on the testing plan and the documentation requirements, and people in the Customer Division started to have doubts about the professional competence of Sellcom's Project Manager. The Customer Division also started to notice that Consultant Philip and Project Manager Jeremy were not in at their offices in the Division's premises daily. All this made Customer Division's project personnel feel that Sellcom did not try to co-operate with them, as shown in Figure 23.

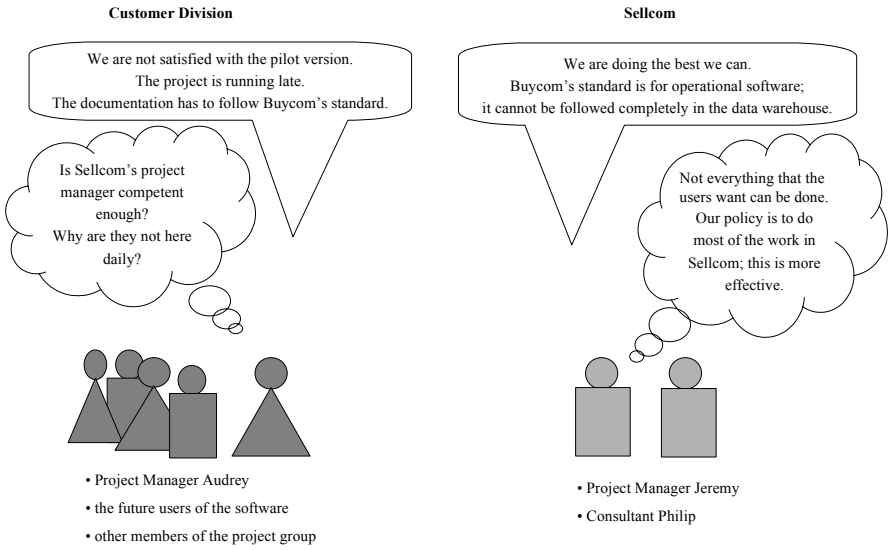


Fig. 23. The views of the actors during the project work

At the same time, Sellcom was discussing the training of Buycom's technical support staff, i.e. mainly Katherine and James (Jude had changed jobs and had been replaced by James) from the Head Office IT functions. Training was included in the data warehouse system contract, but the content of the training had not been settled. As IT Services did not have previous expertise or experience with Sellcom's software, James and the head of Buycom's IT Services, Ralph, discussed the training needs with Sellcom's Training Manager Muriel. However, when Katherine and James attended the training provided by Sellcom, the content did not meet their expectations as it was not in accordance with what had been agreed in the discussions with Muriel.

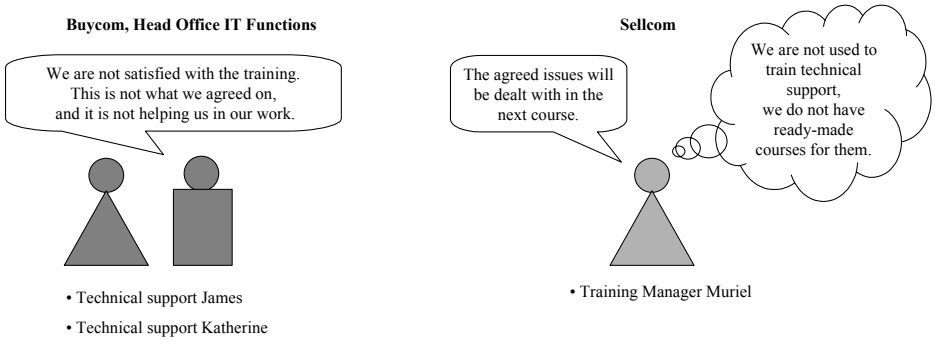


Fig. 24. The views of the actors during the training of technical support persons

Although James and Katherine kept asking for more training, they never received the technical training they felt necessary. As Figure 24 shows, James and Katherine were never told Sellcom had not previously offered any technical training to their customers and therefore neither had any ready-made courses nor the resources to produce them for Buycom. The training James and Katherine received would have been appropriate for the users of data warehouse, but was not suitable for them as technical support personnel.

4.2.2.2 Influencing factors and events

Several dyad-related precipitating events took place during the requirement specification phase as shown in Figure 25. The first event that influenced the buyer's Project Manager was the business trip of the seller's contact persons, during which they could not be reached. Here the previously mentioned dyad-related predisposing factor of different working styles became a reality in a precipitating event. The buyer was used to having close contact with the seller's project management and consultants, and this situation did not meet these expectations. For the buyer company, this was a violation of norms. For the seller, this same situation appeared as a normal procedure.

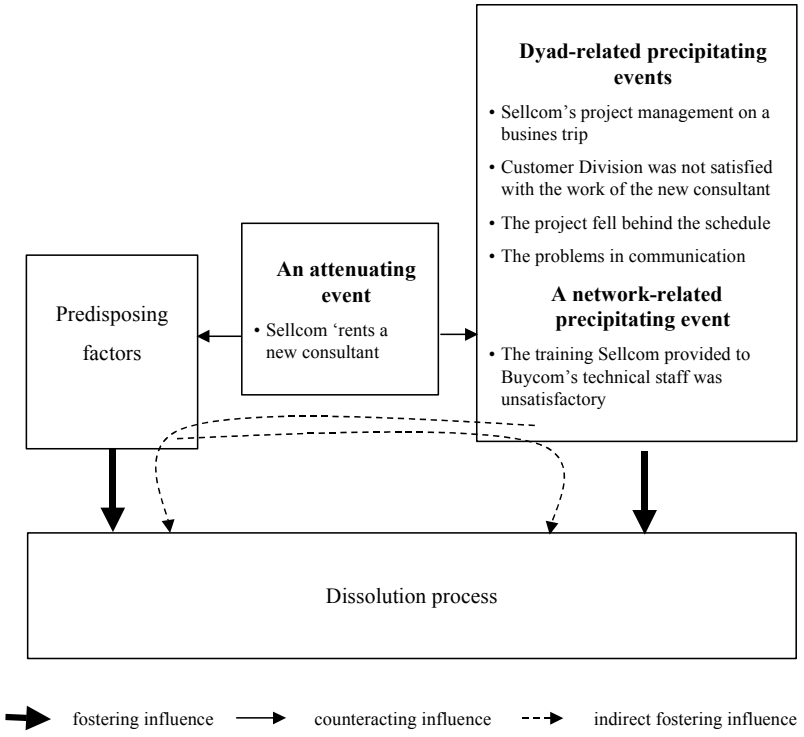


Fig. 25. Factors and events influencing the dissolution process, June – August 1996

However, as a result of the situation, the buyer voiced its concerns to the seller, which was able to correct the situation by providing a new consultant. This restored the relationship. Later on the value of the restoring actions, however, diminished, when the second dyad-related precipitating event took place. It was connected to the new consultant. The pilot version completed by the consultant did not satisfy the buyer. This can be seen as a performance failure, as can the subsequent events concerning the project being behind schedule and communication troubles. All these events lead the buyer to doubt the professional competence of the seller's Project Manager, which is another performance failure.

During the requirement specifications and pilot version phase of the project, one network-related precipitating event occurred. The training Buycom's technical staff received did not satisfy them, which was another violation of expectations. Although the event involved the staff of the network actor Buycom and Sellcom, it affected the focal relationship because of the connectedness of the relationships. Buycom's technical staff had the Customer Division as an internal customer and the training contract was connected to the task of the focal relationship.

4.2.3 Releasing the application

4.2.3.1 Main events in the relationship

Figure 26 shows the events that took place shortly before and after the release of the application. In late August the problems in the project work started to surface also in the Steering Committee, which met once a month, except during the summer vacation period. The Steering Committee realised that the project managers, Audrey and Jeremy, did not agree with each other about the state of the project. However, at first the committee did not perceive this as a 'red flag' item requiring closer attention.

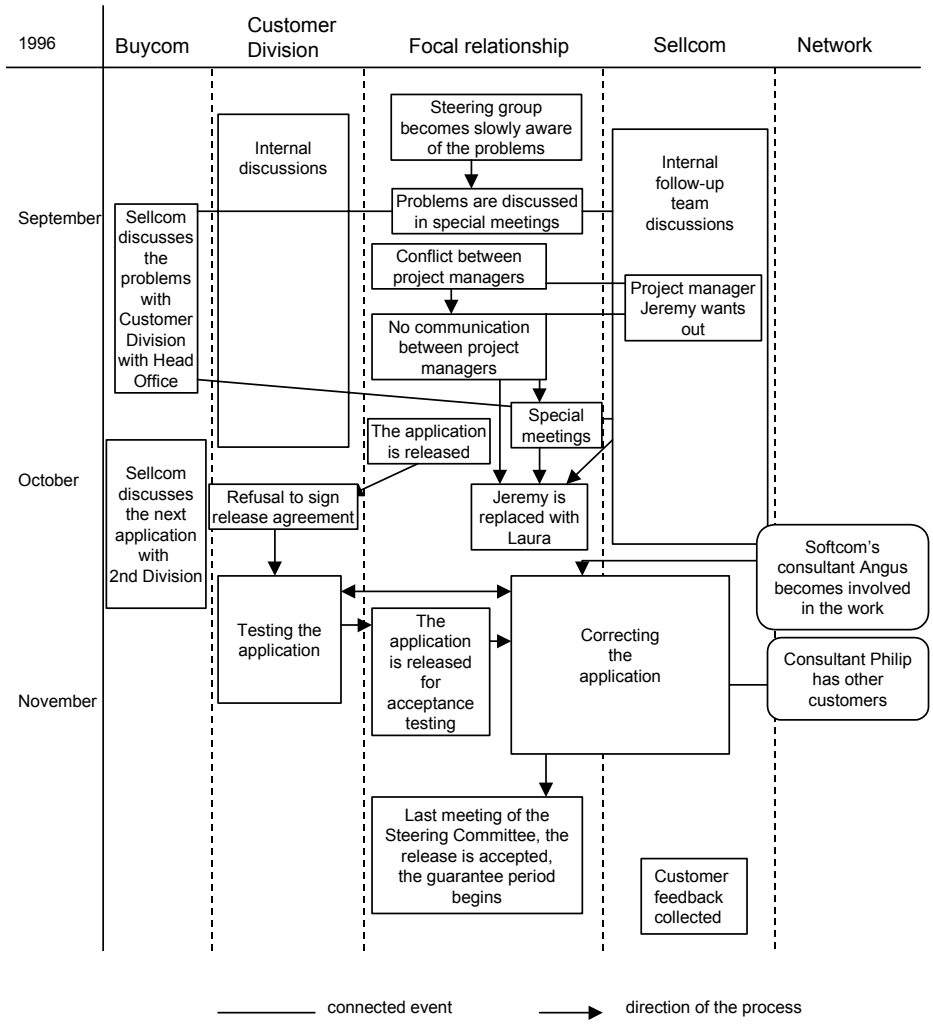


Fig. 26. The events in the relationship and the focal net during September – November 1996

After a while, it became apparent that there were serious problems in the project work. Within the Customer Division, Adrian, the head of the Steering Committee, and IT Manager Miriam tried to talk with Project Manager Audrey to smoothen things up. In addition, they met also members of the Steering Committee from Sellcom and discussed the situation (Figure 27). The meeting was constructive and it seemed that the tensions in the project work could be resolved. However, the situation in the project group did not change for the better, but for the worse.

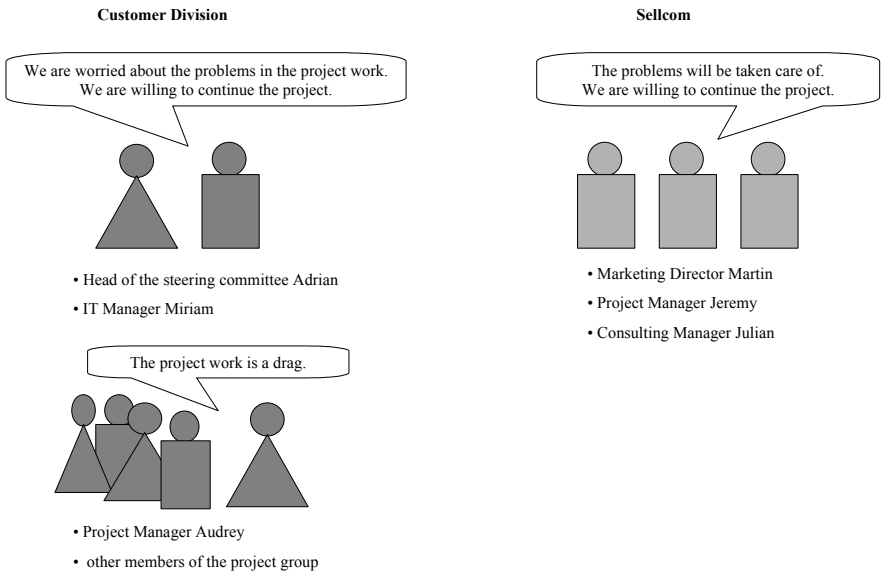


Fig. 27. The views of the actors during the first special meeting

The relationship between Sellcom's project manager Jeremy and the Customer Division's project manager Audrey did not recover, but turned into an open conflict. After that, Jeremy and the other member's of Sellcom's consulting staff did not contact Audrey directly (see Figure 28), but instead communicated with Miriam, the Customer Division's IT Manager as well as with other members of the Steering Committee (Figure 29) and persons in Head Office Functions. These persons where forced to act as middlemen between the project managers. This situation could not go on.

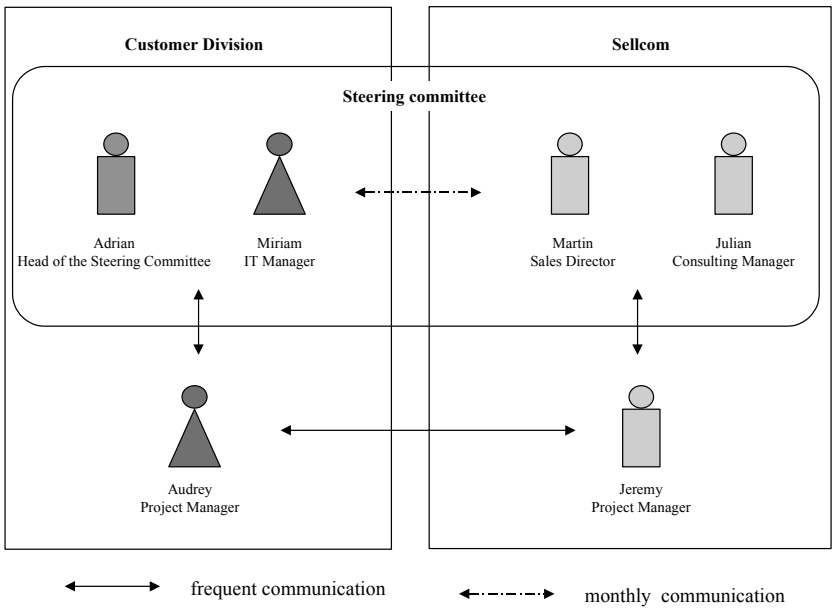


Fig. 28. The normal communication links in the project

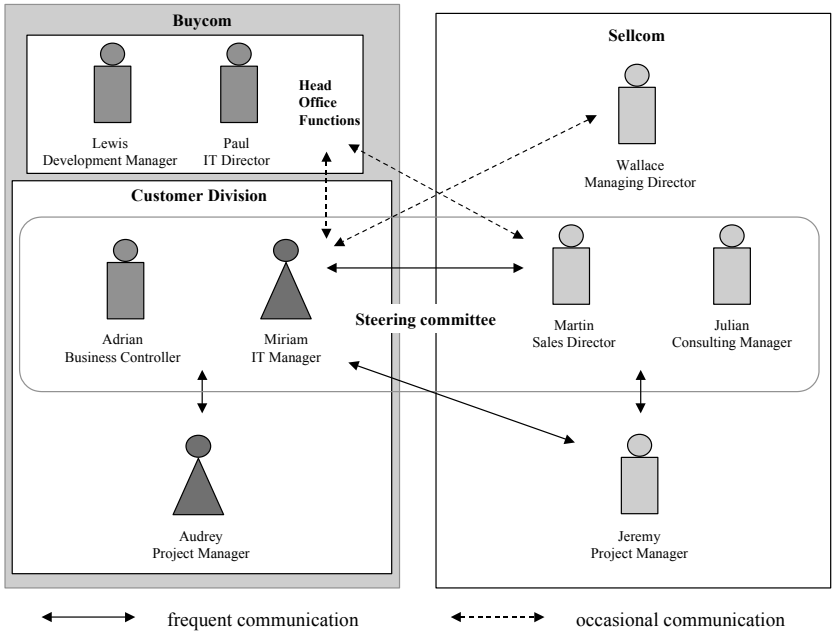


Fig. 29. The communication links after the conflict

However, on the last day of September, as agreed in the project plan, Jeremy visited Audrey's office, handed her the application with documents, and asked her to sign the release agreement. Audrey tried to use the application, which went down, then she refused to sign the papers. This resulted in a situation where the buyer and the seller company did not agree on the delivery. Sellcom felt it had produced and released a functioning and documented application, as agreed in the project plan and contract, and had thus filled in its part of the contract. The Customer Division felt that the application was unable to fulfil the promised tasks and that the documentation did not meet Buycom's standards and was therefore unacceptable.

Project manager Jeremy told his superior, Consulting Manager Julian, that he wanted to leave the project. The internal follow-up team in Sellcom discussed the situation, and Julian contacted the Customer Division's IT Manager Miriam. They agreed that Sellcom would change its project manager in order to restore the normal communication links. In October 1996, Jeremy was released from the project and Laura took over. Laura had acted as Sellcom's Project Manager in the relationship with Buycom's 2nd Division. This relationship concerned the second data warehouse project, which was already being set up. Laura had already had discussions about the Customer Division's project with Jeremy. Laura did not consider herself as a project manager; she felt that her job was to 'clear up the situation'. She shared Jeremy's view that the project work was finished because Sellcom had released the application according to the project plan.

The project team in the Customer Division started to test the solution. Audrey and the project team compiled a list of defects and missing functions in the software. This fault report was sent to Sellcom. However Sellcom did not agree with the list. It felt, e.g. that some of the defects had already been removed and that some of the missing functions had not been agreed on in the requirement specifications. In addition, it turned out later that one of the listed defects was actually invalid, i.e. a result of an error in Buycom's legacy system and not in the data warehouse Sellcom had provided.

The new communication link between project manager Audrey and the new contact person Laura did not survive for long. As Figure 30 shows, soon Laura started to bypass Audrey and to communicate directly with the members of the Steering Committee, mostly with IT-Manager Miriam and Adrian, the chair of the committee. In October, the Steering Committee agreed that Sellcom would correct the major defects in the application without extra costs. They also agreed that Sellcom would write a more specific documentation, but that it could charge Buycom for doing this. This also meant that the deadline for the project was prolonged.

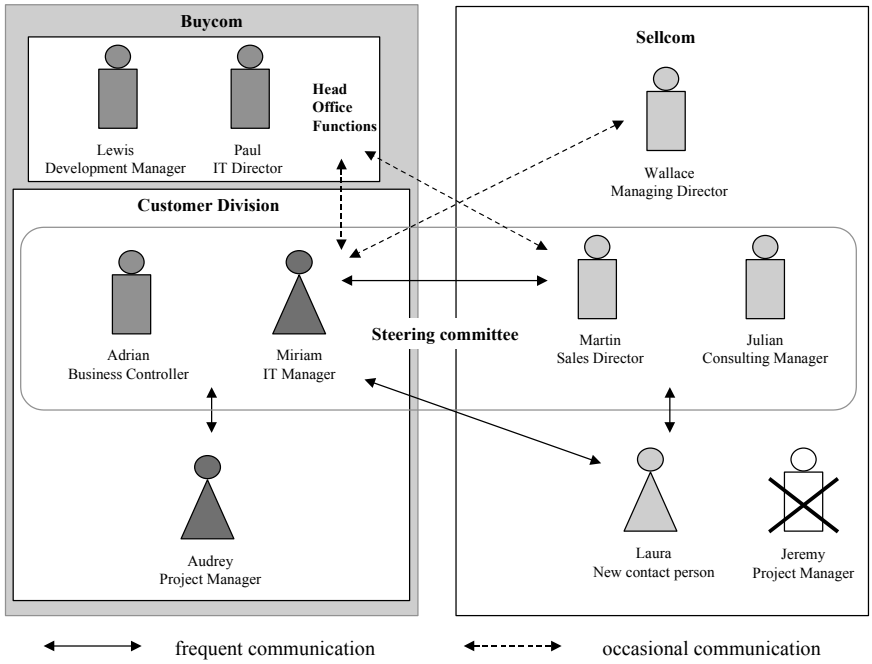


Fig. 30. Communication links after Sellcom's project manager had been changed

One issue that also distracted the project work was that Buycom had no hardware capacity to test the production runs. So far they had used a server that was suitable for development purposes but too small for full production runs.

It was not at all clear who was responsible for buying the new hardware. The Customer Division was counting on the Buycom's Head Office IT functions to do it as the unit was responsible for the technology, i.e. hardware and network solutions (see Figure 31). From the start of the relationship, IT functions had had the vision that Sellcom and the hardware manufacturer would work together on this. From Sellcom's point of view, the buyer company is always responsible for the decisions concerning the hardware technology. Sellcom's members of the Steering Committee became aware of the missing server via Sellcom's Laura. Laura then tried to speed up the process with the Customer Division's Miriam and a few persons from Buycom's Head Office IT functions. They reached one solution, which later on turned out to be too slow and difficult to maintain, and during the next summer the architecture was changed.

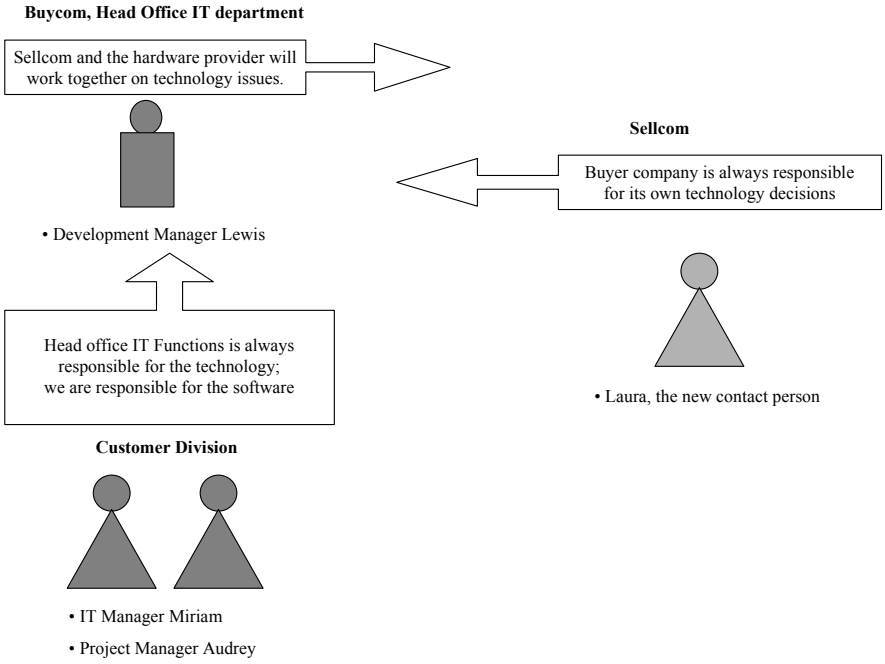


Fig. 31. The views of the actors concerning the technology decisions

At the end of the October, the application was released for the customer's two weeks acceptance testing, and the next meeting of the Steering Committee was scheduled to take place in November, after the acceptance testing had been finished. Consultant Philip was responsible for the removal of the bugs that the customer found during the testing, but he already had new customers to attend to. This situation was annoying to the project personnel of the Customer Division. During the project group's follow-up meetings there were still disagreements about which defects had been removed, and if removed, whether the programme was functioning properly when used in the Customer Division. As the atmosphere was far from co-operative, small issues, otherwise easily resolved, turned into major disagreements.

Adrian and Miriam had already had a few meetings with Sellcom's Managing Director Wallace to save the project. Adrian and Miriam decided on the minimum changes that they wanted Sellcom to do in order to get a solution that could be used in production. In November, when the Steering Committee had their last meeting, the application was accepted and the three months guarantee period began. After the meeting, the Steering Committee was dissolved and the Customer's IT department became responsible for the solution.

After the release was accepted, Sellcom collected customer feedback from the project, a normal procedure. Nine persons returned the questionnaire of 29 questions assessing different phases of the project with a scale from adequate to excellent. The target area of the project and the clarity of the project goals were evaluated as good. "Clear allocation

of responsibilities", "taking care of the quality of the operational data", "listening to the future users in designing the user interfaces", "keeping the project schedule", and "working style in the project" were all assessed as adequate.

4.2.3.2 Influencing factors and events

Again, at this stage of the project work, several dyad-related precipitating events took place, as shown in Figure 32. At first the Steering Committee did not perceive the problems in the project work to be serious ones, and thus did not start restoring actions immediately after the first signs of trouble. Although the Steering Committee tried to solve the situation later on by discussing it with the respective project managers and among itself, it did not restore the relationship. This meant that the existing problems between Project Managers turned into an open conflict. This resulted into a situation where the Customer Division's Project Manager was bypassed, as Sellcom's Project Manager did not contact her any more. For the Customer Division's Project Manager, this was a serious violation of the project work procedures. It not only hindered her to perform her duties as Project Manager, but also affected her position in the project and in the organisation as a whole.

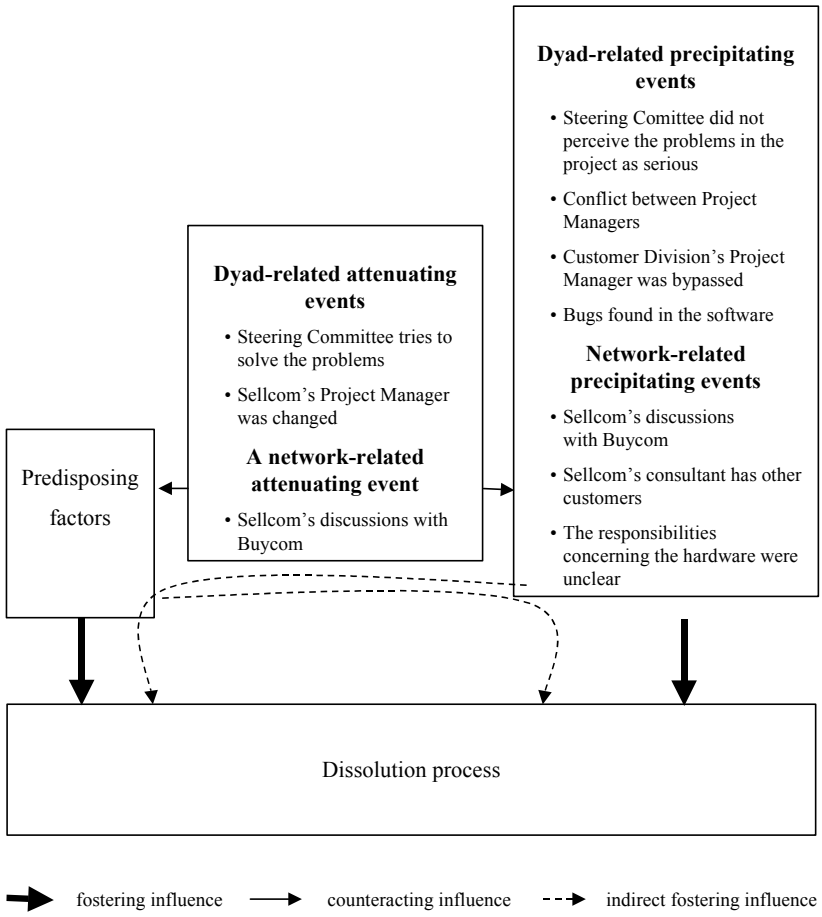


Fig. 32. Factors and events influencing the dissolution process during September – November 1996

In addition to the restoring discussion, which the Steering Committee arranged, the seller also discussed the situation internally and externally with a network actor, namely Buycom's Head Office personnel. From the seller's point of view, it tried to restore the relationship by contacting the persons responsible for the licences contract. However, the buyer, the Customer Division, did not perceive these contacts as attempts to restore the relationship, but as attempts to avoid responsibility by convincing the Head Office that the seller had tried its best and that the problems lay elsewhere. For the Customer Division, the actions, which Sellcom perceived as restoring the relationship, became network-related events that precipitated the relationship dissolution.

Another restoring action that did not bring the expected result was the agreement to change Sellcom's contact person. The change itself took place, but the communication with the Customer Division's Project Manager did not recover. Moreover, the bugs found

in the acceptance testing performed by the Customer Division increased their perception of Sellcom's performance failures.

Two not yet mentioned network related events can also be seen as precipitating ones. Sellcom's consultant had already other customers, so by the time of the acceptance testing, he was not able to concentrate on problem detection. This event is connected to the delays in timetable, if the acceptance testing would have taken place earlier, the consultant would have been more available. Another network-related event was the confusion about who is responsible for the hardware environment decisions. As all the actors, the buyer, the seller, and the network actor Head Office had different opinions on this issue, the decisions were difficult to make. This had bearings to the focal relationship, as the operational hardware for the data warehouse was not ready when the operational test runs should have taken place, thus delaying the project further. From the Customer Division's point of view, this was Sellcom's performance failure, but for Sellcom this was the Customer Division's and Buycom's performance failure.

4.2.4 The warranty period

4.2.4.1 Main events in the relationship

Figure 33 compiles the major events that took place during the warranty period. First, at the end of November, Sellcom's consultant Philip changed jobs, left the country, and was no longer available to correct the solution. This left Sellcom without any consultant who knew the application thoroughly.

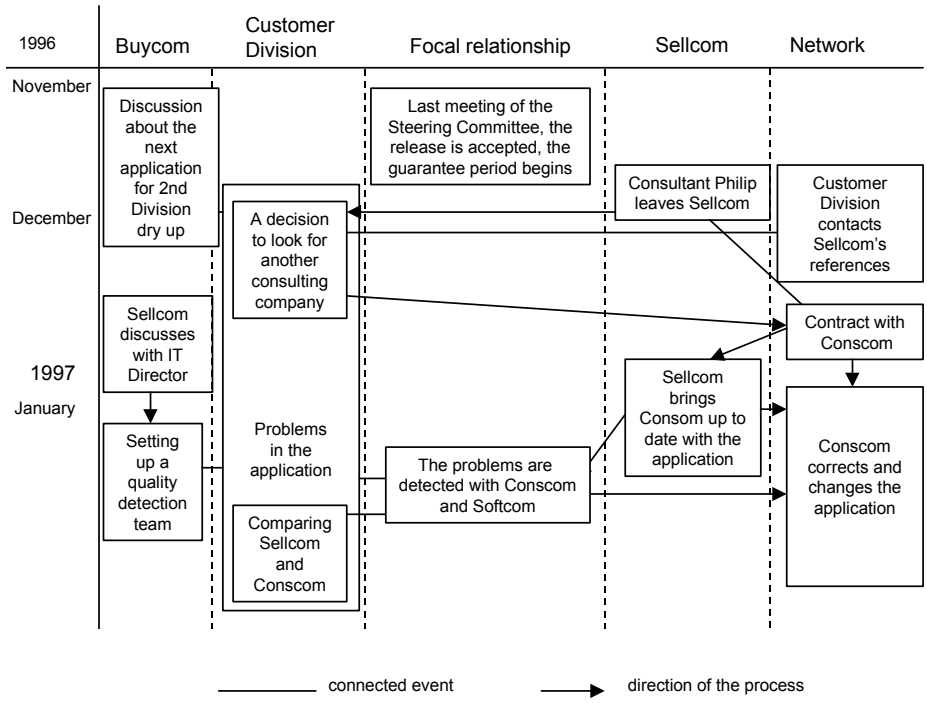


Fig. 33. The events of the relationship and focal net, November 1996– January 1997

The Customer Division wanted to have the application in production use before the end of the three months guarantee period, yet they felt that this was not going to happen without outside help. After discussions and some enquiries also to Sellcom's references, project manager Audrey and IT Manager Miriam decided to contact Sellcom's partner company Conscom in December 1996 (Figure 34). The Customer Division made a contract with the consulting company Conscom to correct the errors in the data warehouse application so that it could function in production use.

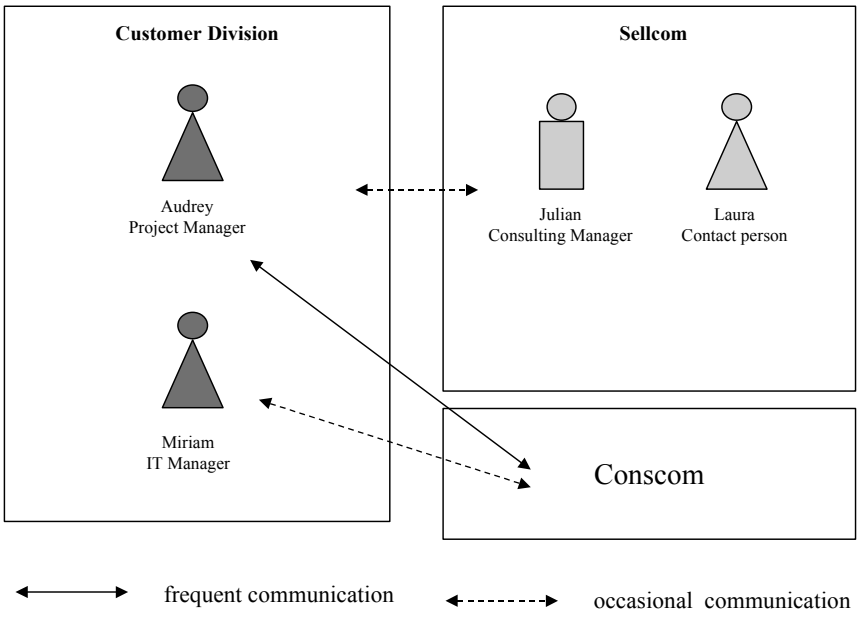


Fig. 34. The communication links during the negotiations with Conscom

During the autumn of 1996, there had been negotiations between Buycom's other divisions and Sellcom concerning the future applications of the data warehouse. These negotiations withered towards the end of the year; this made Sellcom's sales organisation worried about its relationships with the Customer Division and Buycom as well as about the status of the first application project. It became clear to the Sales Manager Joseph that unless the relationship with the Customer Division was restored, Sellcom would not be able to establish any new relationships with other Buycom divisions, although this had been their joint original plan.

In Sellcom's view, the Customer Division should have given them the opportunity to correct the errors during the warranty period and the customer should have discussed the idea of hiring Conscom with Sellcom in advance. As pictured in Figure 35, Sellcom considered the hiring of Conscom a contract violation that led to the invalidation of the warranty of the software. In Sellcom's eyes, Conscom was developing the system, not correcting it. In spite of this, Consulting Manager Julian felt relieved, because he was running out of consultants who could, and would like to, work with the Customer Division, and he felt that Conscom could save the situation. Therefore, Sellcom agreed to help Conscom's consultant get to know the application.

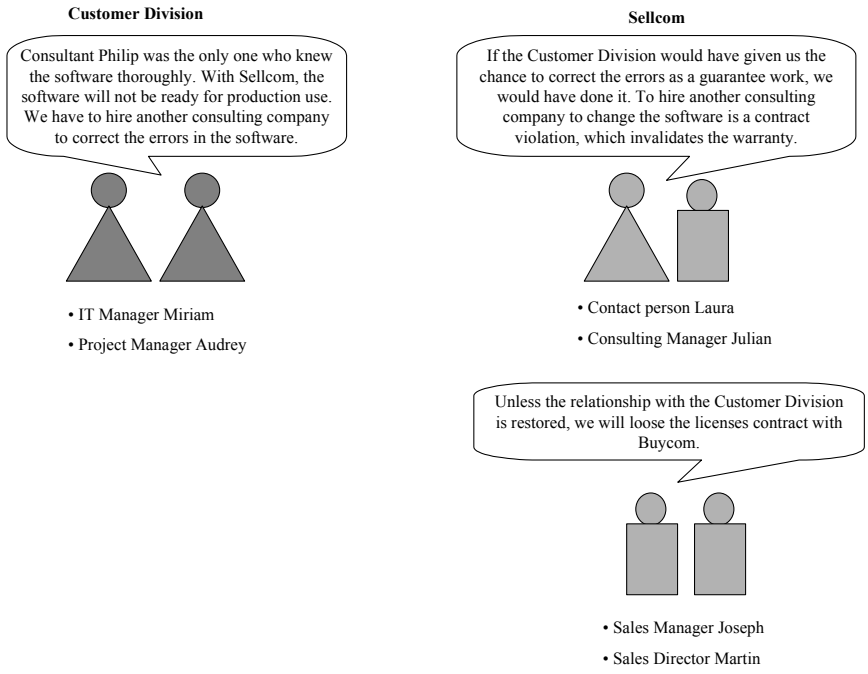


Fig. 35. The views of the actors concerning the hiring of Conscom

Consultant Jacob from Sellcom was involved in the problem detection period that followed. There were two versions of the software, the development and the production version, which were not identical. As a result, a group of consultants, namely Sellcom's Jacob, Softcom's Fanny and Angus as well as Conscom's consultant together with Project Secretary Mabel, tried to resolve the problems (Figure 36). Conscom's consultant also contacted ex-consultant Philip, who knew the code best and who at that time was employed in Conscom's sister company in another European country.

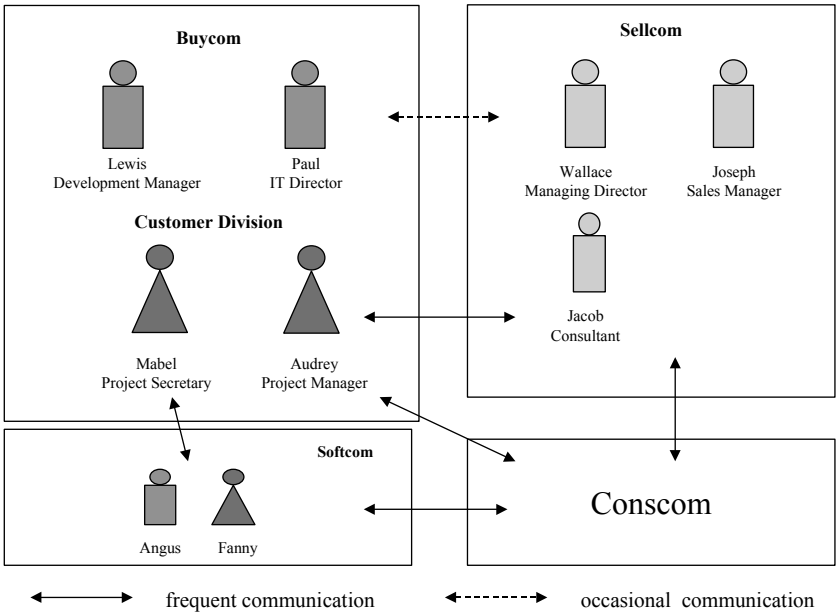


Fig. 36. The communication links during the problem detection

Meanwhile, as a result of the poor customer feedback from the project group and the Steering Committee as well as the ongoing problems and disagreements, Sellcom continued discussions with Buycom's Information Technology Director Paul and Development Manager Lewis from the Head Office Functions. Paul together with Sellcom's Sales Manager Joseph and Managing Director Wallace decided that if they were to continue the relationship, something had to be done. They agreed that Paul would set up a Quality Assurance Group to settle things with the Customer Division. Buycom had a standard project evaluation procedure after each finished project; in contrast, such a team was an exceptional solution.

4.2.4.2 Influencing factors and events

Figure 37 compiles the events that influenced the relationship dissolution during the warranty period. During that period, only one seller-related precipitating event influenced the dissolution process. Consultant Philip left Sellcom and thus took his unique knowledge about the specific solution with him. For the Customer Division this was an influential change, as it affected the problem detection and therefore also the possibilities of getting the software in production quickly. This resulted in a buyer-related precipitating event, namely the decision to start to look for another consulting company to take care of the problem detection.

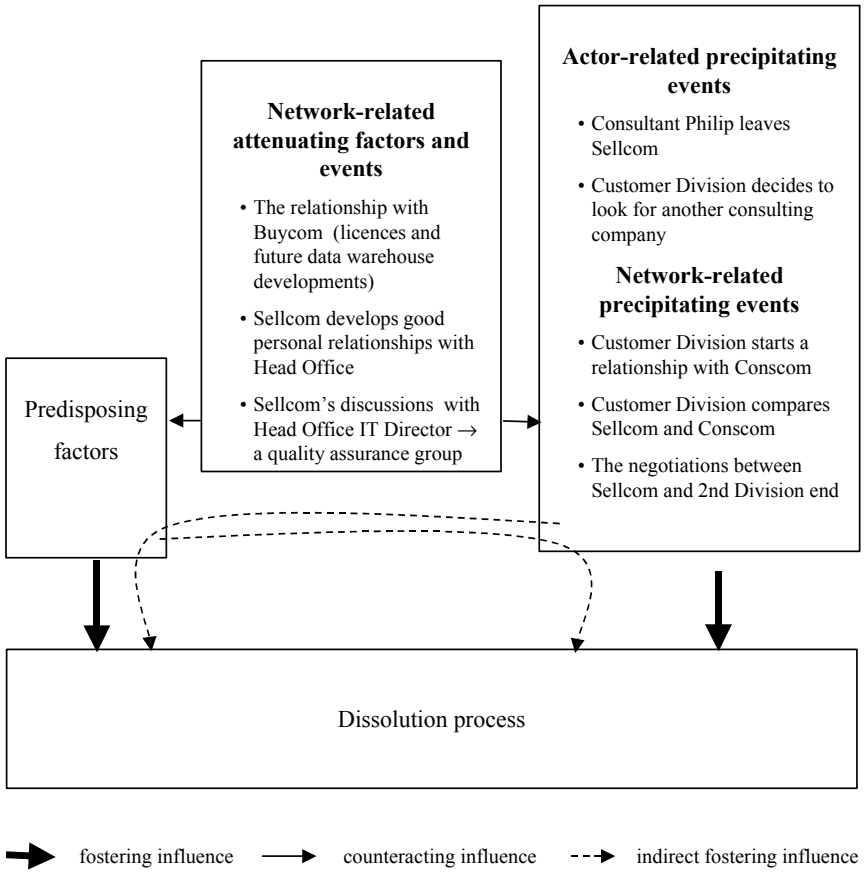


Fig. 37. Factors and events influencing the dissolution process, December 1996 – January 1997

However, several network-related precipitating events took place thereafter. The Customer Division entered a contract with another consulting company, and while they were working on the solution, the Customer Division had a chance to evaluate and compare the performances of the two consulting companies. In addition, the ongoing negotiations between Sellcom and a network actor, namely the 2nd Division, ended. Sellcom perceived this as an alarm signal of the unstable state of their relationship with the Customer Division. Moreover, Sellcom perceived the hiring of another consulting company as contract violation, even though the hired company was Sellcom's partner company Conscom.

Sellcom wanted to restore the relationship because of these attenuating factors: the large licences contract and the prospects of future data warehouse applications with all the different divisions. Thus Sellcom took some restoring actions. Discussions with a network actor, the Head Office IT Services took place, and together with IT Director

Paul, a decision was made to set up a so-called quality detection team to settle the unresolved matters with the Customer Division, so that these matters would not jeopardise the continuation of the relationships.

4.2.5 Closing the project

4.2.5.1 Main events in the relationship

The first event pictured in Figure 38 took place in Buycom during February 1997. IT-Director Paul chose two persons from Buycom to form the Quality Assurance Group. The chosen ones were Lucy, who was an experienced director in the Customer Division's Information Technology group, and Amos, who was a director in the Head Office Functions' Information Technology Services. They were unbiased, as they did not have any previous connections with the project.

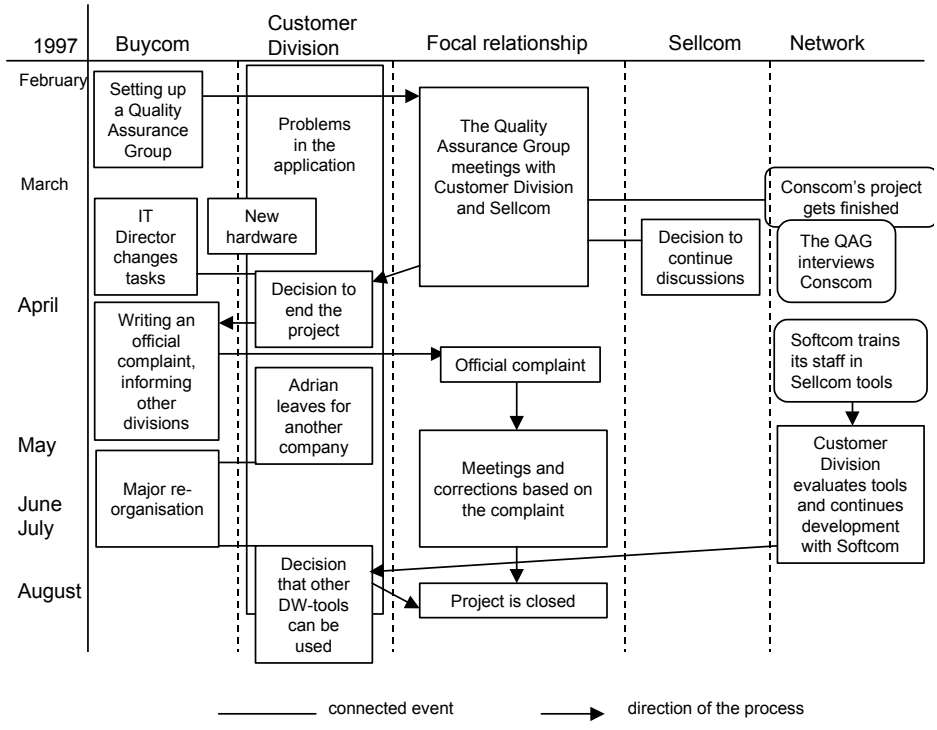


Fig. 38. The events of the relationship and focal net, February 1997 – August 1997

The task of the group was threefold (see Figure 39). Firstly, it had to make clear what had been agreed on in the contract, as the parties did not seem to agree. Secondly, it had to find out what had been delivered and whether it was in accordance with the contract. Thirdly, it needed to analyse the situation of production use and whether this use could be extended. Amos was responsible for sorting out the situation of production use from the hardware point of view and Lucy took care of the rest.

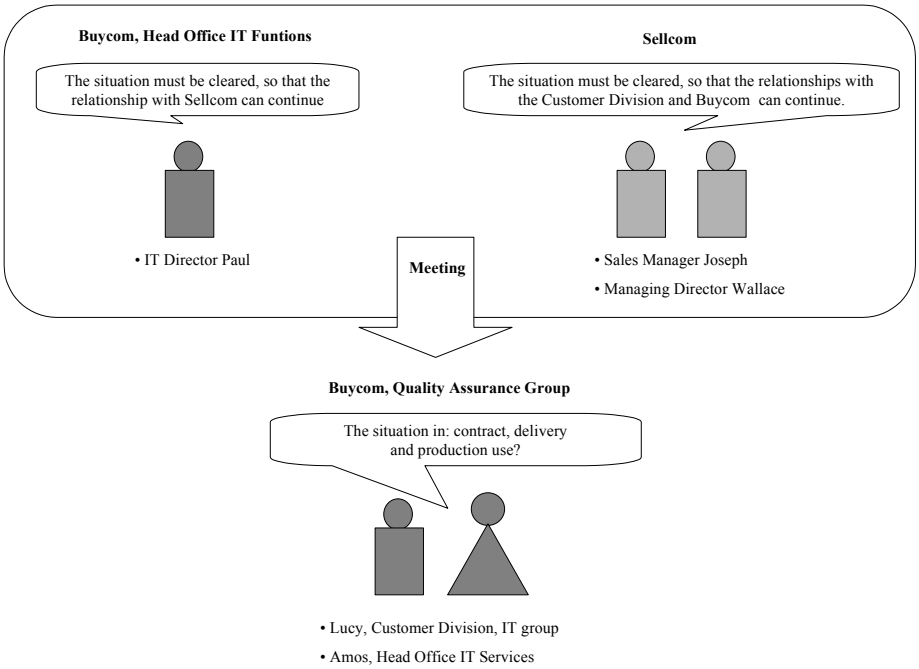


Fig. 39. The views of the actors when the Quality Assurance Group was set up

First Lucy and Amos gathered all the documents and interviewed central persons at Buycom including Project Manager Audrey, the Customer Division's IT Manager Miriam and the Head of the Steering Committee Adrian. After that, they contacted Sellcom and started discussions with Managing Director Wallace and Consulting Manager Julian in order to learn the viewpoints of both parties. They also interviewed Conscom's employees. As the discussions continued and reached a very concrete level with problem listing, allocating responsibilities, and setting time-tables for action, more people took part in the meetings, e.g. Miriam, Audrey, and James from Buycom and Sales Manager Joseph and Consultant Jacob from Sellcom. This is shown in Figure 40.

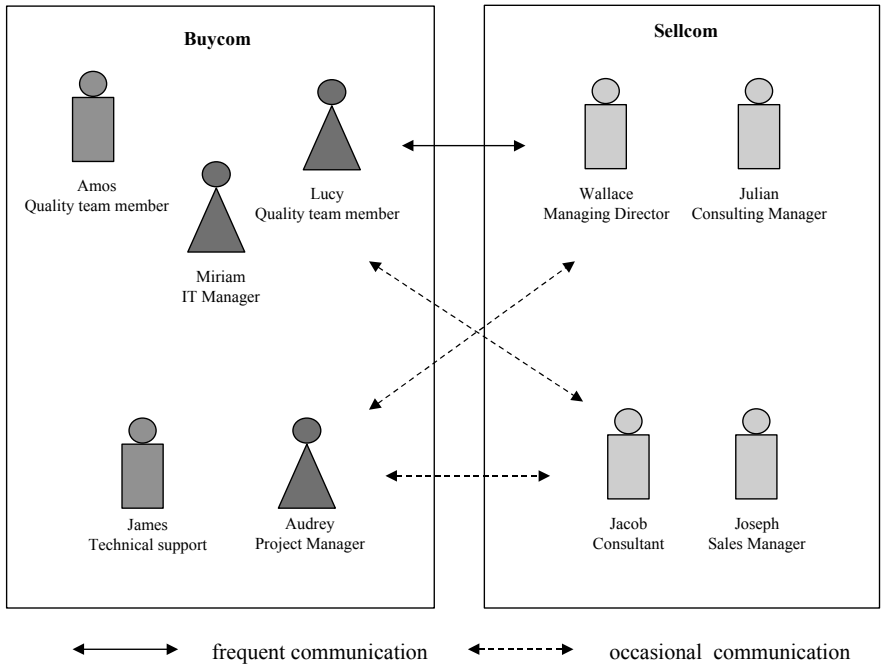


Fig. 40. The communication links during the quality detection period

Later on, Ida from Buycom's Buying and Logistics Services joined the team and helped Lucy in reading the contracts and finding out if everything really had been delivered. Sellcom did not want the Customer Division's Audrey to take part in the meetings, but Buycom could not accept this demand (see Figure 41). In spite of this, Sellcom decided to continue the discussions.

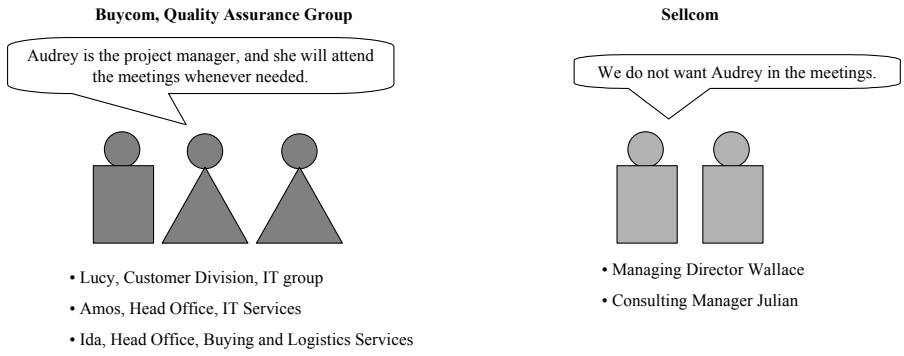


Fig. 41. The views of the actors during quality assurance meetings

Two important personnel changes took place during the spring 1997. Adrian did not take part in the quality discussions, because he had left the buyer company in late April for another company. IT Director Paul changed tasks within Buycom and was no longer involved in the development of the company-wide data warehouse solution. Therefore the Quality Assurance Group never reported their findings to Paul.

In spite of continuing negotiations, the Quality Group was not able to resolve the disagreements. The whole group shared the feeling that they were not making progress. Summer vacations were approaching and preparing for and having meetings with Sellcom was time- and therefore money-consuming. The Quality Assurance Group decided to make a list of the minimum changes and corrections that they wanted Sellcom to make to the application and, after that, to end the project. In addition, during the negotiations Softcom used Sellcom's software development tools to develop a customer satisfaction application to the Customer Division, proving that functioning applications could be developed with Sellcom's licences.

As the ongoing negotiations did not seem to produce any results, the group decided to make a formal complaint. Ida and lawyers from Buycom's Buying and Logistics Services wrote the official complaint in April. The complaint concerned insufficient technical support, insufficient training, and the application not operating properly. Other divisions (mainly the 2nd Division) were informed about the complaint and asked not to start any new projects with Sellcom until the situation had been resolved. Sellcom was also informed that no development work would continue until the Customer Division's solution functioned properly in production use.

Sellcom's view was that the buyer had lost its right to claim compensation because the Customer Division had accepted the software delivery and the software had been changed by another vendor namely Conscom, thus expiring the warranty. Conscom had continued to work with the data warehouse-application until March, changing e.g. the customer interfaces and hard coding. The Customer Division's view was that the changes made by Conscom were clearly visible in the original code, which also contained the original errors (e.g. hard codes). The different views of the two companies are pictured in Figure 42.

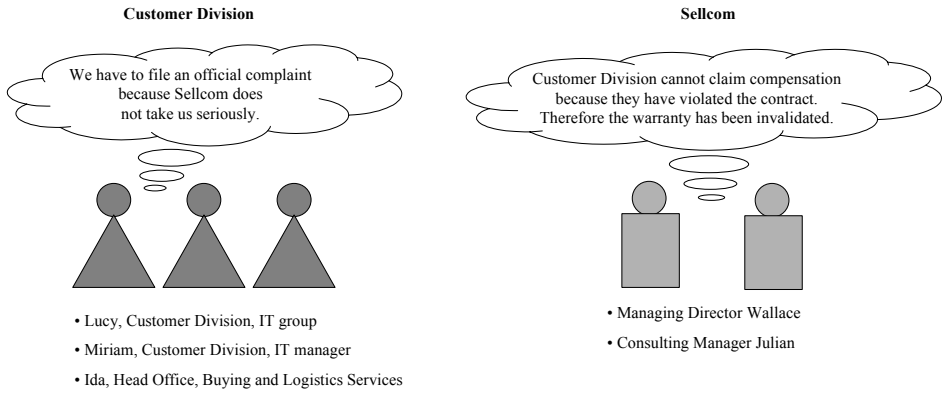


Fig. 42. The views of the actors concerning the complaint

In May 1997 Ida contacted Sellcom and the complaint meetings continued. During this time, the most central persons were Lucy, Ida, IT Manager Miriam and Technical Support Employee James from Buycom and Managing Director Wallace and Consulting Manager Julian from Sellcom. The communication between these six people was occasional (Figure 43). Sellcom's contact person Laura also attended a couple of meetings.

Meanwhile, the Customer Division's IT department together with Softcom started to assess the re-usability of the existing system and to evaluate other available software tools in order to build a larger data warehouse system than the one bought from Sellcom. This evaluation resulted in the conclusion that the application Sellcom (and Conscom) had developed could not be re-used as such, and therefore Sellcom's software tools would not necessarily be used in developing the larger system. The meetings concerning the complaint continued until August 1997, when Buycom's group considered that the minimum changes had been done. The project was officially closed in the last meeting and confirmed with a closing letter from the Customer Division.

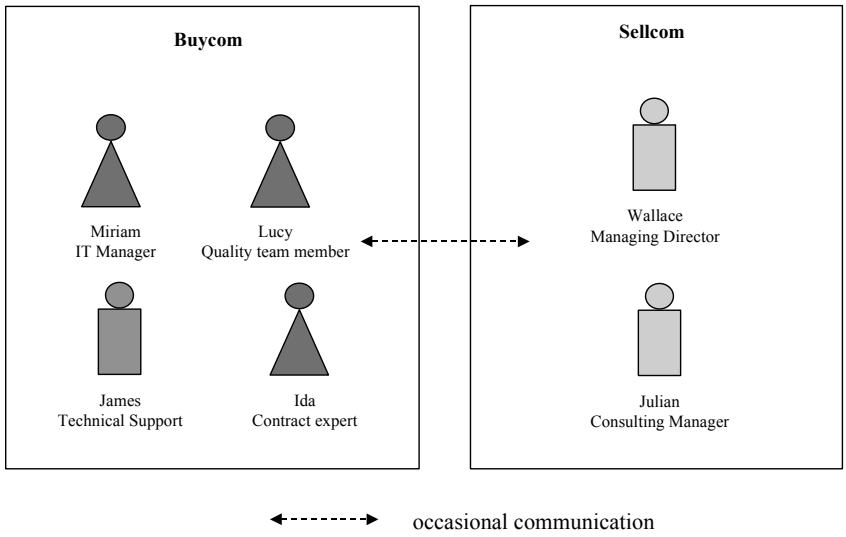


Fig. 43. The communication links during the formal complaint negotiations

4.2.5.2 Influencing factors and events

Figure 44 compiles the events that influenced the relationship dissolution during the closing of the project. Although the Quality Assurance Group was set up to restore the relationship, it did not produce the expected results. The team members were not satisfied with what had been achieved in the negotiations, and this turned the negotiations into dyad-related precipitating event. Buycom's group members felt that Sellcom was not co-

operative in its behaviour. Actually, it was not self-evident that Sellcom should have entered into discussions with the group, as there were different views at Sellcom. However Sellcom decided to try to restore the relationship via the negotiations.

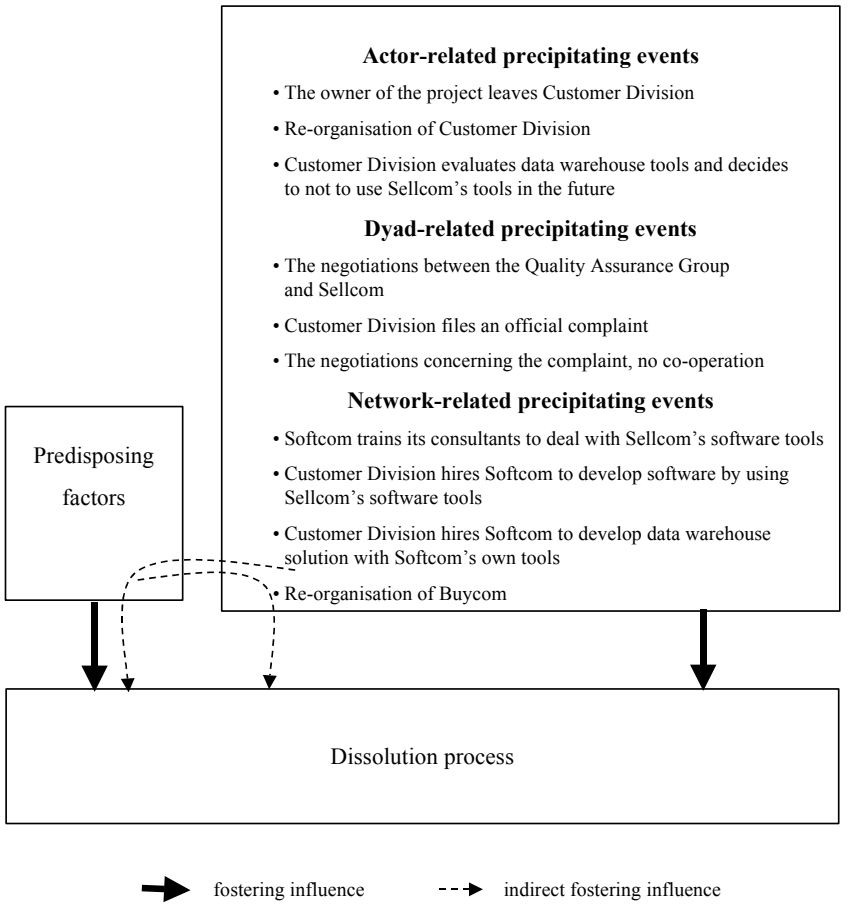


Fig. 44. The factors and events influencing the dissolution process, February – August 1997

The problems in the production use of the application continued. This and the time consuming negotiations lead to a buyer-related precipitating action, the decision to end the project. The decision had become possible because of a network-related precipitating event: IT Director Paul had changed tasks and was no longer involved in the relationship. Thus no attenuating factors or events hindered the end of the relationship. The next dyad-related precipitating event was the official complaint and the following negotiations based on the complaint, which, again, did not satisfy the buyer.

A buyer-related precipitating event happened when Adrian, who was the 'owner' of the project and the former head of the Steering Committee, left the Customer Division to work for Buycom's competitor. This reduced the Customer Division's interests in

continuing the relationship with Sellcom. Moreover, the organisational structure of the Customer Division was changing because of a network-related event, namely the major re-organisation at Buycom.

In addition, two other network-related precipitating events took place. Another consulting company, Softcom, which already had developed a long-term relationship with the buyer, trained their consultants to operate with the seller licenses and was hired to develop another type of application using the seller's licences. As this solution was a success, Softcom was also hired to design the data warehouse solution, using the most suitable development tools, which meant it was not obligated to use Sellcom's licences.

During this period, there were no attenuating factors nor any attenuating events took place that would stop or delay the dissolution process.

4.2.6 The epilogue

4.2.6.1 Main events in the relationship

The development of the relationship from September 1997 to November 1997 will be referred to as an epilogue (see Figure 45). Although the project had been closed, and the project group had also been dissolved, some compatibility problems still existed in the solution. The Head Office IT Services and Audrey continued to resolve the problems with Sellcom. Audrey contacted Sellcom's parent company, which promised to look into the issue with Sellcom. When these problems were resolved, the Finnish and Swedish letters of the alphabet (å, ä, ö) started to cause problems at the end of September 1997.

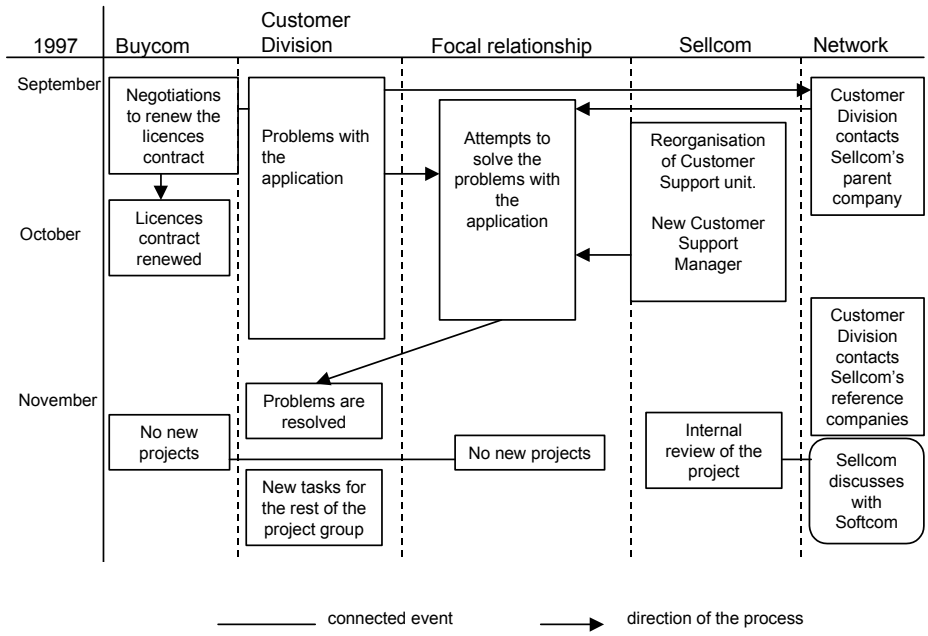


Fig. 45. The development of the relationship, September 1997 – November 1997

In late October, Sellcom reorganised its customer support unit and hired a new person to lead the group. Alan, the new Customer Support Manager, started to build exactly the same technical environment at Sellcom that Buycom had had since the beginning, and the problem with the letters of the alphabet was resolved in the end of November 1997.

After the closing of the data warehouse project, the Customer Division and Buycom did not start any new consulting projects with Sellcom, although the original plan had been to continue with new developments with the Customer Division and similar projects with other divisions. As the persons that has been involved in the licences negotiations from Buycom were no longer in their original positions, the original plan, which included Sellcom as well as other division was left without anyone to execute it. The licence contract was renewed during the autumn of 1997, ensuring that the Customer Division's application could be used, but no enhancement or new development work took place.

Communication e.g. about new software releases related to data warehousing and data mining continued between Project Manager Audrey and Sales Manager Joseph from Sellcom, but only at Sellcom's initiative, as Figure 46 shows. Related to these discussions, the Customer Division contacted some of Sellcom's references. Sellcom continued to discuss the project, both internally and with Softcom, which also had been involved in the relationship as a network actor.

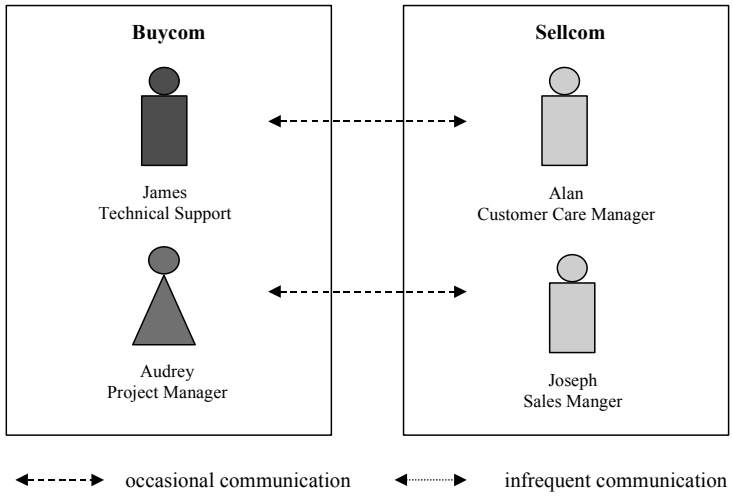


Fig. 46. The communication during the epilogue

Buycom went through a major reorganisation in the summer of 1998. After that the Customer Division no longer existed, but the information technology personnel of the former Customer Division still continued with more or less same tasks and as more or less the same group. However, the users of the data warehouse system were spread out from one unit to different parts of the new organisation.

In addition, several persons from the Customer Division, Buycom, and Sellcom left their companies. Adrian had already left the Customer Division, and Project Manager Audrey left her position in the spring of 1998. At Sellcom, Project Manager Jeremy left for another consulting company soon after the relationship had dissolved and, later on, his replacement in the relationship, Laura also left.

The situation in the summer of 1999 was the following: Buycom no longer had licences for Sellcom's data warehouse development tools. Buycom had a new data warehouse solution, which had been developed using Softcom's consulting and the software development tools Softcom was used to working with.

4.2.6.2 The influencing factors and events

Figure 47 pictures the influencing factors from September 1997 to the summer of 1999. During the epilogue, some connections remained between the buyer and the seller; these were actually the results of a dyad-related precipitating event. There were continuous problems with the production use of the data warehouse application. However, the main connections were between Sellcom and the network actor Head Office IT Services. It was the task of the IT Services to keep the different Division's applications running without problems. In the case of the data warehouse application, IT Services was not able to

perform the task. There were constantly problems with the solution, and Sellcom's Customer Support unit was not doing a good job in helping IT Services in resolving them.

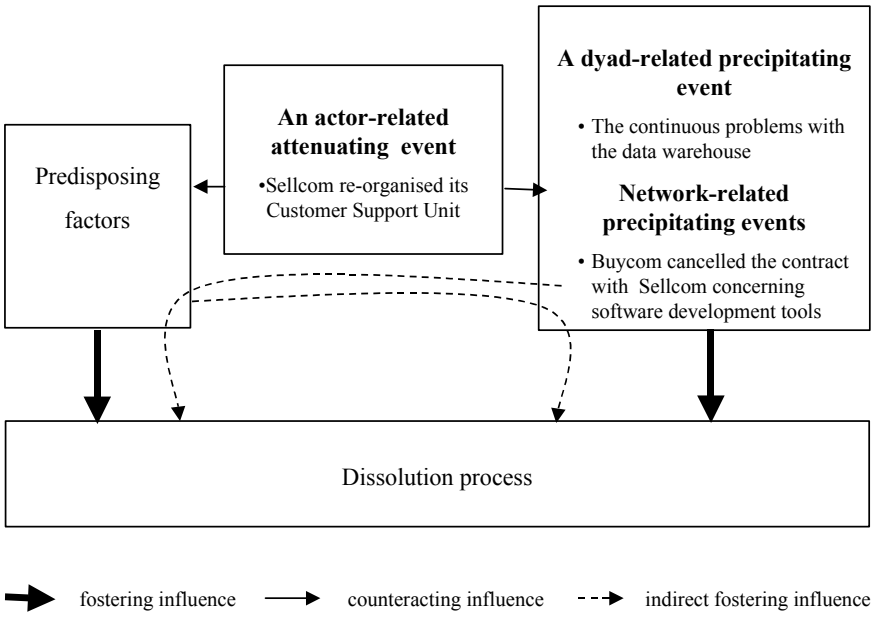


Fig. 47. Factors influencing the dissolution process from September 1997 to the summer of 1999

The problems continued until Sellcom reorganised its Customer Support unit, and the new head of the unit was able to resolve the problems. However, this actor-related attenuating event happened too late to save the relationship between Sellcom and the Customer Division.

In the summer of 1998 a major network-related precipitating event took place. Buycom did not renew the licence contract with Sellcom; this ended the relationship between Buycom and Sellcom. This also meant that the applications created with Sellcom's tools could no longer be used, because neither Buycom nor the Customer Division had any licences for them.

4.3 The nature of the relationship

The previous sections have described the course of the relationship between the Customer Division and Sellcom. In each stage of the project, the factors that influenced its dissolution process were highlighted. The factors form only one part of the theoretical

framework through which I try to understand the case. Therefore, in the next sections, the theoretical model and the empirical data are compared and the model is adjusted to fit the data. All three parts of the model are discussed: First, the nature of the relationship, which the model suggests influences both the factors and the dissolution process. Second the predisposing factors, precipitating events, and attenuating factors and events of this case are compared to the *a priori* model. Finally, the stages of the process are described with the help of the theoretical model in order to complete its empirical grounding.

The nature of the business relationship between the Customer Division and Sellcom was at its beginning continuous. It was clear to both of the actors that this first project of a developing data warehouse solution for the Customer Division would only be the start of a long-term relationship. There were two reasons for this: First this particular solution was to be the first of a series of similar solutions in different divisions of Buycom. Related to this reason were the facts that Buycom had bought licences for Sellcom's software tools and developing the application was possible only with the licences.

The second reason is related to the nature of the software: Data warehouse development is more like a process than a project. This means that because of the complexity of these systems the building starts often from only a business question, to which the first solution gives an answer. Once the first part of the solution is working, new queries answering new questions are developed, and new legacy systems may be connected to the database, thus enlarging the solution.

Although in the beginning the relationship was a continuous, this view was not totally shared by all individuals involved in the relationship. The Customer Division's IT personnel experienced the situation somewhat differently. In their view, the relationship had elements that added a terminal 'flavour' to its nature, i.e. they were not willing to maintain the relationship. There are two factors that influenced their perception of the nature of the focal relationship: Firstly, they had been in a relationship with Offcom, another data warehouse vendor, and they were satisfied with its performance. Secondly, they were not able to take part in the supplier selection, which had been done in Buycom. The terminal 'flavour' to the relationship's nature only increased when the troubles began. Moreover, when the Project Manager's communication links broke down, and Sellcom started to discuss the project, not only with the Customer Division, but also with Buycom, these events shifted the Customer Division's perception of the relationship more and more towards terminal.

However, during the relationship, the Customer Division's IT personnel were not the only ones perceiving the focal relationship as something else than just continuous. Also in Sellcom discussions were taking place about whether to continue the relationship or to terminate it. Some individuals in the Consulting Unit felt that this project had become too difficult with too many conflicts. They perceived the situation as impossible to continue. However, Buycom had signed a considerably large contract with Sellcom on the licences, and if this first project did not succeed, the relationship with Buycom would be in danger. The predominating view was that Buycom was too important and (soon-to-be) too large a licence and consulting customer to be lost. Therefore Sellcom decided to continue the relationship, although not everyone agreed wholeheartedly with this decision.

Why then did the nature of the continuous relationship change into terminal, and why could the relationship not simply be terminated? From the viewpoint of the individuals in the Customer Division, the relationship was terminal because the Division was not

satisfied with the relationship but it had to maintain it because of Buycom's involvement. Buycom was involved in the relationship because of their contract concerning Sellcom's licences. In addition, the plan was to build a company wide-data warehouse system. Moreover, Sellcom had involved Buycom in its attempts to resolve the conflicts between the Customer Division and Sellcom; for the individuals involved in the actual project, it seemed that Buycom had taken Sellcom's side in the matter. The Customer Division's personnel were unable to decide the relationship's future on their own, which made the relationship terminal for them.

Once the ending of the relationship between the Customer Division and Sellcom became possible, it did not take long for it to end. The precipitating events that made the ending possible have been discussed previously, however, they are summarised in the following section, along with the other factors that influenced the dissolution.

Figure 48 depicts how the perceptions of the nature of the relationship changed from the beginning to the end. In the Customer Division there were individuals who almost from the beginning felt that their company's relationship with Sellcom occurred on an involuntary basis. During the relationship, more people started to agree with them, and towards the end, the Customer Division shared the joint perception of the focal relationship being terminal and wanted to end it. At Sellcom, the relationship had been seen as continuous for quite some time, but already during the active project work, the Project Manager wanted to relieve himself of it. His view of the relationship was shared by his replacement Laura, and she sustained her view until the end of the relationship.

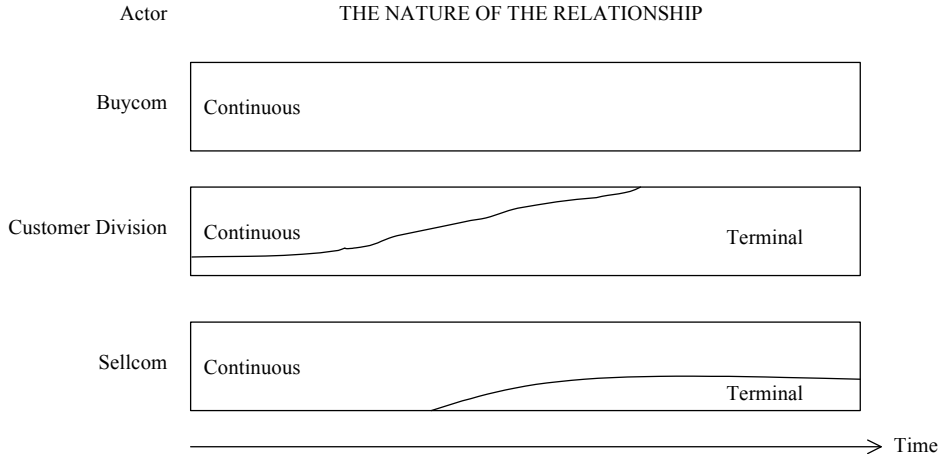


Fig. 48. The actors' perceptions of the relationship's nature

In contrast to the two partners, the network actor Buycom saw the focal relationship, as well as its own relationship to Sellcom, as continuous all the time. This was also the reason why the Customer Division was not able to decide to end the relationship. Although the three actors did not perceive the relationship similarly, it is possible to say that the focal relationship changed from being continuous to being terminal. Thus its dissolution can be termed as chosen/desired. From the buyer's point of view the

dissolution was desired. The individuals involved in the relationship from the buyer company shared the views of the relationship as terminal. The seller's personnel had mixed views, some of them saw the end as desired and some as chosen. In spite of the different views, the decisive one was the shorter view, as one partner may end the relationship, but two are needed to keep it alive (Simmel 1950 p. 123).

4.4 The influencing factors and events

In the conceptual framework, the influencing factors were labelled as reasons and attenuating factors. However, during the analysis of this first case, it became clear that especially the label 'reasons' is somewhat misleading. It is obvious that it is always the managers that act in the relationship, and, of course they often have more or less clear reasons to act the way they do.

However, to say that something is the reason for dissolution is to say that some factor forces the relationship to end, and that managers cannot prevent this. The case material does not support such a claim. On the contrary, the managers in the partner companies and in the other connected network are the ones who act, and their actions form and influence the dissolution process (as well as other processes in the relationships). Thus the new label, which is the influencing factors, describes the content of the factors as well as covers both types of factors, be they fostering or hindering managers' dissolving actions.

This section summarises the factors influencing the dissolution process of the relationship between the Customer Division and Sellcom. The factors that influenced the relationship's course in each of its stages have been described earlier in this research. The following section compiles the factors which could or did facilitate the ending process i.e. the predisposing factors; the events that advanced the ending process, i.e. the precipitating events; and the factors that hindered the ending, i.e. the attenuating factors.

4.4.1 Predisposing factors

Figure 49 compiles all the predisposing factors that existed when the focal relationship started. As the theoretical model suggests, four categories of predisposing factors were found to influence the focal relationship's dissolution.

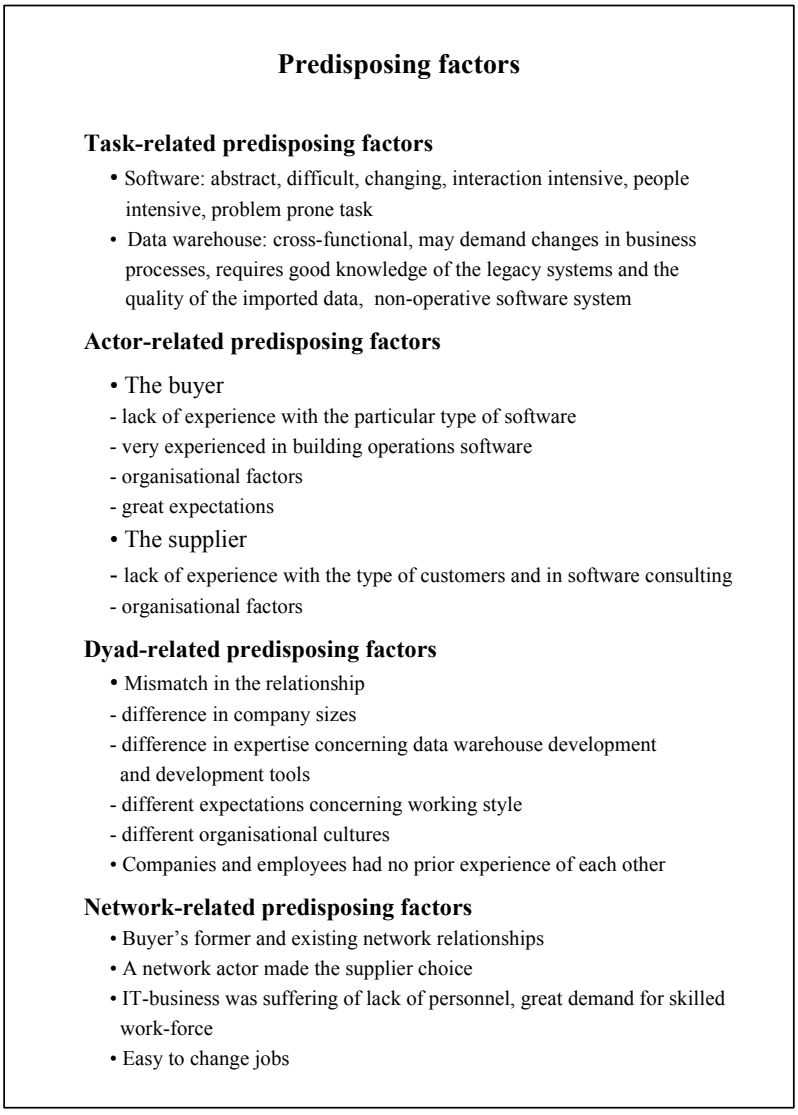


Fig. 49. The predisposing factors influencing the dissolution of the continuous relationship

First, let us have a look at the predisposing factors which relate to the task – developing a data warehouse system. These factors are not specific to this particular relationship, but exist in every relationship with the task of developing data warehouse systems. The development of any kind of tailored software, and more so data warehouse software, is an abstract, difficult and changing task, whose characteristics make the task problem prone. In other words, the task-related predisposing factors expose the relationship to events that can precipitate its dissolution. The following quotations bring out the views of the actors on the difficulties of the task of developing data warehouse systems.

Buycom:

But most importantly, when you think about it from the beginning again, data warehouse work is very complicated, it differs, like the whole dw-world differs from building operative systems. It deals with so many other issues and demands from the technology; the technology poses different kinds of limitations and, one could say, demands than a sort of operative world.

Sellcom:

There are always many parties involved in projects like these, there are the business management, information technology management and operative system suppliers, that is to say dw-projects are cross-organisational projects, when operative [ones] are vertical projects, this means that they stay inside one organisational unit. Here the Customer Divisions information technology management lacked the vision of cross work.

Secondly, both companies had several characteristics that predisposed their relationship to dissolution. For the Customer Division, the most influential predisposing factor was its lack of prior experience or knowledge about data warehouse development as well as about Sellcom's software tools. This is shown in the following quotations.

The Customer Division:

And then maybe a data warehouse-project like this, which maybe we didn't realise right from the start, that it's more a process than a project. It sort of like lives and changes all the time, and let's say that some of these for example, documentation demands that are connected to information system projects, they might not be quite the same then in data warehousing, and then again we didn't have the specifications other than the ones we had used. And we then demanded the same documentation from them and they said that these don't normally belong to a dw-project.

The Customer Division:

Maybe it changed that during the project, our knowledge of data warehousing grew an awful lot. It was a new thing for us when started to work with it.

In Sellcom, the most influential characteristics were related to Sellcom's employees and their competence areas in large and de-centralised information technology environments. In other words, Sellcom was short on consultants and customer support staff, which would have had experience from the kind of IT environment the Customer Division had.

Sellcom:

Sellcom is more a sales organisation than consultation. We don't have enough people doing the hard labour. Our line of action usually is fast projects and several of them simultaneously.

The Customer Division:

From our viewpoint, the Project Manager didn't know the Sellcom product well enough. We often received information that this feature could be added and when I went to meet them at Sellcom and check it, it couldn't be done… There was not enough, like, technical competence and then there was this problem with chemistry between people. He [Project Manager] had, to my understanding, began working in Sellcom just that spring.

Softcom:

Neither had, like, any experience, the customer didn't have experience with this [data warehousing] and then maybe on the part of Sellcom, there should have been • especially with the project management • more experience.

When the relationship between the Customer Division and Sellcom was formed, the characteristics of both actor companies taken together created a certain mismatch. The actor's difference in the experience of developing data warehouse systems – and especially the perceived difference in the expertise level – was the most influential dyad-related predisposing factor. The Customer Division had almost no experience of the task and they relied on the expertise of Sellcom. However, the Customer Division did not have full knowledge of the level of experience that the particular individuals from Sellcom possessed because they did not know each other as companies or as persons beforehand.

Moreover, the expectations concerning the working style in software projects were different. The Customer Division assumed that Sellcom's consultants would sit in the physical environment, i.e. the rooms reserved for them in Customer's office. However, this was not customary with Sellcom.

Buycom:

Then there were quite a lot of conflict situations, company culture conflicts and skills conflicts. The main thing that we sought after very much was the partnership and it wasn't real [on their part]. Technologically the product met most of the demands but then their consultation …and our way of working and their way of working were in conflict with each other.

The Customer Division:

Let's say that, for me it left on a whole an image that we were in a way too big of a customer for them. To my knowledge, they had other projects going on at the same time. And they didn't have enough input for us. And of course as a customer, I see that we should have all their best brainpower at hand.

Sellcom:

Our organisational knowledge at that time was insufficient. Buycom was a big organisation. --- The Customer Division expected from the consultants that they would sit in the organisation. Afterwards thinking about it, it was a mistake not doing so. Other big firms, like Softcom, do this that the consultants sit there even though they don't do anything and then bill the customer for sitting.

The fourth set of predisposing factors was related to the network actors, that is to the previous supplier relationships. The Customer Division had worked together with the consulting company Offcom concerning the data warehouse report, but Buycom decided to award the data warehouse development contract to Sellcom. Moreover, previous relationships with consulting companies and the ongoing relationship with Softcom concerning operating systems had influenced the expectations the Customer Division had towards working with Sellcom.

The Customer Division:

We had had some co-operation with Offcom on the data warehouse report before, which had been finished in February, but for one reason or another, Offcom, they had done these data warehouse -jobs, but for some reason or another the co-operation ended on the wishes of Buycom's management. These Offcom consultants were terribly expensive, don't know how it would have then continued, if it had, with them. They did bid for the design and development, but we were not allowed to…it didn't work out that we could have continued with them.

However, the facts that the professionals skilled in Sellcom's software tools were few and their demand was high also in other companies influenced Customer Division's decision not to use Sellcom's tools for further development of the data warehouse. A very general network-related factor, the lack of professionals, turned out to be a very concrete reason to end the relationship with Sellcom.

The Customer Division:

That was one of the reasons for changing the development tools, designing the interfaces, it wasn't easy. And you had to have special skills just because of Sellcom's

software tools, and we didn't have the skills. We'd always have had to use consultants with those skills and they weren't so easily available in the market. And those that learned something quickly changed their jobs.

4.4.2 Precipitating events

Predisposing factors create a possibility for precipitating events to take place during the continuous relationship. This was already suggested in the theoretical model of Chapter 2, and it can also be detected from the case. The network-related predisposing factor of the lack of IT-personnel was connected to the Sellcom-related precipitating event of Consultant Philip leaving the company, and no one replacing him. Moreover, the chain of events evolved into a dyad-related precipitating event. Consultant Philip's decision to leave Sellcom influenced the Customer Division because it perceived that Philip had the necessary know-how for the project. The Customer Division felt that Sellcom could not fill the space Philip had left and decided to look for another consulting company to put the software into production use. This decision was a part of a network-related event, the hiring of Conscom. This move was perceived by Sellcom as a contract violation, decreasing their wishes to co-operate with the Customer Division. Moreover, the Customer Division had now a chance to compare Sellcom with Conscom; the comparison reduced their willingness to co-operate with Sellcom even more.

Figure 50 includes the precipitating events that took place during the focal relationship's existence. As in the case of the predisposing factors, the categorisation suggested in the theoretical model suits this case well. Three categories of precipitating events were found: actor-related, dyad-related and network-related events. In the following, some main events are highlighted together with selected quotations from the case study interviews.

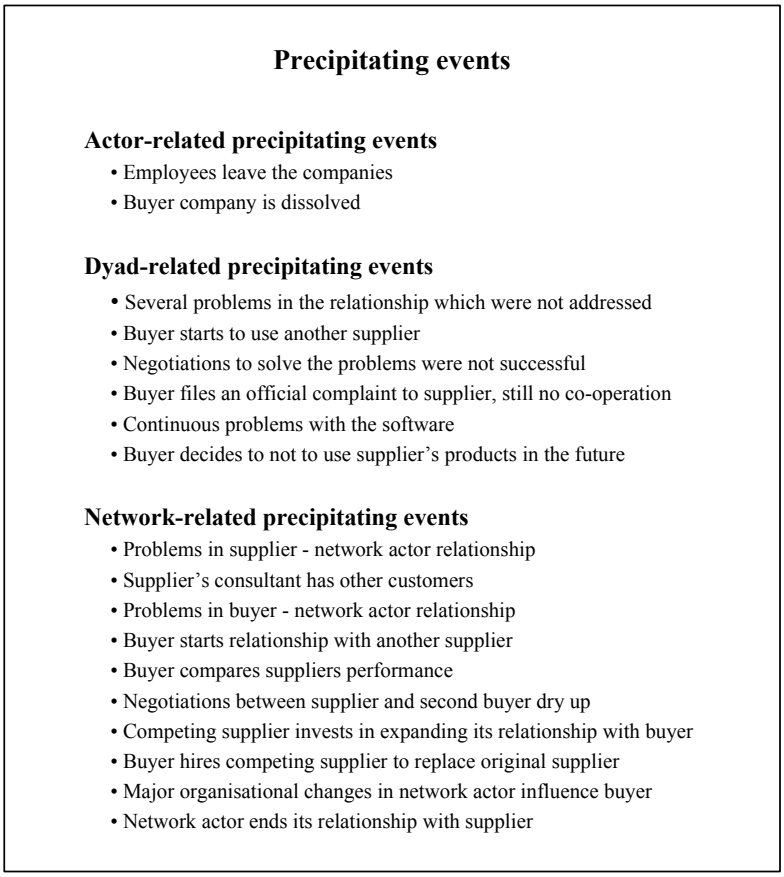


Fig. 50. The precipitating events influencing the dissolution of the continuous relationship

The main event was related to the seller: Consultant Philip left the company, and with him a considerable amount of knowledge about the software vanished. This actor-related event led to other precipitated events, which have been described earlier. The Customer Division was the scene of two other actor-related events: another personnel change and the dissolution of the Division itself. The latter was the result of a network-related event, namely the reorganisation of Buycom.

The Customer Division:

But there was the problem that the consultant, Philip, he actually didn't have the time. --- And then he came to do the corrections in the evenings or brought on a disk always some correction and then left. It continued like this until the end of November, when they informed us that he is leaving for Sellcom's office in Central Europe. But then we

heard from somewhere else after couple of weeks that he had changed companies altogether.

During the relationship, several dyad-related precipitating events took place. They seem to fit into three sub-categories: events related to service quality, events related to communication, and events related to personal relationships.

From the customer's point of view, several events happened that led them to doubt the quality of the service they were receiving from Sellcom. The following quotations illustrate that Sellcom did not meet the expectations of the Customer Division concerning e.g. the working style and the user interface of the software. Thus the outcome of the events was that the Customer division became dissatisfied with the relationship.

The Customer Division:

So when it [the application] was tried, then it was like, no way in hell, this isn't like, you actually can't do anything with this. It didn't serve the purpose that we were thinking about, that you can get several dimensions with this and fiddle with the data as you want, it was damn rigid.

The Customer Division:

And then, at the same time, Audrey like started to pull out these quite significant and stupid sounding things as examples of how Sellcom had like screwed up there, all kinds [of examples]. Dates had been taken in source code and hard coding which is like, the same if a surgeon went into the operating room straight from the toilet without washing his hands or putting on the gloves. It's compared to that. So it tells you that something is really wrong here.

After the first precipitating events related to the service quality in the relationship took place, the communication between the Customer Division and Sellcom started to suffer. The communication was not open, and the Customer Division got the impression that Sellcom did not accept any responsibility for the low service quality it perceived. In addition, discussions turned into arguments. Even in during the negotiations after the official complaint, Sellcom did not demonstrate a will to settle the open matters.

Buycom:

But then it could be like really nastily that they would say that "yes it says right here that this is working and that the bug is fixed". But when you tried to explain that "if it's fixed but it still doesn't work, so then it means that it isn't fixed". Nasty situations like these happened. Such things that for me were self-evident turned into difficult matters.

Sellcom:

Problems arose from this lack of architecture when for example the documentation specifications at Buycom were only for operational systems and a dw-project like this can't be documented according to them as it doesn't have parts like that which these standards demand to be documented. I thought it was kind of weird when a person claims to me with bright eyes that "this has to be documented like this" when it just can't be applied.

Moreover, Sellcom started to bypass the normal communication links (Project Manager to Project Manager) and explained its side of the matter directly to the directors in the Steering Committee. This made the situation difficult for the buyer's Project Manager because it is difficult to manage any project if you do not have all the information available at all times. However, at first the Steering Committee did not perceive the problems as being serious enough for them to react.

The Customer Division:

Sellcom used to phone the whole organisation, asking directors what was their opinion, and sort of sold themselves and their view here to the rest of the organisation all the time.

Softcom:

I don't know whether for example the Buycom management noticed, they probably weren't aware of what was going on. Then the Sellcom people started to take contact like, instead of Audrey, the people in Buycom's management, Miriam and those Steering Committee members. In a way at some point, I got the impression that in a way also Buycom's management took Sellcom's side in the matter. Audrey was sort of passed over, at least mentally. I think that Buycom's management should have stepped in earlier in the situation, but maybe they weren't aware how inflammable the relations were. Also in Sellcom's management. Sellcom's management must have received messages all the time that everything is fine, everything is fine and (laughter). Ain't it quite normal that they didn't, at least not the people themselves, or they say it's going fine, that they are doing everything right. Of course the other party is always blamed, probably from both ends.

The dyadic communication difficulties were most severe between the Project Managers. The situation escalated into an open conflict, the result being that the Project Managers did not speak to each other. Sellcom suggested that it changes its Project Manager, but even after that the communication link did not recover. Sellcom's view was that the Customer Division's Project Manager was a difficult person to deal with and at one point,

also some of the Customer Division's own employees shared this view, which made the issue very personal.

> The Customer Division:
>
> And I thought it quite surprising that it started to be about accusing or that they made things personal. This hasn't happened to me with other suppliers. For example that they announce that they don't want to be in contact with someone, that they want someone else.

> Sellcom:
>
> I remember the next time it [the conflict] was more obvious was when our project manager said that he refuses to go there [to the Customer Division] or before that came the information that the customer's Project Manager refuses to talk to him.

> The Customer Division:
>
> Obviously it changed and went all weird after the problems started to come. At some point I was convinced that Audrey was, of the conflicts, that she was responsible for the most part. At some point I was so sure about it. Then again when I started to look into what Sellcom did, like in work quality and functionality, then I understood why Audrey was getting all worked up about it. A difficult project, very difficult.

There were also quite many network-related precipitating events taking place during the focal relationship. The most important events influencing the focal relationship were related to two competitors (Conscom and Softcom) and their actions and relationships with the buyer. A major turning point in the relationship was when the Customer Division started a new relationship with Conscom. Sellcom perceived this as a contract violation. At the same time, it gave the Customer Division an excellent opportunity to compare the service of these two consulting companies; this is depicted vividly in the following quotations:

> The Customer Division:
>
> Yeah and we came to the conclusion that these corrections don't, they aren't done by Sellcom, especially because Consultant Philip had left. Conscom had the knowledge of Sellcom's tools and then we thought we could get the working application, so certain things needed to be fixed and we set out to do that.

Buycom:

So when I talked about it [features that Sellcom said could not be added to the application] later on with Conscom and others, they said that there is this and this and this. So then it was like, gee, didn't they [Sellcom] just swindle [the Customer Division] nicely.

Once the co-operation with Conscom had ended, Softcom became more involved in the data warehouse development. Softcom had already trained their consultants to Sellcom's tools, and they had an opportunity to show their expertise in developing customer satisfaction software for the Customer Division. In the end, the Customer Division decided to change the software development tools and start the data warehouse development again by using Softcom's products and their consultants. After this, there was no point in Buycom renewing the licence contract with Sellcom.

Buycom:

Well, the project's, that is the data warehouse's further enhancement had been started there on the side but not with Sellcom's consultants. Softcom took part in it and already there the success of the product choices, i.e. Sellcom, were a bit questioned. This had to do with how long we were going to continue the negotiations with Sellcom.

Softcom:

I was involved for a while in that data warehouse and then moved on to another project. But now we have a big bunch of our people in this further development of the data warehouse.

4.4.3 Attenuating factors and events

The theoretical model suggested that managers would perceive attenuating factors as moderating the influence of the predisposing factors and precipitating events. The case showed that some changes in the category of attenuating factors were needed. It became obvious that the classification of only static factors, which seemed to relate to the beginning of the relationship, was not sufficient to understand the case. In addition, many events that took place during the relationship dissolution process hindered the process. Therefore I have modified the category to include both attenuating factors which exist from the beginning of the relationship and attenuating events which take place during the relationship. In this way the distinction between attenuating factors and events resembles difference between predisposing factors and precipitating events.

Next I will describe the attenuating factors and events that influenced the actors in the focal dissolution. Figure 51 compiles the attenuating factors and events that I recognised in the relationship between the Customer Division and Sellcom.

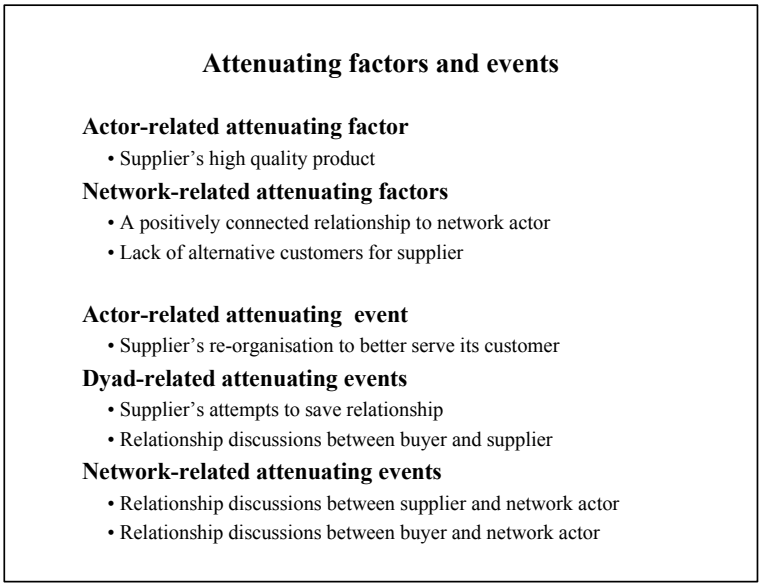


Fig. 51. The attenuating factors and events in the continuous relationship

There was only one actor-related attenuating factor; it existed already in the beginning of the continuous relationship and continued to influence the managers of the Customer Division during the relationship. The managers were convinced about the high quality of the software tools that Sellcom offered, as they were among the world's leading data warehouse tools, and other Finnish companies were using them.

> The Customer Division:
>
> I have no doubts about Sellcom's product because it could not have so high world-wide market share if it was a bad product.

Buycom was a major target customer for Sellcom, and this was an important network-related attenuating factor in the case. It influenced the perceptions of Sellcom's managers of the importance of maintaining the relationship. However, as already mentioned, this view was not shared among all the individuals involved in the relationship at Sellcom. Moreover, also the Customer Division was aware of its special status, and it also assumed that it would have an effect on the managers of Sellcom and on their behaviour in the relationship.

Buycom:

Then the same was the organisation, didn't do its best if one thinks that it was supposed to be this sort of partnership-type thing. We were a big customer and we would have been a big reference. They didn't have their input with the best possible resources. That's the picture that I got.

Sellcom:

From our point of view the background was that we had done this big licence deal there [with Buycom] and this application is a use of licences. So without this licence deal we would not have continued with the project. We would have completely ended the situation around August, September in 1996, when the co-operation started to seem impossible.

For the Customer Division, the most important network-related attenuating factor was that Buycom had signed a large licence contract with Sellcom. Moreover, Buycom wanted to develop their relationship with Sellcom to a partnership level in a long run.

Buycom:

It was the idea that it would have been one of these successful DW-implementations, where we would have had a clear growth trend, maybe for larger implementations. And we would also get these divisions' own scattered projects connected to this one larger project. We were looking for a sort of common technology, a supplier-partner relationship that would have guided them to do other [other dw-systems] too. This covered only a few customer systems, and it would have had a clear growth trend, that next year more customer registers would be connected to it.

The new category, attenuating events, can also be divided into sub-categories of actor-, dyad- and network-related attenuating events. The only actor-related attenuating event was Sellcom's re-organising of their Customer Support Unit. This was done after the Customer Division had made the official complaint in which they expressed their dissatisfaction with the expertise and the speed of the customer support. Anyway, the focal relationship was not the only reason for the re-organisation, Sellcom's consulting business and their customer base was also growing. Soon after the re-organisation, there were considerable improvements in customer support in the focal relationship, but it was too late to be able to influence the Customer Division's manager's decisions much.

Buycom:

And he [new Customer Support Manager Adam] came like an angel to the rescue and fixed the situation in a very tight schedule. --- For example when Adam came here to

> see me and we went through that Scandinavian alphabet problem and how it arises. Then he started to build an equivalent environment for them and called every other day saying that he had done this and can you check if you have it done like this. And he did it like we are accustomed to with many other suppliers that they send interval information. And then he told us that it is operational now • the solution is here. You get new repair files from this and this rdp-server, install them, and test does it work, and it did. And then it was solved.

Dyad-related attenuating events all aimed at saving this particular relationship. Already quite early in the relationship, Sellcom hired an extra consultant from another concern company to fill in in a situation, which the customer perceived as a lack of consultants. The hired consultant developed a demo version of the solution but the future users were not satisfied with it, so the outcome of the restoring event was not positive.

The Customer Division's main individuals and Sellcom tried to resolve the arguments in the relationship by arranging few 'relationship discussions'. Similar types of discussions also took place in the Steering Committee. At this point, however, the disagreements at the project group level were too large to be settled outside it. Moreover, Sellcom changed their Project Manager, in order to resolve the personal conflict between the Project Managers. The change took place, but the broken communication links were never restored.

> The Customer Division:
>
> Then at that point we had had several conversations with Sellcom's Managing Director Wallace but we went again to talk with him. Then we made a compromise that as we had also changed the specifications along the way, that we can't expect from them as a full guarantee work that they do the changes and make it work. That's why we said halve it, that you pay for half and we pay for half. That's how the job moves forward.

> Sellcom:
>
> Then we had a meeting where Miriam, Adrian, Wallace and me were, and where we tried to sort out what was actually going on. We talked about what questions were open and what should be fixed. So this was one meeting in fall of '96 where we tried to ascertain from the customer if they had the will to continue. We certainly had it because Buycom was a big customer for Sellcom and an important reference. The result of the meeting was that both had the will to continue. And then we went through stuff that was left open and agreed that we would finish those.

The network-related attenuating events involved both Sellcom and Buycom's Head Office IT Director. Sellcom discussed their relationship with the Customer Division with the IT Director already during the autumn 1996, and developed good personal relationships. These discussions continued in the spring of 1997, when the Customer Division had hired

Conscom and Sellcom's project had been reviewed – receiving less than excellent reviews. Sellcom had also realised that if they could not maintain their relationship with the Customer Division, they could lose the whole of Buycom as a customer. These second discussions led to the IT Director's decision to form the impartial Quality Assurance group to find out what really had happened in the project, and the data warehouse system was operational, and whether it could be extended to other Divisions.

> The Customer Division:
>
> Usually the supplier doesn't lobby this much, that the noisemaking that Sellcom did in here was major. It has happened in other projects a bit but not to this extent.

> Sellcom:
>
> Before the official complaint I was in contact with Buycom's Head Office IT Director and then we agreed on an internal report in Buycom. We never got the report but it probably generated the list of things to clear up in the official complaint.

This chapter has compiled the factors and events that influenced the dissolution process of the continuous relationship. The theoretical model was also adjusted at this stage to better fit the empirical case and a category of attenuating events was added to the model. The next chapter will look at the different stages in the process of dissolution to see whether this last part of the theoretical model also needs modifications.

4.5 The stages and actor levels of the dissolution process

The theoretical model suggests that business relationship dissolution proceeds through several stages. The different stages suggested were: assessment, decision making, dyadic communication, disengagement, network communication, aftermath, and restoration stage. When analysing the case data it became obvious that these stages did not optimally describe the dissolution process that this continuous/terminal relationship went through.

While analysing the data, I realised that I had to take the purpose of the action into consideration as I decided how to theoretically describe it. As already pointed out in the theoretical model, my view of active actors encompasses the notion that actors behave with an intention of achieving some target. Thus the purpose of each action had to be considered when deciding what stage would best describe that particular action. In addition, managers perform actions that either do not produce the wanted results at all, produce some wanted and some unexpected results, or produce nothing more than unwanted results. These actions are also incorporated in the dissolution process. In the following, the modifications are shortly presented; thereafter the process and its stages and actor levels are described in more detail.

The main modifications involve the titles and the content of the suggested stages. By changing some of the titles I aim to describe the content of each stage more accurately. Often the need for changing the title came from a better understanding of the actions performed during the stage, in other words the content of the stage.

The assessment stage was changed into a *consideration stage*, as the new name better distinguishes the considerations concerning the ending of the relationship from the ongoing evaluation or assessment of every relationship. Such ongoing assessment is a part of every phase of a relationship and thus it is not only a stage in the dissolution phase. Moreover, as long as the outcome of the assessment is satisfactory, in other words the evaluating persons are satisfied with the relationship and thus wish to continue it, it is not part of the dissolution process.

As soon as the outcome of the assessment turns into an unsatisfactory one, the assessment can continue with considerations of what to do with the matter – either to continue or to end the relationship. The content of the consideration stage covers also all the information seeking that is done related to considering the ending and making decisions about it. Shortly, a consideration stage involves actors' decision-making behaviour, which evolves around the question of continuing or ending the relationship.

The suggested aftermath stage was modified in much the same way. I discovered that the actors did reflect on their previous behaviour in the relationship, not only after it had ended, but also during the ending process. This sensemaking behaviour also influenced their decisions and actions during the dissolution process. Therefore I chose to combine the aftermath stage; i.e. sensemaking after the dissolution, with the sensemaking that is done during the dissolution process. The new stage is thus labelled *the sensemaking and aftermath stage*. Moreover, the purpose of its behaviour is to protect the actors themselves, to prove that they did not make mistakes, to enable them to think what they could have done differently, and to reduce their cognitive dissonance related to the process. Therefore, I added also the 'storytelling', i.e. spreading the news and telling the actors' own side of things to others in the network to the content of this stage.

It is difficult to separate storytelling from self-reflection because they often happen simultaneously. Telling the story also changes it and the speaker can realise something new from the story, which again helps her/him in sensemaking.

The stages of dyadic and network communication were combined in *the communication stage*. One reason for this was that the actor levels, which had already been suggested in the theoretical model, are sufficient means to determine whether the communication, or any other action, is performed at dyadic or at network level.

Another, more compelling reason for the change was that I used the aim of the action as a determinant of the stages, as already mentioned, and the aims of the dyadic communication and the network communication are different. The dyadic communication is about the future of the relationship, i.e. discussions about exit and/or voice, and/or informing the other party about the decisions made. The network communication can also be related to e.g. seeking additional information about the partner from the network, while considering the future of the relationship; these actions are now seen as a part of the consideration stage.

Thus the label 'dyadic communication' is for two reasons too restricting to describe the actions and the actors at this stage. Firstly, it suggests that the actions involve only the two parties of the relationship. This is a too narrow interpretation because the disengager

company may well use a network actor to convey the message to the soon-to-be ex-partner. Secondly, a network actor can intentionally or unintentionally send exit signals to the partner, even without the disengager company's knowledge of it. Therefore, from now on the stage is labelled as a communication stage and it refers to the communication that is about the ending or the continuation of the focal relationship, regardless of the level of the senders of the message.

Network communication can also be aimed at ensuring that the ending of the relationship is possible, i.e. developing new relationships and securing network positions. This type of communication will be conceptualised as a part of the *enabling stage*. This new stage also involves actions to lower the exit barriers, whether they are internal or external. The enabling stage emerged from the data and the immediate reason for it was that the relationship changed its nature from continuous to terminal. Terminal relationships have a strong dissolution barrier, which makes their ending impossible, even though at least one actor would wish it. Thus the enabling stage consists of actions to destroy the barriers in order to make the dissolution possible.

The disengagement and restoration stages were the only stages suggested in the theoretical process model that so far have remained unmodified. Thus the stages that are now used to describe the dissolution process of the continuous/terminal relationship are: the consideration, restoration, disengagement, sensemaking and aftermath, enabling, and communication stages (see Figure 52).

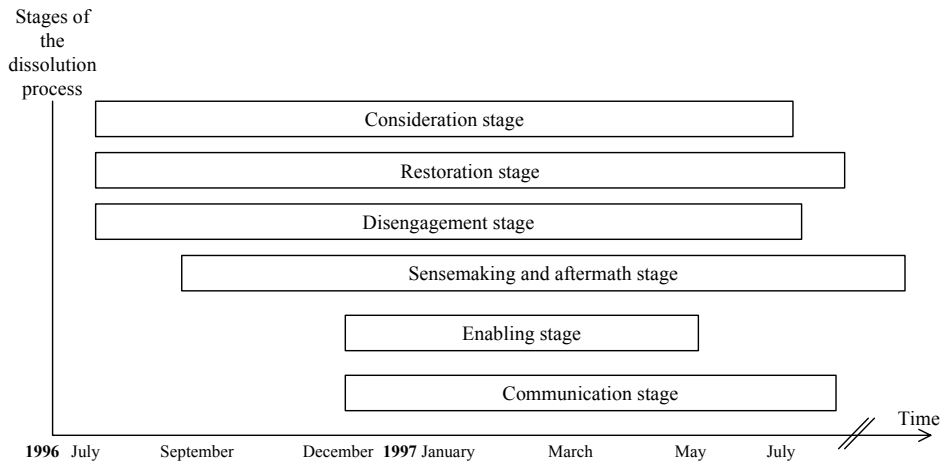


Fig. 52. The stages of the chosen / desired dissolution process

The theoretical model was not very explicit about the difference between an influencing event and an event in the dissolution process. It was very difficult to suggest any clarification before the empirical data was available for analysis. Once the analysis was progressing, the need for a clarification became obvious. Thus, in the light of the case material, the notion that the influencing events do not appear only before the process but also during the process was confirmed. For example, a precipitating event may simultaneously be part of the dissolution process, e.g. an event in the disengagement

stage. In other words, the same event influences the managers' next actions and decisions as well as advances the process.

Moreover, one action and/or event may indicate different stages within the dissolution process. For example, the change of a Project Manager was a restoring action, but at the same time, it ended a personal relationship and disconnected an important communication link between the project managers. Moreover, different actor levels may perceive the same action/event differently, thus indicating different dissolution stages.

The theoretical model suggested that different actor levels would help understanding the dissolution process in more detail. The suggested actor levels were; the individual, the company, the dyadic, and the network level. The rationale for studying smaller actor levels that the relationship stems from Simmel (1950). A business relationship exists between two company actors, but one is capable of ending it through its own actions (Simmel 1950 p. 123). Therefore, at least two actor levels are needed in order to study the dissolution process, the relationship and the company level. In addition, large companies consist of smaller units, e.g. departments, divisions etc. and within these units, single managers can be powerful actors. This is vividly demonstrated in some of the cases of Alajoutsijärvi *et al*. (2000) and thus an individual level was suggested. Moreover, as noted in the theoretical model, other network actors can through their actions influence the focal relationship and its actors, either towards or away from the dissolution. Therefore, a network level is needed to shed light to the actions of third actors.

The case material prompted also changes to the suggested actor levels. As already described, the a priori model proposed that certain stages would occur in certain actor levels, e.g. the dyadic communication would take place in the dyadic level. However, this proposition did not receive grounding in the case study. On the contrary, it became clear that actors at different levels can e.g. communicate exit intentions in the dissolution process. Thus after modifications, the stages describe the content of the action and the actor levels describe the performers of the action.

In the focal relationship, the stages started in the order pictured in Figure 52, but at some point of time, they were all going on simultaneously. Thus the stages are not to be understood as subsequent, like in history. Therefore the issue of when a certain action and/or event took place is not considered important in the following analysis. The stages of the dissolution process describe the content of the actions and decisions, whenever they take place.

4.5.1 The consideration stage

The first of the stages was the consideration stage, during which the end or the continuation of the relationship was considered and decisions were made concerning the continuation of the relationship (see Figure 53).

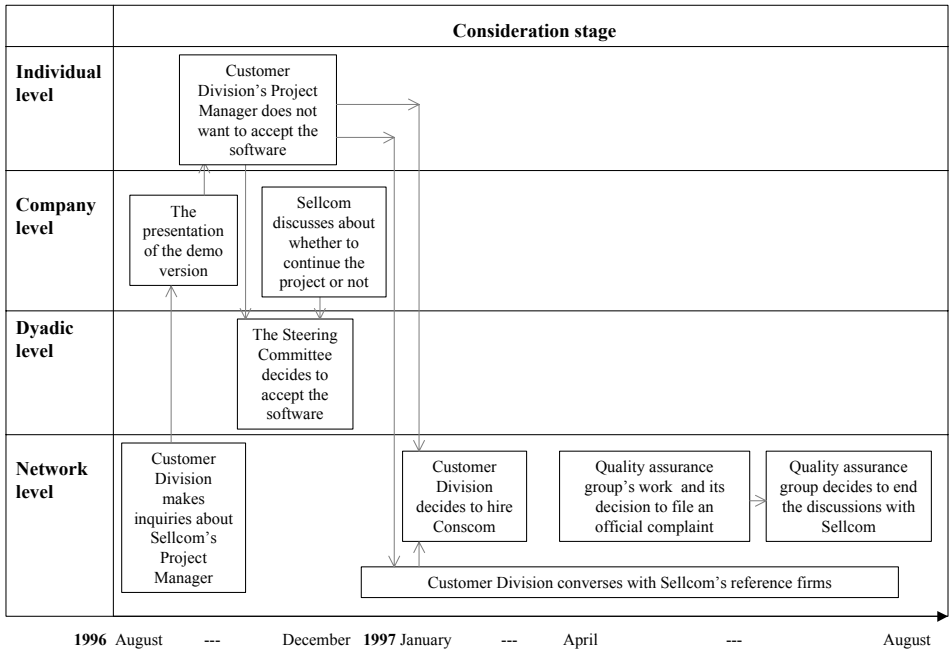


Fig. 53. The events and actor levels in consideration stage

The first event consists of several actions in both companies and in the relationship. In the Customer Division, the actions accumulated so that the Project Manager Audrey became convinced that the Customer Division should not accept the software. As a start, Audrey became worried about the project, which was not proceeding smoothly. She doubted the competence of Sellcom's Project Manager Jeremy and as she knew people from his previous company, she talked to them and asked what they knew about him. At that time she also found out that the Project Manager was a rather new employee in Sellcom, which increased her dissatisfaction with the co-operation.

The Customer Division:

The Project Manager, that Jeremy disappeared after September so that he was almost never around. --- But the situation was that Jeremy was new, had just started at Sellcom in May, straight to Project Manager here, he didn't know Sellcom's products at all. So if we had known that we could have guessed from that already, Sellcom is doing so well in sales that they put new people inside [a customer] before they have accustomed to the house [Sellcom] and the products. But we didn't know this.

The Customer Division:

I was asking around after it started go [bad], because I knew that Jeremy had come from company X and I know people in company X, what was he like, why he had left. I got some background on him.

Moreover, the whole project group as well as the future users became dissatisfied, when the demonstration version of the software was presented, as it did not meet their expectations. However, the project work continued, but when Sellcom's Project Manager delivered the software on the agreed date, it did not work. The Customer Division's Project Manager refused to sign the release agreement. She also came to the conclusion that the Steering Committee should not accept the release, but should demand a defect removal before the Customer Division would begin the acceptance testing.

The Customer Division:

[Sellcom] demonstrated mid-August what the outside consultant had done during the summer. Then it went so that when our users looked at it [the software demo], they were like surprised is this it, this doesn't correspond to what it was supposed to. And then they criticised a lot, it looked like a book, like, open a book cover, then the next page and the next page and awful lot of just reports had been done and so on. When we had in the specifications that they want a sort of a multivariate analysis and not a report book like this, you felt straight away that this was a bit, not quite a dispute, but there was lot of criticism from us already at that point that this didn't correspond to what was [promised].

The Customer Division:

And in the end of September when in the project it was agreed that the last day they deliver the material and applications and everything, so then the Project Manager just marches up to me and hands over a blue folder. "Here's the documentation and application is there, so sign here that this has been delivered." It was quite a surprise. It didn't quite go as normal … We hadn't been shown the functioning application and documents hadn't been looked through or nothing. Just a folder like that. But we had agreed that the documentation would be done according to Buycom standards. Then I tried right there if the application worked and it crashed straight away. I didn't even get to log in when it showed some error notice. --- Well, then, we didn't sign that paper.

Sellcom considered the continuation of the relationship in internal discussions. Especially Sellcom's Project Manager perceived the situation in the project as difficult. This prompted the question of whether or not to continue the project and the relationship.

However, as the relationship with Buycom was positively connected with the focal relationship, Sellcom decided to continue it.

Sellcom:

Within Sellcom we did have these talks with our Project Manager that our people don't want to visit the customer, talks on how each person had seen difficult projects, but the line must go somewhere, that where it is. We have had some rough talks about it but the licences side won.

Within both companies, there was thus dissatisfaction with the relationship and some even wished to end it. However, during the last meeting of the Steering Committee, both parties of the relationship wanted to continue and they made compromises. Sellcom promised to remove the defects without any extra costs and the Customer Division agreed to pay their share of the expenses that had been the results of changing specifications. Thus in the end of the first event, the partner companies reached a conclusion to continue the relationship.

The Customer Division:

And, well, the Steering Committee decided that Sellcom will fix them now • the most acute matters and then they go as a warranty repair and that's how it went.

Sellcom:

Before Christmas, I remember that we were in the Customer Division's meeting room having Christmas cookies so it was before Christmas, we had a meeting and we signed the paper that the system delivery was accepted. And we thought that now it's wrapped up, thank God and now the warranty period starts.

Although the release had been accepted, not everyone in the Customer Division was satisfied with the situation. The software was still not free of bugs and it was not functioning properly in production use. The Customer Division's Project Manager still wanted to be sure that if they were to continue the data warehouse development with Sellcom, the enhancement projects would proceed differently than the current one. However, as she contacted Sellcom's references, she became more convinced that Sellcom was not the right choice for the Customer Division.

The Customer Division:

At the end of the project, at the end of the year I heard in seminars and also from Sellcom that they have a good reference, AB Corporation and we have visited them

> couple of times to get to know their application. And I asked around in AB that who had been working for them and how it had gone. AB said it had had also Julian and then Philip had been there and it hadn't gone all OK and AB had changed then. It had hired [new people] and also couple of people from Conscom. Well, then after that I've heard quite a lot information from other places about failed projects.

The Customer Division and the project group were not satisfied with the defect removal that Sellcom had promised to take care of. The involved individuals from the Customer Division talked about the matter and came to the conclusion that it would be best to change the supplier. Sellcom's Consultant Philip was very busy, yet he was the only one doing the removal. After he left Sellcom, the Customer Division decided that it was necessary to hire another consulting company, namely Conscom, to work with the solution. Thus the first event that culminated into the Customer Division's Project Manager reluctance to accept the software release. However, the Steering Group decided differently

> Researcher: Well did you talk about it together like, afterwards or then?
>
> Buycom:
>
> About changing?
>
> Researcher: Yes.
>
> Buycom:
>
> Of course we discussed it passionately! Everyone was so fed up with Sellcom's actions that no way. Personally I can't understand such an attitude: that no - how should I put it - customer satisfaction was even sought after. They had the attitude that for example they know everything and that's that, no use in saying anything to them, that they are Sellcom experts and this and that. It wasn't like they even tried, it left a feeling that they didn't even try their best, they were kings and that's it, we just should accept it. And then everything [that was wrong] was peachy inherent characteristics, so it can't fit to my head or then again as the saying goes; change products, if it has these characteristics. These characteristics are quite enough, thank you very much. I rather would hope that these are defects, which will be removed and not inherent characteristics.

In the meantime the discussions with Sellcom and 2nd Division had cooled down; this worried Sellcom. In addition, the results of the project reviews they undertook among the Project Group and the Steering Committee were not promising. Something had to be done. They contacted Buycom's Head Office IT-Director, who already was familiar with the project's problems. The information from both the buyer and seller sides was so contradictory that it was agreed that IT-Director would nominate an impartial Quality

Assurance Group. This group was to find out exactly what the situation was in the project and whether the development work could continue as planned. The goal was to have the application in production so that its usefulness could be assessed and the enhancement needs estimated.

However, the Quality Assurance Group's discussions with Sellcom did not advance as desired. The Group re-evaluated the situation and came to the conclusion that it would have to file an official complaint to show that this was a matter that needed serious attention.

> Quality Assurance Group:
>
> Then when the matter didn't seem to progress and the summer holidays were approaching, we had talks about how long we are going to keep the meetings going on. That how much do we want to use money, as preparing for meetings costs money. --- We decided that we were going to try and get the minimal repairs in tack, i.e. the hard codes and defects, and then we are going to call it quits. The project wasn't expensive, I mean the part that we had agreed to buy, or perhaps a bit expensive, but not any gigantic project, so it's useless to spend so much money if we are not going anywhere. Then we decided to file an official complaint, which was done by Ida and the lawyers.

The last event that took place during the negotiations concerned the complaint. The Quality Assurance Group was aware that the plan to set up a company-wide data warehouse system no longer hinged on the software tools of Sellcom. This gave the Group a new opportunity to consider the ongoing relationship with Sellcom, which at that time basically evolved around the complaint negotiations. The data warehouse plan was the main incentive to keep up the relationship; when it no longer hindered the ending, the Group considered it best to stop the negotiations. The decision also ended the relationship between the Customer Division and Sellcom.

> Quality Assurance Group:
>
> Well, the project's, i.e. data warehouse development had been started on the side but not with Sellcom's consultants, Softcom was in it, and, in it the success of the product choices that is Sellcom's success had been questioned a little. This was connected to the question of how long we were going to continue the talks with Sellcom.

> The Customer Division:
>
> It was agreed that as money was burning all the time, we would try and end the project. This was said to Sellcom all the time but it didn't affect their standpoint.

The first and the last event of the consideration stage were almost a year apart. This can be related to the different actor levels involved. The first chain of events involved actors from the individual, company, network, and dyadic levels. Audrey had acquired information from the network as the Customer Division started to feel dissatisfied with the relationship. She finally suggested the rejection of the software, but the Steering Committee decided to accept it. The acceptance took place in November. Before that, also internal discussions in Sellcom had taken place at the company level.

The rest of the consideration stage took place at the network level. The discussions concerning switching the vendor involved persons from Buycom as well as from Sellcom's reference companies. In addition, the Quality Assurance group included members from Buycom; they also interviewed Conscom's employees.

4.5.2 The restoration stage

During the restoration stage, actions are directed towards saving the relationship. As with any actions, their goal may not be achieved. Therefore, although the actors may try to save the relationship through various actions and means, they may not succeed. This is also the case in the focal relationship. As Figure 54 shows, many restoring actions took place, but in spite of them the relationship ended. Moreover, as the quotations reveal, an action or an event meant to restore the relationship can be perceived in quite the opposite way by the partner company or by some individuals involved in the relationship. An example of this is the event of Sellcom discussing the project and the troubles in it with Buycom's personnel. Sellcom's aim was to restore the relationship, but as previously presented during disengagement stage, the Customer Division's personnel perceived these discussions as violation of the project norms.

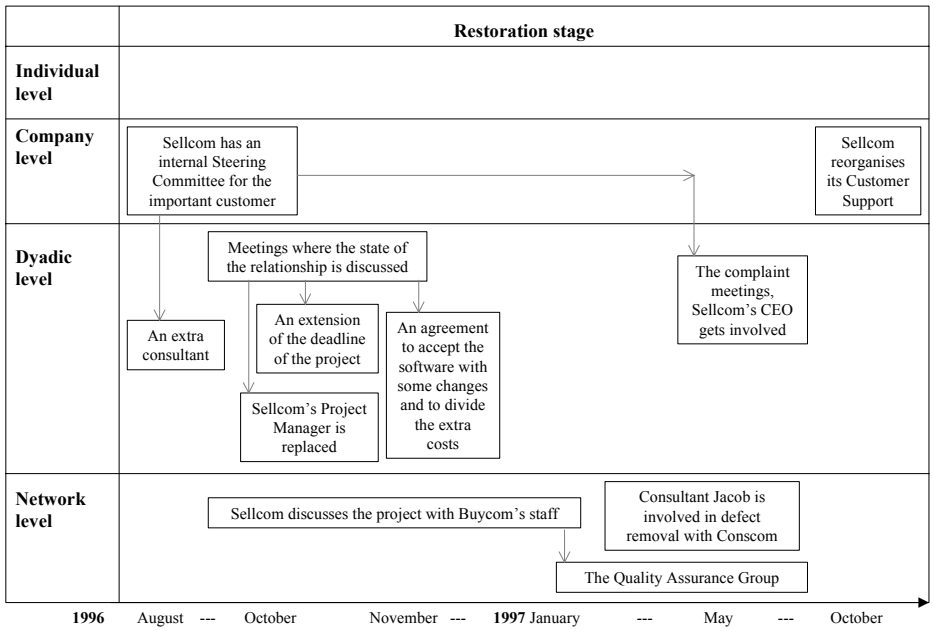


Fig. 54. The events and actor levels in the restoration stage

At the company level, the first event that were related to restoring the relationship was the formation and the functioning of Sellcom's internal steering committee, which was set up to follow the project and Sellcom's own actions in it to ensure the success of the project. In spite of this goal, the discussions of the internal committee did not help Sellcom much in keeping the relationship alive.

> Sellcom:
>
> However, I did thought it [the project] to be so important that I asked for a sort of follow-up team, whether it be official, well, it must have been unofficial. I wanted that our company's highest management is aware of the project and that's why we met on regular intervals. Our Managing Director, Consultation Manager, Project Manager, and Sales Manager sat down at regular intervals and followed it. And it was my wish, which I tried to ensure that we would do enough of the right stuff to pull through this project for an important customer.

Most of the restoring events took place at the dyadic level. This means that there was a certain level of joint attraction and commitment when both actors took part in these restoring actions. The first event of the restoration stage at the dyadic level happened after the Customer Division complained about the lack of consultants during the summer of 1996. Because of this, Sellcom borrowed a consultant from another concern company to

work for the customer. The consultant developed a first demo version of the software and presented it to the future users. However the users were not satisfied with the result. Therefore, although the customer at first was satisfied with the restoring event, this effect did not last for long.

The second event consists of the discussions that the members of the Steering Committee had. The discussions took place both within the companies and between the companies. The atmosphere in the Project Group was not co-operative; thus the Steering Committee discussions were meant to restore the working atmosphere so that the relationship could continue. The relationship continued, but the atmosphere in the Project Group did not change much.

The Customer Division:

Well then, at the beginning we tried to get a grip on it and we talked with them [Sellcom] and talked with Audrey, that she shouldn't take such a strict attitude in relation to these [things]. And talked with Sellcom and all around tried to smooth things over. It only started to aggravate from there. --- We did discuss with both the [Sellcom's] Project Manager and their Sales Manager but at that point when we had to really start looking for a higher gear, then we went to Sellcom with Miriam to have a word with the Managing Director.

Sellcom:

The result of the meeting was that both [parties] had the will to continue. And then we went through some open issues and agreed to complete them.

By the time the project deadline was closing, the problems in the project became more clear and concrete. The Steering Committee discussed the matter again and the Committee's agreement was that it was best to aim for functional software, even if the deadline would have to be slightly extended. Thus the buyer was willing to compromise on the dead-line to continue the project and the relationship.

In spite of the attempts of the Steering Committee to restore a good working atmosphere in the Project Group, the atmosphere did not recover. On the contrary, things got worse and some kind of solution had to be reached in order to continue the co-operation. After a few more discussions, it was decided that Sellcom would switch their Project Manager so that the conflicts between the Project Managers could be resolved. The switch took place, but that did not improve the situation much.

Sellcom:

The vagueness of the project team took shape in very sore personal relations. From our side there was a new person involved who started to lead the project [Project Manager

Jeremy]. But not even switching people changed the situation, like when from our side the very experienced Laura replaced Jeremy.

Softcom:

Laura --- almost like immediately refused to communicate with Audrey. I don't know why she took that kind of an attitude. Obviously she thought that Audrey was like a skid for the whole thing.

Sellcom released the software, but the Customer Division was not happy about it. However, to continue the relationship, the Steering Committee, together with the CEO of Sellcom made a decision in November to accept the software and to divide the costs of the changes in it and in the documentation that the Customer Division wanted to be done.

The Customer Division:

First it just evolved into this accusing from both sides about where is the fault. And in the Steering Committee, we just agreed that we'll try to get it into production use, that the defects that there are would be removed so that the application would at least work. And that the missing documentation would be done. To my recollection we promised to split the costs. So for the documentation the Customer Division paid more money up to a point and the application errors the supplier corrects.

Sellcom:

We agreed that the Customer Division pays for the extra work on the documentation. The decision was made by Adrian on the basis that Buycom caused the suffering on this part. In practice Buycom didn't have an own documentation standard for this type of applications. The actual changes that we did to the code were minimal.

During this whole series of actions at the dyadic level, Sellcom had discussed the relationship with Buycom. Sellcom considered these discussions attempts to resolve the conflicts in the relationship at a higher level, but Customer did not share this view. However, some of Buycom's personnel ended up in the middle of these two parties, unsure of which side of the story was closer to the truth.

Buycom:

In practice it was many times that I was forced to resolve rising problems and misunderstandings. Very often there were two messages, one from the Customer Division's side and the other from the other side. They were often different matters, so

> they mixed apples and oranges in that entire hassle. --- So if we were told it doesn't work and Sellcom told us it did, and two different messages came from professional people and it was hard for me to be in the middle and figure out why there are such contradictory messages. Things were interpreted differently.

The next restoring actions at the network level are connected to each other. First, the discussions Sellcom had with Buycom led to the decision to set up a Quality Assurance Group to clarify the situation of conflicting views. First the group interviewed the main persons from the Customer Division and thereafter from Sellcom as well as Conscom. The group's report was never finished and delivered to Sellcom. The interviews and the discussions did not contribute to restoring the relationship; on the contrary, they led to an official complaint.

During the work of the Quality Assurance Group, and already during the time Conscom was working in the Customer Division, one consultant from Sellcom was helping with the problem detection. This was a compromise from Sellcom, because as already pointed out, Sellcom perceived that its warranty already had been invalidated.

In addition when the Customer Division filed the official complaint, there were different views within Sellcom about the matter. Some were against negotiating and some felt that it was important to negotiate at the highest level possible to restore the relationship. The complaint was handled according to the latter view, and Sellcom's Managing Director and the Consulting Manager were involved in the discussions. However, the negotiations did not restore the relationship.

> Sellcom:
>
> I did say in the official complaint stage here [in Sellcom] that I won't be part of any clowning around like this. I didn't then even talk to [Consultant] Jacob about what happened in the Customer Division when he went there to sort things out.

> Sellcom:
>
> But the discussions and actually the official complaint and handling it was done directly by our Consulting Manager and Managing Director, as the matters were so serious. --- I was aware of it, because, in a way, I had been involved in starting that quality assurance process, so I was very aware that things weren't looking good and I was aware of the complaint. And I saw it as important and I was involved in getting our Managing Director to be part of the formal complaint resolution. So it wouldn't be left for example to the Consulting Unit, which was already one party in the project where the personal relationships had became pretty critical. So my goals were filled by our Managing Director being involved.

The last event of the restoration stage took place at the company level. During the summer and autumn 1997, Sellcom reorganised its Customer Support unit and hired a

new person to manage the unit. One issue in the complaint was the technical support, which the Customer Division had not been satisfied with. Some problems continued until the new Customer Support Manager Alan was able to fix them. As for saving the relationship, this restoring event came too late.

4.5.3 The disengagement stage

The disengagement is a stage where the actor bonds, activity links, and resource ties start to weaken and in the end, break down altogether. The first bonds to be broken in the focal relationship were the actor bonds. Already during the autumn of 1996, the co-operation in the relationship had decreased, and conflict had started to appear as the prevailing state of the Project Group's work (see Figure 55). The parties clearly were unable to understand each other, and as the project moved on the communication problems got worse.

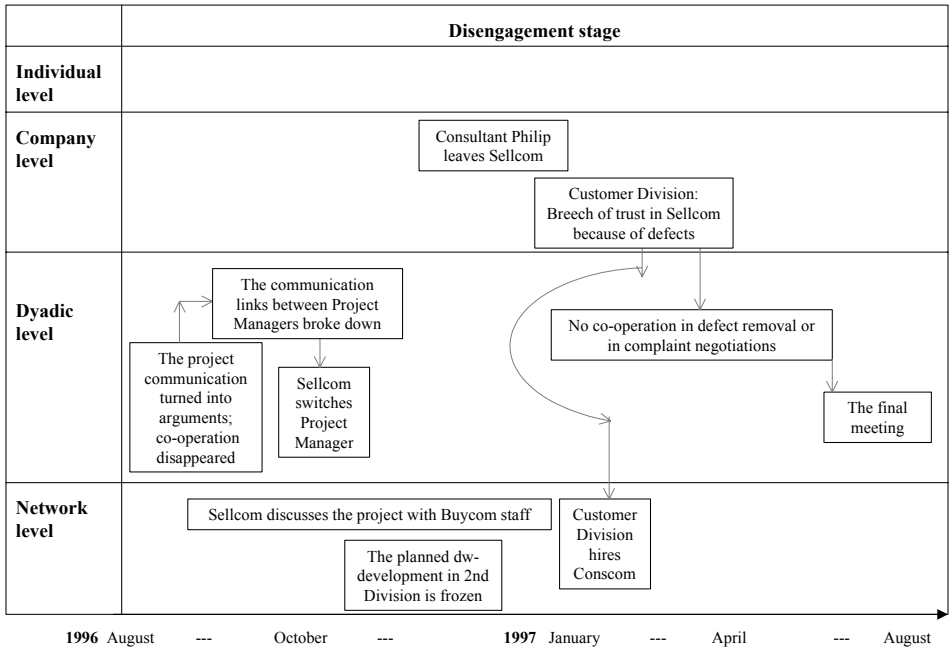


Fig. 55. The events and actor levels in the disengagement stage

The Customer Division:

We did discuss, we just had this problem that we were going on and on about the same things and it was damn difficult to, for example try and explain our organisation structure to them [Sellcom]. We always came back to the same thing and it was never,

it was never like [clear]. I was surprised how they didn't … [understand], we couldn't get through to them. We draw these things many times, how our business was, and there are two different ways to look at this, there's like the regional dimension or then this segmental dimension that there are small firms and big companies and like, which are from, in a way, from another viewpoint. They can't be placed on top of each other because they are different things. And we went through these things in many ways and always came back to the same thing, some organisation structure of ours or something. --- I draw this thing at least three times and I think Adrian was going on about this a lot, a lot more [than me] as he was responsible of the project, he owned this project, and he felt strongly what we want out of this.

The Customer Division:

You could feel it in the meetings that the atmosphere was real tight and that there was like this small poking and jibing going on from both sides. (laughter) Well you could see from it, that there was a feeling that they [Sellcom] aren't willing to co-operate anymore. You could sense it quite easily.

Buycom:

Of course they didn't like it when we asked for the documentation. In one meeting I was told that why are you asking for it when you aren't going to get it. It didn't bother me as such, I was of course extremely surprised that, I think it was Julian who came out with that line. I was like yeah, all right. What else can you say? Then they [Sellcom] started like, I think that they started to appeal to some contract clause like "it doesn't say here that it needs to be documented like this and this".

At the dyadic level, the atmosphere was tense, but at the network level, that is between Buycom and Sellcom as well as in the Steering Committee, co-operation still prevailed. However, the series of discussions Sellcom had with Buycom were perceived by many of the Customer Division's persons as violations of the rules of project work. In projects the two main communication links are 1) between the two Project Managers and 2) between the Project Managers and the Steering Committee. The discussions Sellcom was having with Buycom and the Steering Committee did not involve the Customer Division's Project Manager. Therefore, Sellcom broke both the main communication links from the Customer Division's point of view.

The Customer Division:

Somehow this just didn't work out, we ended up with Sellcom contacting me and Audrey contacting me and then again we talk and talk and [try to find out] what is the problem. Audrey can be like really strict and rigid, of which I've said that it is good, so

it should be. If we have agreed on something, we should hold on to that. So somehow it just didn't all fit

The next two events escalated the communication problems in the relationship. The personal relationship between the two Project Managers broke down completely. In project work, if the main communication link does not work or it does not exist, the project becomes almost paralysed. Sellcom's Consulting Manager Julian and the Customer Division's IT Manager Miriam then decided to switch Sellcom's Project Manager, but the situation did not improve, as also she soon stopped communicating with Project Manager Audrey.

Softcom:

And then the personal relationship between the project managers of customer and supplier were totally in a gridlock. At that point there should have been the sense to change people earlier from one of the sides.

The Customer Division:

And then it went to the personal side then when the supplier announced that they don't want to be involved with Audrey and they want someone else doing the testing. --- And then Sellcom's Laura once went through the defects with Audrey. After that Laura announced that she doesn't want to be involved with Audrey and then just went through the stuff with IT Manager Miriam. It was kind of ugly the rest of the year, going on like that.

The next action took place at the company level, when Consultant Philip left Sellcom. From the Customer Division's point of view, his leaving broke down an important resource tie in the relationship, as he was the main developer of the software. Moreover, as Sellcom was short of consultants who would have time to work with the software, also activity links, as far as the defect removal was concerned, almost broke down.

Before leaving, Philip taught some of the buyer's project group members how to 'read' the code, so that they were able to e.g. do more thorough documentation instead of demanding that Sellcom to deliver this. However, the Customer Division felt that they were left with software that did not work and that the seller was not doing much in debugging it. Moreover, they found such serious bugs in the software that made them lose the last remaining trust in Sellcom.

The Customer Division:

But then for example about these loading programmes --- from them I found that the whole software wouldn't have worked in 1997 because they had hard coded the year 1996 to the software. Yeah and I found as much as, I don't know anything about that

> code but I do know when the protection, [i.e.] the hard code is on, that is what I know. There were couple of other hard codes there so it wouldn't have been very flexible anymore. And of course you lose trust, this is 1996 and all that should have been excluded from operations long ago.

> The Customer Division:

> [Concerning the documents the Customer Division required Sellcom to do.] And then, it like stuck to my mind that damn it, do we need to write down every little detail with these [Sellcom] people that this and this and this is what we demand or want from our co-operation. This hadn't been needed before so we didn't know how to prepare for it.

Sellcom was to develop the next application for the 2nd Division, but as the focal project was in trouble, it was decided in Buycom not to start any new developments nor enhancements of the focal application before the unfinished matters have been settled. At this point, Sellcom and the Customer Division did not agree on whether the application had been released according to the project plan or not.

The Customer Division had lost their trust in Sellcom. They needed to have the software in production use, and hired Conscom to perform the task. Sellcom saw this as a clear violation of the contract they had; therefore they perceived that the warranty had been nullified, as the customer had let another software company change the code. It is commonly accepted that the developer company's responsibility of the code ends in such situation. From the Customer Division's point of view, Conscom was doing the defect removal that Sellcom should have done, but had not.

> Sellcom:

> So after all this quarrel and the different episodes where the last battle must have been about "has it been delivered, has it been tested and is it in production use or not". Of which the customer's Project Manager and ours still totally disagree on, so after these stages the Customer Division hired, instead of our consultants, our partner Conscom.

> Sellcom:

> After the project was handed over, the customer changed suppliers, i.e. according to the customer Conscom came to correct errors, our viewpoint is that they [Conscom] came to develop the software further.

The final series of actions are all related to the negotiations the Quality Assurance Group had with the representatives of Sellcon and the Customer Division. As the quotations reveal, at the beginning of the negotiations, all parties felt that the opposite party was not co-operative, to say the least. This was a reflection of the dissolved relational bonds of

attraction, trust, and commitment. The negotiations done by the group were meant to find out the state of the project and to end the arguments concerning whose fault the continuing problems (e.g. related to the hardware environment and some updates) were.

As already described, the group started to feel that the negotiations did not lead anywhere, and they decided, together with the Customer Division, to make an official complaint. The negotiations concerning the complaint ended when they had reached an agreement about Sellcom offering the training that the technical personnel had not yet received and removing what the Customer Division considered to be the major defects in the code.

Sellcom:

First in the meetings the buyer was aggressive but as the fault report was studied a bit further, the situation calmed down.

Quality Assurance Group:

Sellcom didn't seem to prepare for these meetings. The attitude was that: "we'll be there if something like this is organised but you can explain all you want".

Sellcom:

Then the complaint process started. In other words, outsiders to the project, Lucy and Ida, had got the assignment to clear up this project. Lucy had at first a very negative attitude, she had been given the whole load to carry. --- Then suddenly the process was finished on the 5th of August. We had a meeting with Miriam and Lucy where it ended. --- The level where this process was finished was quite civil. I was quite surprised that this is it already. It was a certain relief [that it ended].

4.5.4 The sensemaking / aftermath stage

This stage includes all the actions through which the individual and/or group actors make sense of what has happened in the relationship. These actions include thinking and explaining previous actions, one's own as well as other's. This self-reflection is not just internal; sensemaking can also take place in conversation with an insider or an outsider. Explaining an event to someone is not just about stating the actions as they took place; at the same time, the speaker creates the event, as she/he perceives it at the moment. Moreover, the speaker may have a need to protect her/himself, and to present the event to the listener in such a way that it does not highlight her/his own mistakes in it, at the very least. In addition, the speaker may receive information from the listener that helps

her/him in the sensemaking. The information may convince her of her own story or it can also make her doubt her own explanations and revise the story.

Because the function of the actions in sensemaking and in the aftermath is the same, I am using only one stage to describe both. Sensemaking turns into aftermath once the actors are aware of the immediate outcome of the event. In the relationship, the sensemaking which took place once the complaint negotiations ended can be labelled the aftermath. In this case, if the outcome of the dissolution process had not been a dissolved relationship, the story of the dissolution phase would be a story of a serious but temporary difficulty in the relationship. Moreover, some of the actions that now are being explained as the faults of the opposite partner or as their lack of trying their best would be explained differently in that situation.

Most of the sensemaking/aftermath stage took place at the network level, as shown in Figure 56. This is partly due to the fact that so many network actors were closely connected to the focal relationship, for example the 2nd Division, Buycom, Conscom, and Sellcom's other customers. Another explanation is that as the relationship was not free from problems, in the Customer Division there was also an increased need to make sense of the 'mess' and, in doing that, to seek help from other actors that knew Sellcom. This explanation can also be applied to the continuing internal discussions that took place in both Sellcom and the Customer Division.

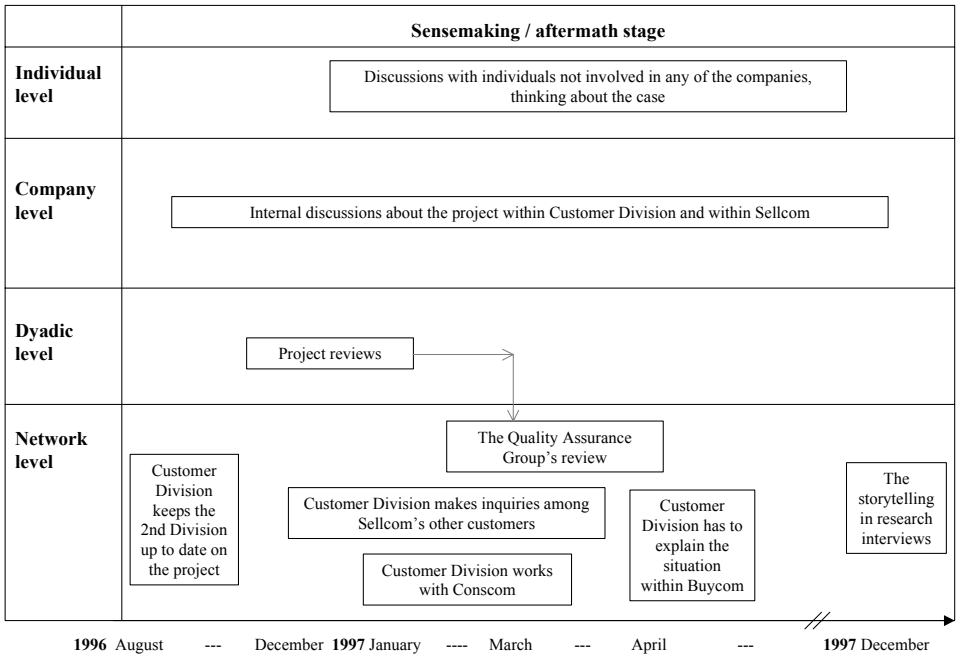


Fig. 56. The events and actor levels in the sensemaking/aftermath stage

Already when the focal relationship started, the companies agreed that the Customer Division would keep the 2nd Division up to date on the project. The 2nd Division was to

be the second customer for Sellcom; they were already trying out some of Sellcom's tools. When the data warehouse software was released, but the Customer Division did not accept it, this had to be explained and justified to the 2nd Division.

The next time the actors jointly reflected back on the project and the relationship so far at the dyadic level was during the project reviews. Both the Project Group and the Steering Committee filled in review questionnaires. Through the results of the reviews, it also became obvious to Sellcom and Buycom that the situation in the relationship was alarming. This resulted in the formation of the Quality Assurance Group, which then interviewed the main persons from the project and tried to find out what had happened in the relationship so far. This way the sensemaking moved to the network level. The Group started the interviews at Buycom, continued with the Customer Division and Conscom, and discussed finally with Sellcom, to find out how it responded to the stories.

The Customer Division:

> In January the review started again. Back then before the year [1996] was over Sellcom had held its own review where the users and members of the Project Group were asked how the project had gone and to assess the project, and Project Managers from both sides as well as the success of the project and the goals and so on. Then in January came the second review, the result was rejected by the Head Office IT Director and he put this third review on the way which resulted in the official complaint procedure.

When the Customer Division asked Conscom to work with the solution, it was also forced to explain its reasons for this. It is not a very common task for a consulting company to step in and start changing a solution that some other company has developed. Moreover, Conscom and Sellcom were business partners, and Conscom's consultant needed help from Sellcom and its previous employee, Consultant Philip.

While Conscom was working with the solution, the Customer Division's personnel could compare their way of working with Sellcom's. The comparisons, the information from other persons and network actors who were familiar with Sellcom, and learning more about Sellcom's software tools made the Customer Division change their previous perceptions about Sellcom. The change was, however, not for the better.

The Customer Division:

> This Colin [an employee in Buycom], when he was with us, he then told that Sellcom acted like this with all the companies, that he wasn't surprised with their mode of action unlike I was. I'm like used to that suppliers are like, helpful and they do their best to keep us happy and like, you know what I mean. That there are always bad days but still on the whole, you are left with a feeling that you are not swindled. So from this, I didn't get that picture from Sellcom really at any point.

Buycom:

Of course on our part there was the weakness at that point, at the end of last year, that there was no knowledge of Sellcom's tools, you had to believe that, of course if they say it's a characteristic, then all right. Then later on, I talked with Conscom and others so they said that there are [the software tools have] these, these, and these options and of course then you thought, well, didn't they [Sellcom] swindle us nicely.

Within both the companies, the persons involved in this relationship naturally talked about it with each other. In addition, because the relationship ended, also other persons within the network had to be told about it. Moreover, as the troubles in the relationship affected the everyday work in the companies, some of the individual employees also spoke their minds to their personal network.

Buycom:

Outside Buycom it hasn't been talked about, but of course I have discussed it within the project and also inside my own unit.

Sellcom:

We've been going through this a lot. We didn't quite understand the seriousness of the aftermath [after the project was accepted] then, in the beginning of '97, at least I didn't personally. We haven't talked about the aftermath as such, other than to inform.

The Customer Division:

Inside Buycom we have told some things to people in IT management, not much, well actually quite a lot. Let's say that from the viewpoint of project experience and in a way, as we have had to take this thing forward, had to explain why or why we need to do conversions. But to the outside we have kept a low profile in general about this, so it has usually been the other way around that we have asked other people's experiences of Sellcom.

The Customer Division:

Yeah we have, like between friends. I told them what's the name of the game, because it really started to stress me out that you are trying to work and work and it feels like nothing. Or that when there were bugs in the loading runs it felt like that you try and try and it's not working. That you fix one and more and more appear. So it started to be like, it stresses you out. Well, you had to vent it out to your friends.

In Sellcom, this particular project had not been discussed in a post mortem meeting. This is an exception, as the company normally arranges a post mortem after every major project. However, an internal meeting was arranged during the official complaint period. Likewise at the dyadic level, no post mortem was set up between the Customer Division and Sellcom. Some individuals from Buycom were interviewed later on for Sellcom's customer satisfaction surveys, but not everyone was eager to answer the questions.

Buycom:

Once after this I took part in a customer satisfaction survey over the phone and I told my opinion about their organisation [Sellcom's], don't know if it was justified, but straight out, that in my opinion they did a bad job. The second time I told the interviewers that I would not answer their questions anymore.

This research offered an extra opportunity to the actors to tell the story of the relationship. From these interviews, it was clear that the persons had gone through the relationship in their minds as well as with e.g. their friends and had tried to explain why it went wrong. Their stories had time built into them; each speaker clearly spoke with all the knowledge she or he now had and with that knowledge she/he could offer explanations of the past events she/he could not have made at the time.

Researcher:

You said earlier that Sellcom did not try their best, did you feel that right from the beginning or did their attitude change at some point during the project?

The Customer Division:

I suspect that they were like that right from the beginning, you don't just get it, until when the project should be finished. It is then that you are faced with it that they [the supplier] really come up with something finished. Before that you didn't necessarily believe [that it goes wrong] or you trusted that they are going to finish it even though at some point you noticed that they were behind from the schedule. I think that it was straight from the beginning. I suspect that they thought that this company is like a piece of cake. Like what I've been wondering about is that when you think about it this company is big enough that if you gain footing here, it means money. So that's why I think that in the first project the supplier should make major investments and put the best resources in there.

Buycom:

Honesty is one thing I would have, now thinking about it afterwards that I would have appreciated. So that we would have been told straight on what works and what does not, and not gone on a wild goose chase.

Sellcom:

I think that at that point we should have as suppliers stopped everything, get a new approval for this and then just agree and develop the rest of it so that it can be taken into operational use. But, but something radical should have been done at that point, then we would have reached the goal roughly in the target schedule and expense frame. --- The situation looked like this or it looks clear only afterwards, back then it was quite confusing as there were lots of complaints and defect lists and complaints from both parties, from our workers and from the customer that things are totally screwed

Sellcom:

When we changed Jeremy for Laura, we have been thinking about it later that should we have demanded that Audrey should be changed too, that changes would have been made in both ends.

In addition to the explanations about the course of the events, the interviewees also had a final opinion about the relationship and about the opposite party. Some had also quite firm opinions about what they would do, if they would now be at the same situation as they had been in the beginning of the project.

The Customer Division:

Yeah, there are all kinds of suppliers. (Laughter.) I have to admit that I myself had, like it was a shock that, that I don't know. Well, I haven't been more than eight years on the job but I have yet to meet suppliers like [this]. This was, to be frank, the record low, like they had the nerve to say to a customer all sorts of things and act like they did.

Buycom:

This Sellcom's bunch in Finland was in principle revealed as they were salesmen, and they were nothing else. Others have similar experiences, too.

Sellcom:

I think that the sense of proportion was lost at some point.

Sellcom:

This was hard on the personal level, as these kinds of ‘dramas’ aren’t played normally. Usually the problem people are changed and the work continues, i.e. it is strictly business.

The Customer Division:

If I would do this, if I had this same situation again, I wouldn’t do any freaking data warehouse. That’s a fact.

4.5.5 The enabling stage

The enabling stage consists of all the actions that aim for lowering the exit barriers or minimising the attenuating factors. An internal barrier may be e.g. from the viewpoint of an individual disengager, the strong relational bonds of other powerful individuals within the company, who want to continue the relationship. Another example of an internal barrier would be a contract. On the other hand, from a contract one can find reasons to rely on when ending the relationship – although the real reasons may not be related to any contract violations. Enabling actions include also developing new relationships and securing network positions, these make it possible for the disengager company to end the relationship without large losses or disruptions in the company functions.

In the focal relationship, most of the enabling actions involved the network level as Figure 57 shows. There were two reasons for this, firstly the relationship between the Customer Division and Sellcom was positively connected to the relationship between Buycom and Sellcom. Secondly, the need for the software solution did not vanish, and because of that the same tasks had to be performed anyway. Therefore the Customer Division needed a complementary software consulting company to develop a working data warehouse system.

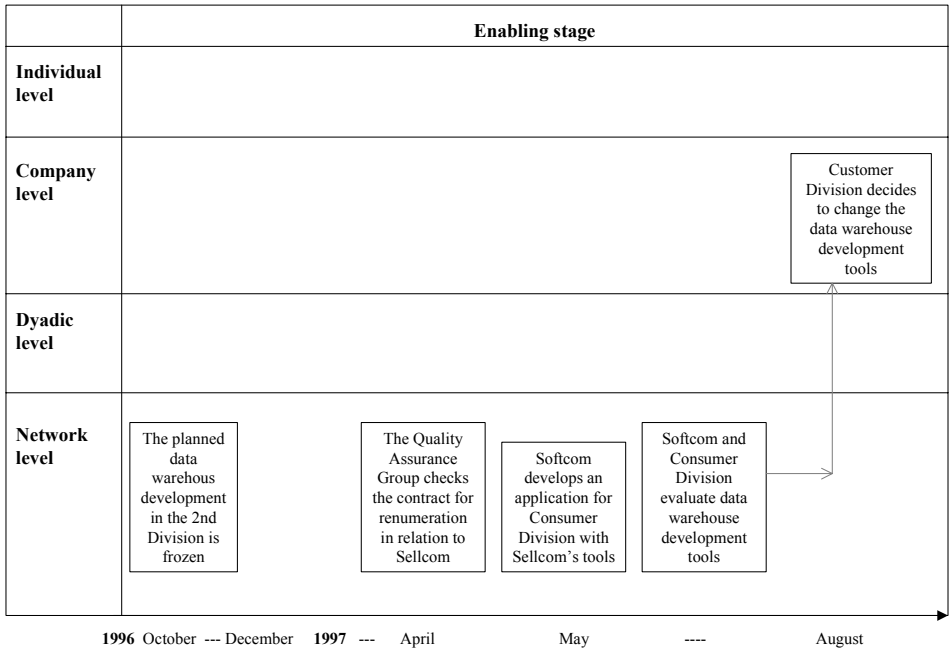


Fig. 57. The events and actor levels at the enabling stage

The first event at the enabling stage was the freezing of data warehouse development in the 2nd Division. This project had already been planned and the 2nd Division had used Sellcom's software on trial runs. If this second project at the network level would have started, the first one, with the Customer Division, would subsequently receive less attention from Sellcom, and the chances to end the relationship with Sellcom would have been minimised.

The Customer Division felt that their project was not finished yet because they still had troubles in the solution's production use. Therefore, the Customer Division wanted to resolve the unfinished business with Sellcom before any new projects with Sellcom would start. They also knew that Sellcom was interested in starting the new project; thus freezing it could be a sign that Sellcom needed to take the matters with the Customer Division seriously.

Sellcom:

So putting it in plain language, we had with the 2nd Division a similar but maybe a bit specialised project going on. It was on a start-up and trial stage. Then we started to realise that inside Buycom information was going around that with Sellcom, I don't know the exact wording, but a notion was born that you can't co-operate with Sellcom. --- We understood that there was some information going around, and then we noticed quite evidently that the negative experience of the Customer Division will hamper all

> our efforts to progress at Buycom's level. This maybe made me recall or gave me the impression that unless we find a common goal with the key persons in the Customer Division, we do not actually have anything to do in Buycom.

The second event took also place at the network level, when the Quality Assurance Group, which had members from Buycom in it, started to carefully read the contract the Customer Division and Sellcom had signed. They were looking for something that Sellcom had promised to deliver but had not, which would give the Customer Division a right to point a finger at Sellcom and claim compensation. The Customer had not received all the training that had been agreed upon in the contract, and Sellcom's Customer Support had not been performing as promised, but otherwise no major contract violations were found.

The third network-level event started when Softcom, the consulting company, whose consultants already had been involved in the project, started to train their consultants for Sellcom's software tools. They attended the courses Sellcom's Training Services was arranging. These courses are part of Sellcom's business and by paying the course fees anyone can obtain access to them. Once Softcom's consultants knew how to use Sellcom's tools, they were able to perform also data warehouse consulting services to the Customer Division with Sellcom's software tools.

At this point the Customer Division was still satisfied with Sellcom's software tools, but dissatisfied with Sellcom's consulting work. By using Softcom's consulting and Sellcom's tools the Customer Division wanted to prove that the choice of the software tools was not totally wrong, but that the choice of the consultants was. If the influential individuals in Buycom, which had made both the choices, would see that the consulting choice was not the best possible, the Customer Division would be free to switch the consulting company.

> The Customer Division:
>
> Customer satisfaction application was done in April and May. Two Softcom consultants did it. We like wanted to show that you could do something with Sellcom's [tools], that it wasn't a totally wrong choice.

The last event that enabled the ending of the focal relationship also involved a network actor. The Customer Division set up a group to evaluate different software tools designed for data warehouse development, and Softcom took part in the work. Such an evaluation is a normal pre-project task in software development, but in this case, the Customer Division had not been able to take part in the evaluation that had been done when the company wide data warehouse plan had been set up and Sellcom's tools had been selected.

The evaluation group came to the conclusion that Sellcom's tools were not the optimal solution for Buycom's data warehouse solutions. The system that the Customer Division now had was evaluated to see if it or parts of it could be re-used in the data warehouse solutions to come. When it was concluded that there was little that could be re-used, it

was easy to make the decision of changing also the software tools, with which the data warehouse solutions will be developed in the future. Actually, this decision enabled not only the ending of the relationship between the Customer Division and Sellcom, but also the relationship between Buycom and Sellcom, as far as the licences were concerned. Later on, Softcom started to develop the data warehouse solutions for Buycom.

The Customer Division:

In tool comparison it was brought up that in the future, the tool is not necessarily Sellcom's. Softcom was already at that point in it. So it was speculated that if we would expand to a bigger data warehouse as originally planned, how much from the pilot could be re-used there. And it was verified that not much, so we might as well change the tools.

4.5.6 The communication stage

The communication stage and the enabling stage were the last stages to start during the dissolution process. The actions in this stage encompassed communication about the ending or the continuation of the focal relationship. In the theoretical model, the stage was labelled as the dyadic communication stage. However in this case the network level was the sender of the messages, as shown in Figure 58. The communication concerning the ending of the relationship was mostly indirect. Only in one communicative event, the conduct of the official complaint, was the buyer also involved.

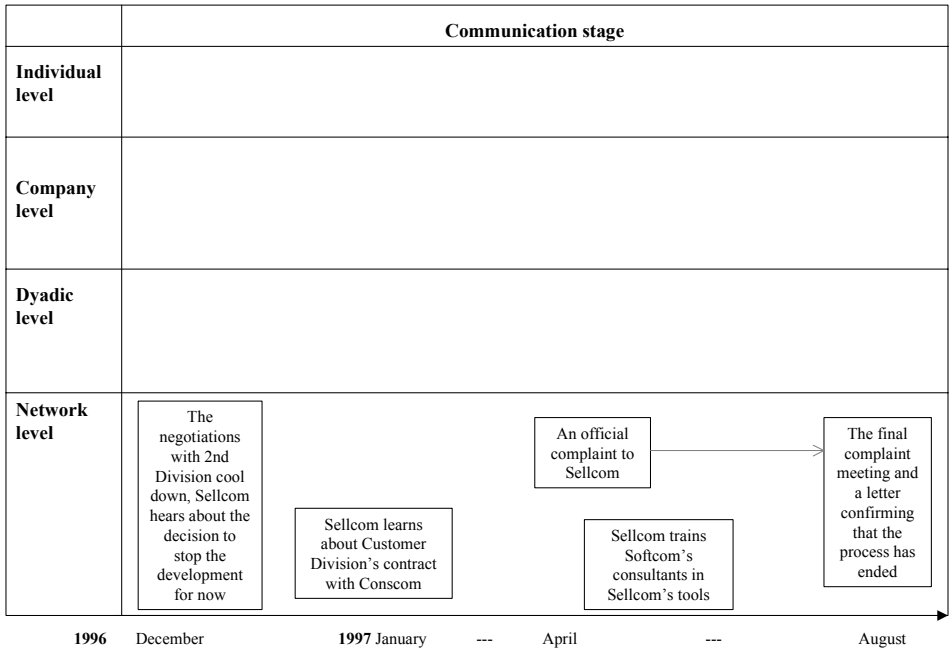


Fig. 58. The events and actor levels at the communication stage

The first alarming news that Sellcom heard came from the 2nd Division. At first they only noticed that the discussions with the 2nd Division about the second data warehouse solution started to cool down towards the end of the year 1996. Thus the 2nd Division was using withdrawal communication strategy (Alajoutsijärvi *et al*. 2000) in their relationship with Sellcom, by not communicating directly but through changed behaviour.

Later on, Sellcom heard rumours about some kind of order in Buycom to not start any new data warehouse development projects with Sellcom, until the unfinished matters between the Customer Division and Sellcom had been settled. This can be seen as signalling thus a third actor (the 2nd Division) was telling Sellcom news about the focal relationship that the Customer Division had not told Sellcom directly.

> Sellcom:
>
> Actually I heard rumours that there was an order not to do any projects with us. The rumours I heard from 2nd Division personnel. What was the truth, I don't know.

The second event, which was a warning sign, took place at the end of 1996. The Customer Division had decided to hire Conscom to work with the solution because they felt that Sellcom was not willing to debug the solution and to have it ready for production use during the warranty period. Conscom was Sellcom's partner company, so the Customer Division's switching to another vendor remained no secret to Sellcom.

There are still different views about the matter. At the time Sellcom felt that it should have been asked permission concerning the switch because of the warranty period; today it still feels that it (or the right persons in Sellcom) was not consulted about the matter in advance. The Customer Division claims that it did ask Sellcom its opinion on the matter. Anyway, the contract between the Customer Division and Conscom was a direct and self-oriented way of communicating the wish to exit to Sellcom. In spite of this, Sellcom's consultant Philip assisted Conscom's consultant, so that he was able to get to know the code and to make changes to it.

Researcher:

Was the Conscom's arrival negotiated with you?

Sellcom:

This was a very secretive issue. The customer had forbid Conscom from telling us and did not itself inform us about Conscom coming aboard. Officially we heard about it only when the customer and Conscom already had signed a contract and we where asked to transfer knowledge to Conscom.

The Customer Division:

We then asked from Sellcom "what if we use Conscom?". Then they did some like presentation or not quite an actual training, but any way told Conscom what they had done.

During the time when Conscom was working in the Customer Division, Softcom started to train their consultants in the use of Sellcom's software tools. This again was a warning signal to Sellcom, because Softcom had an ongoing relationship with the Customer Division, which could have been enlarged into data warehousing as well.

The negotiations with Sellcom and the Quality Assurance Group did not advance smoothly and the group decided to express the disappointment of the Customer Division in a more official way. With the help of Buycom's lawyers, they drew up an official complaint and sent it to Sellcom. This was the first direct message from the Customer and also from Buycom that they were seriously considering ending the co-operation with Sellcom. As the Customer Division had already announced that the next projects depended on this first project ending successfully, the complaint left Sellcom with no doubts about what would happen. Thus there was a movement from an indirect strategy to a direct communication strategy, from signalling to attributional conflict, which was evident already when Conscom was hired and which continued during the formal complaint period.

The Customer Division:

We wanted to bring it out into the open that the defects that we had listed had not been removed. We thought that it [complaining] is the only way to get enough serious attention for the matter.

The meetings and the work that Sellcom did with the solution continued after the formal complaint. However, the Customer Division still felt that, the changes did not take place at the desired pace during the few meetings they had had. So, in the end, the Customer Division decided that it is best to end the process and leave the matters with the software as they were.

The two parties did not reach a common understanding of each other's views, as the ending of the process came to a somewhat surprise to Sellcom. The last meeting took place on the 5th of August 1997; a letter confirming that the matters discussed in the complaint were settled followed it.

Researcher:

About the time with Sellcom, about finishing after all the complaint meetings, did you get all that you wanted or were things left a bit open?

The Customer Division:

Yeah, it was the last option that something was left but then we found that there was no sense in continuing so we would settle for this now.

Sellcom:

And then suddenly the [complaint] process was finished on the 5th of August. We had a meeting with Miriam and Lucy where it then ended.

Although the communication and the enabling stages were the last ones to start during the dissolution process, the stage that ended the dissolution process of the continuous relationship was the sensemaking / aftermath stage, as the theoretical model suggested.

5 Dissolution of an episodic relationship

In this chapter a predetermined ending of an episodic relationship is described and analysed, starting with a description of the task of the relationship, the focal actors, and the connected network. Thereafter the life of the relationship is written out as a story, which starts from the establishment of the relationship and continues until the time when the relationship no longer existed. This story is finally analysed, using the elements of the tentative process model. Some adjustments to the tentative model are made during the process of empirical grounding.

5.1 The task, the focal parties and the network actors

In this section, the reader is briefly introduced to the task the relationship was set up to perform and to the actors involved, the companies as well as the individuals. This episodic relationship has already been referred to in the previous case description of the continuous relationship between the Customer Division and Sellcom. The Customer Division is the buying organisation also in this relationship, whereas the software vendor is Conscom, Sellcom's partner company. The purpose of the episodic relationship was to finish the development of the data warehouse solution started by Sellcom, which the Customer Division failed to get in production use.

The number of individuals involved in this episodic relationship is, much smaller than in the previous case (see Figure 59). Audrey, the former Customer Division Project Manager, remained in the same task in this case. Audrey was responsible for the initial contacts with Conscom and took part in every subsequent project meeting during the relationship. Miriam, the IT Manager, was also involved in the contract negotiations and in some of the more important project meetings. Mabel, who was the Project Secretary in the data warehouse project with Sellcom, acted as the Main User of the system and kept in contact with Conscom's consultant on a daily basis. These three persons were the main individuals from the Customer Division.

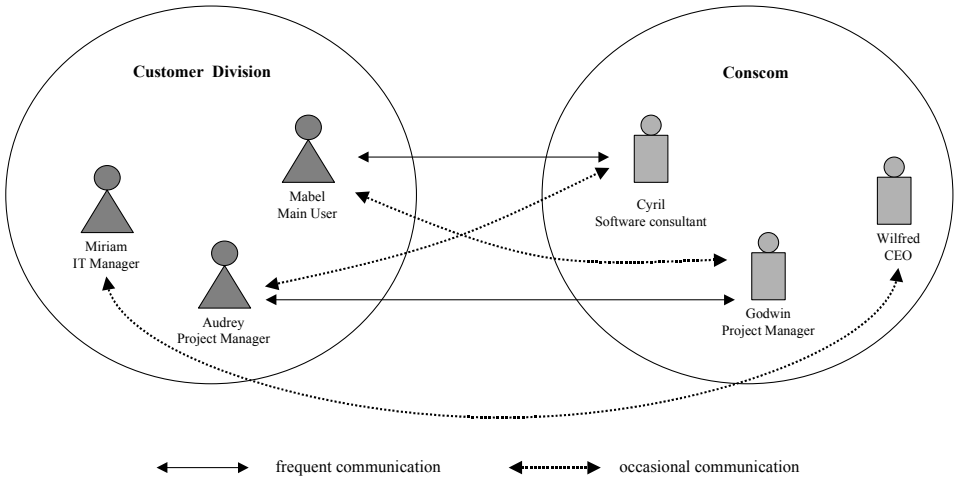


Fig. 59. The focal relationship and the individuals involved in it

The seller was the software consulting company Conscom, which has already been presented, in Section 5.1.1. There were three persons involved in the relationship with the Customer Division. The CEO of the company, Wilfred, was the first person to have any contacts with the Customer Division. He furthermore negotiated the contract and took part in the most important project meetings. Godwin was a senior consultant in Conscom, and his task was to be the seller's Project Manager. He also took part in the last phases of the contract negotiations as well as all the project meetings. Cyril had expertise in the specific software tool that was being used to develop the data mining application. Therefore he acted as a project consultant. Because the task was not very large in size, no other consultants from Conscom were needed. Additionally, no official Steering Committee was set up, instead IT Manager Miriam and CEO Wilfred took part in the most important project group meetings.

The other companies connected to the focal relationship depicted in Figure 60. They were Sellcom (Conscom's partner company and the original vendor for the Customer Division), Conscom's sister company in Central Europe (for which Sellcom's Consultant Philip had left), and Softcom (the Customer Division's long term software vendor). All companies have been introduced in Section 4.1.1.

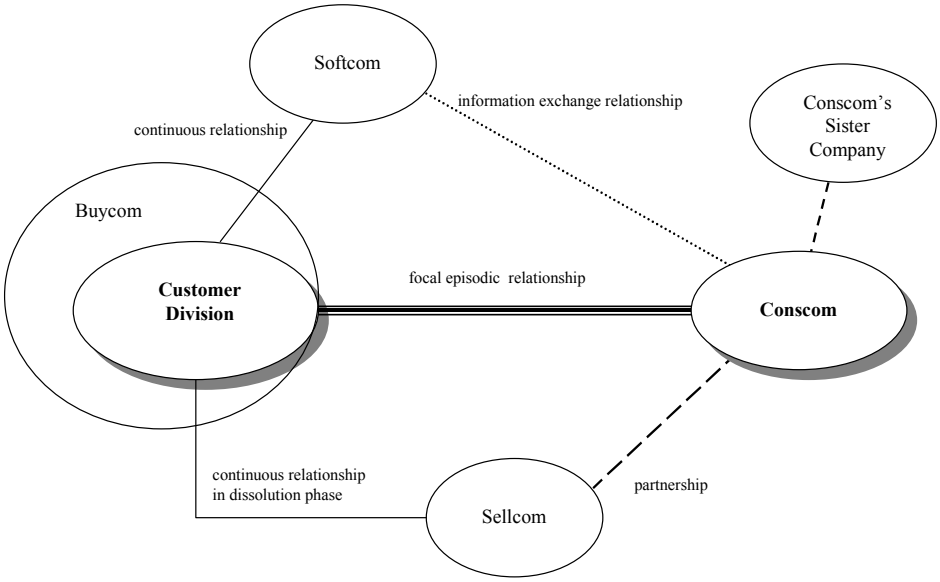


Fig. 60. The net of companies in which the focal relationship was embedded

The relationship between the Customer Division and Sellcom, the original supplier of the data warehouse system, was in a dissolution phase. This was the main reason for the Customer Division started the focal relationship with Conscom. One of Conscom's sister companies became actively involved in the network, because it hired Sellcom's Consultant Philip. Therefore it was easy for Conscom to acquire information about the software directly from Philip, who had been its main designer. The third company actively involved in the network was Softcom, with whom the Customer Division continued to have a business relationship concerning the development of operational software. Softcom's consultants were maintaining some of the legacy systems of the data warehouse, and thus had to be somewhat involved in the actual development project.

5.2 The story of the relationship

In the following sections, the development of the episodic relationship between the Customer Division and Conscom is described. The factors influencing its dissolution are described, not after each stage of the project, but as a separate Section 5.4. There are two reasons for this. First the relationship was of a short duration, about six months and therefore its story is can be told in few pages. The second reason is that also the dissolution process was much more straightforward than in the case of the continuous relationship. Section 5.5 also contains the description of the different stages and actor levels that were involved in the dissolution process.

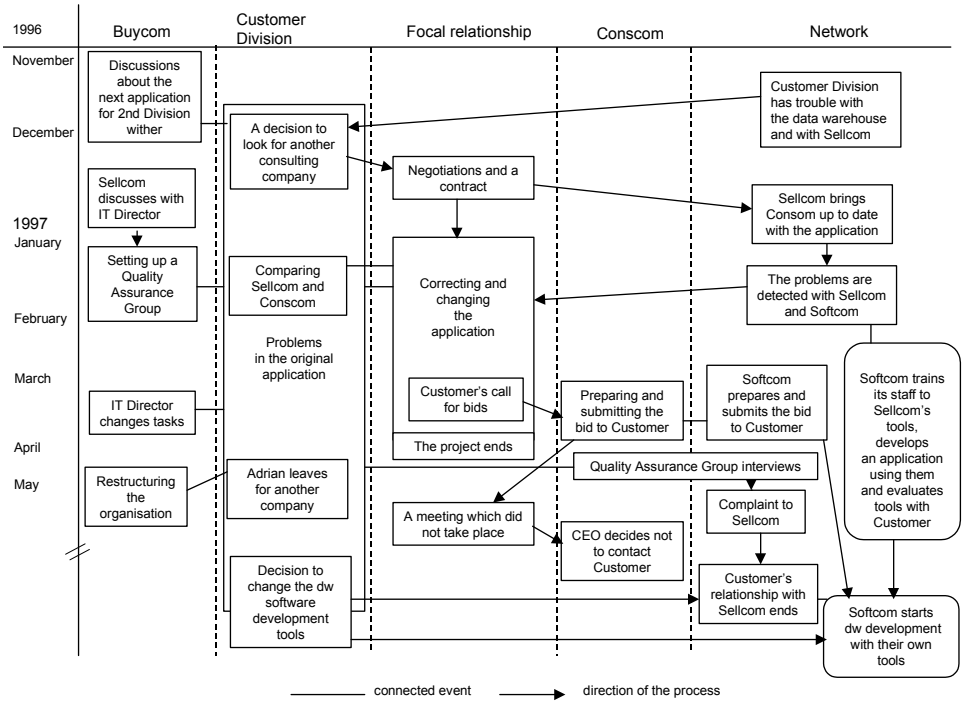


Fig. 61. The events in the episodic relationship and the focal network, November 1996 – May 1997

Figure 61 presents an overview of the flow of the main events in the relationship as well as in the connected network. Each of the main stages of the project; i.e. contract negotiations, actual project work and epilogue will be described in more detail in the following sections, one after another.

5.2.1 Contract negotiations

In the end of 1996, the data warehouse project with Sellcom had reached a situation where the Customer Division felt that it would not have the system in operational use without some help from another vendor. Therefore Audrey, the Project Manager, made enquiries concerning the potential vendors; in these Conscom came up as Sellcom's partner company. Conscom had expertise in Sellcom's development tools, and it also had consultants available who had previous experiences in using the software tools which had been used in developing the Customer Division's original data warehouse application.

Project Manager Audrey and IT Manager Muriel from the Customer Division and Ida from Buycom's Buying and Logistics Services discussed the contract with Conscom's

CEO Wilfred (see Figure 62). As Godwin was appointed to be the vendor's Project Manager, he also took part in the negotiations. A short term (four months) contract was agreed upon; however its total cost was so high that it had to be signed by Jack, the Head of the Customer Division.

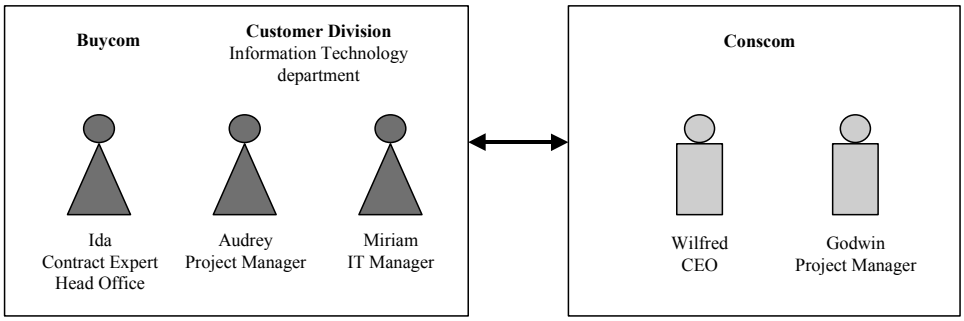


Fig. 62. Contract negotiations between the Customer Division and Conscom

The Customer Division established the relationship for the sole purpose of getting the data warehouse in operational use. In contrast, Conscom, fully aware of the unique nature of the relationship, perceived it as a way to prove to the Customer Division and to Buycom that it offered expertise and high quality service. Thus Conscom saw in this project a chance to develop a more long-term business relationship with the customer.

5.2.2 The data warehouse application project

The project work began in January 1997. The main task of the project were to enable the production use of the application, to revise the user interface and the reports that the system was producing as well as to speed up the response time of the system. Most of the work was done in the customer's physical environment. Project Manager Godwin and Consultant Cyril were the main individuals from Conscom. Consultant Cyril worked full time on this project. However the project was small enough that Project Manager Godwin managed to be involved in other projects at the same time. CEO Wilfred also took part in some of the project meetings. Project Manager Audrey and Main User Mabel were the individuals most involved in the actual project work from the Customer Division. Additionally IT Manager Miriam, Katherine from Buycom's IT-Services, and Fanny from Softcom, as well as individuals responsible for the legacy systems, took part in some of the phases of the project.

The communication links between the Customer Division and Conscom were very much in line with the project organisation. Main User Mabel and Consultant Cyril were in contact daily. Audrey and Godwin as the Project Managers made the main decisions concerning the project in the project meetings. Godwin informed Consultant Cyril about

the decisions and discussions that were made and took place in the meetings. The project did not have an official Steering Committee, but the Customer Division's IT-Director Miriam and Conscom's CEO Wilfred took part in some project meetings, such as the one in which the customer accepted the project.

Consultant Cyril's first task was to become acquainted with the system and how it had been developed. He was able to ask the original designer, consultant Philip for help. As described in Section 4.2.3, Consultant Philip had left Sellcom in November 1996 to work in another concern company in Central Europe. After that, he changed companies and started to work in one of Conscom's sister companies in the same country. Therefore Cyril was able to ask Philip questions quite easily.

The work started with the revision of the customer interfaces and reports; Cyril was able to rework these to satisfy the requirements of the users. Thereafter Cyril tried to speed up the system's response time, but it appeared to be almost as quick as it could be. However, this task also led to new knowledge of problems with the quality of the data imported from the legacy systems. This led Consultant Cyril to resolve these issues together with the system managers of the legacy systems and consultants from Softcom. Cyril thus communicated frequently with Softcom consultants. He also began to notice that Softcom was training its consultants in Sellcom's data warehouse development tools and that the number of Softcom consultants in the customer's premises seemed to be increasing. Additionally he ended up in situations where he was giving advice to Softcom's consultants concerning Sellcom's development tools. Apart from co-operating with Softcom's consultants, Cyril also worked with Consultant Jacob from Sellcom during the period when Sellcom was trying to solve the problems in the original system as a part of their attempt to restore the relationship with the Customer Division (see Sections 4.2.3–4.2.4).

As the project deadline was approaching, the users of the data warehouse came up with new ideas concerning the reports that the system would produce. In addition, Consultant Cyril developed new reports to show that there were good opportunities to make use of the rich data stored in the data warehouse. Consultant Cyril also implemented some of these new report and analysis ideas, but using a different Sellcom software tool than the one with which the original reports had been developed. As a whole, the project work was done within the timetable, without any specific problems. The project was finished and accepted by the beginning of April 1997. However, no project closing or post mortem meeting took place.

5.2.3 Epilogue

Already during the project, in late March, the Customer Division's Project Manager Audrey made a request for proposal to both Conscom and Softcom concerning the future development of the data warehouse system. Conscom's CEO Wilfred discussed the matter with Softcom's representatives. Conscom invested time in making the offer in early April, as well as specifying it later on, in the beginning of May.

Meanwhile, in spite of the efforts made, the relationship with the customer and the original dw-vendor Sellcom did not recover, and the Customer Division decided to file an official complaint. At this point, the Customer Division did not want to put forward a large investment proposal, that is to ask for more money to be spent on the enhancement of the data warehouse, since they were in the middle of a complaint regarding the first version of it. In addition, the Customer Division's IT department was together with some of Softcom's consultants evaluating other software tools for developing data warehouses. This evaluation suggested that Sellcom's tools were not the best available for the needs of the Customer Division. Moreover, the structure of the Customer Division was being re-organised and the users of the data warehouse would not form a unit; as they were being decentralised into different units. The re-organisation complicated requirement specifications for the enhancement of the data warehouse. Therefore, the Customer Division never accepted the bid from Conscom. Instead, later on, it decided to develop a new data warehouse system by using both Softcom's tools and its consultants.

However, during the period in which the decision of not to accept the offer from Conscom had not yet been made, the CEO of Conscom and the Customer Division's Project Manager Audrey decided to meet to discuss the offer during an international software conference. The meeting never took place because the customer's representatives never showed up. Conscom's CEO was annoyed, because the conference was a busy time for him, and it was very seldom that someone missed agreed meetings without giving any notice. After that incident, Conscom's CEO did not take any further contact to the Customer Division.

This section has shortly described the events of the episodic relationship during the six-month period. In the following sections the theoretical model, which was already modified in Chapter 4, will be confronted with the data from this second case. As in the continuous/terminal relationship, the sub-models of the framework will be studied one after the other. I will start the examination from the nature of the relationship, continue with the influencing factors, and end with the stages of the dissolution process.

5.3 The nature of the relationship

At the end of the year 1996, the Customer Division searched for a consulting company capable of removing the defects from the data warehouse solution, so that the users could make use of it in their daily work. Conscom was chosen, as it had the capability and the resources available to fulfil the Customer Division's needs. Thus the purpose of the relationship was to put the application into production use, after which the future of the data warehouse development would be re-evaluated. The nature of the relationship, from the Customer Division's point of view, was episodic.

The Customer Division:

So that we can have it [the data warehouse] in production. At that point, we did not think of adding any further enhancement to it. That would have been a separate project.

However, there was also a short period during which the relationship was seen as potentially continuous. This was the time when the Customer Division considered enhancing the data warehouse system and requested proposals from Conscom and Softcom. Conscom's proposal was never accepted; thus the relationship remained episodic.

Conscom entered the relationship fully aware of the Customer Division's needs for a quick solution to its unique problem. In spite of this, and because of Conscom's strategy of developing long-term customer relationships, it saw the focal relationship as a chance to demonstrate its expertise and the quality of its work to the Customer Division. In addition Buycom, to which the Customer Division belonged, was a large potential customer for Conscom. Therefore it treated the relationship as a means to commence a more long-term relationship with the Customer Division, as well as with Buycom. Thus from Conscom's point of view, the relationship was partly episodic and partly continuous. Conscom rejected the perception of continuity only after the failed meeting, once the Conscom CEO decided not to contact the Customer Division again.

Conscom:

We went to fix things up, they wanted us to join in, and for that part it was a different project than normally. We did have a goal in it, that after this project we would be able to continue our co-operation. We always seek for more long-term relationships.

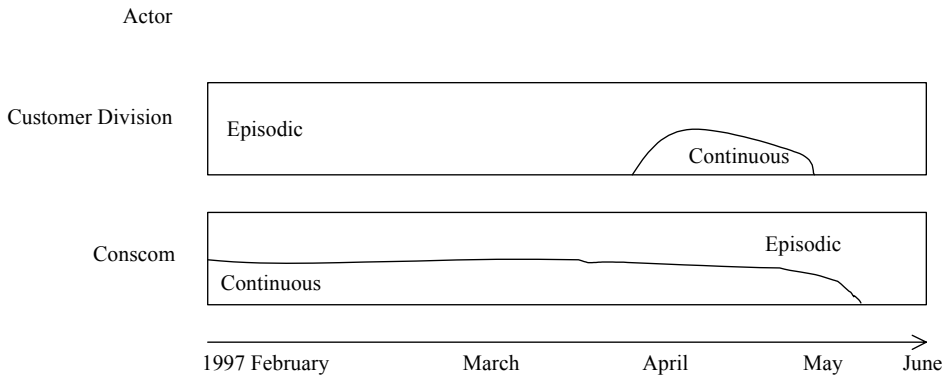


Fig. 63. The actors' perceptions of the relationship's nature

Thus the views of the buyer and the seller concerning the nature of their relationship were different as shown in Figure 63. Which view then counts? It takes two to form a relationship, but only one to end it. Therefore, a business relationship can be continuous only if both of its actors perceive it as such. In the case that they do not, the relationship is either episodic or terminal, depending on the perceptions of the other party. Therefore the relationship between the Customer Division and Concsom can be classified as an episodic relationship, although it had a continuous 'flavour'.

5.4 The influencing factors and events

5.4.1 Predisposing factors

As in the case of the continuous relationship, a group of predisposing factors were present already when the relationship was established. The task- and actor-related predisposing factors are classified and discussed in Figure 64.

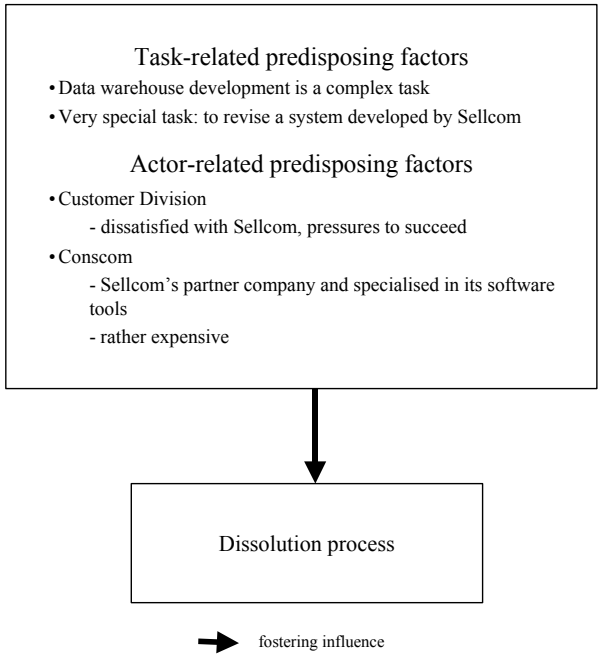


Fig. 64. Task- and actor-related predisposing factors in the episodic relationship

Two task-related predisposing factors can be named. The development of a data warehouse solution, as already mentioned in the case of the continuous relationship, is very complex and is, as all software development tasks, prone to problems. Thus the task is a predisposing factor providing fertile ground for precipitating events, such as delays in time-tables and cost increases which lower the quality of the service. This complexity is a feature of all relationships between vendors and buyers of tailored software.

The second predisposing factor is unique to this particular relationship. It was a very special assignment, as it involved modifying a software that had not been developed by the vendor itself. This meant that the task was even more difficult, as it entailed that the consultant first had to become acquainted with the structure of the system before he was able to make any revisions to it.

Conscom:

> Because this was a special case, that we went there [to the customer] to fix something up and while we were there, we tried to see what it was that had to be done. So it was a very unclear assignment on the whole. So anyhow, it was a special case.

Moreover, these task-related predisposing factors also created actor-related predisposing factors. The customer was dissatisfied with the co-operation with the first vendor, which was bound to influence its expectations and attitudes towards the second vendor. In addition, the future users had been promised a working solution by October 1996, and by the time Conscom started working this deadline had been exceeded three months ago. The users were losing interest in using the system, even if it would be in production use. So the new vendor had to succeed.

In addition, two predisposing factors were related to Conscom. It had a partnership with Sellcom, the vendor firm that the buyer had a troubled relationship with. The fact that Conscom was specialised in software consulting using the development tools of Sellcom was the main reason for the establishment of the relationship, but it also made the same relationship more vulnerable to dissolution. Conscom's special knowledge was needed only if the buyer firm still used Sellcom's software tools in developing its systems.

Conscom's special knowledge created yet another predisposing factor, which was the high cost of using its consultants. The situation with the original vendor Sellcom was such that the buyer did not want to use Sellcom's consultants for software development. Therefore the solution was to use Conscom, but as its price was higher, this also meant increasing costs of software development in the future. The high price was not such a big issue in a short project, but the consulting costs would play a more significant role in the future development of the data warehouse.

The Customer Division:

> I've no doubt they're [Conscom] excellent as a vendor. I got the impression they were quite expensive, but on the other hand, it's their business to specialize in Sellcom's

products. But as we [the Customer Division] don't have them [Sellcom's products] in use at the moment, we've no need to find any Sellcom partners either.

When the characteristics of both companies and the conditions under which the relationship was established are put together, there is a certain imbalance in the relationship, which is a dyad-related predisposing factor, as shown in Figure 65.

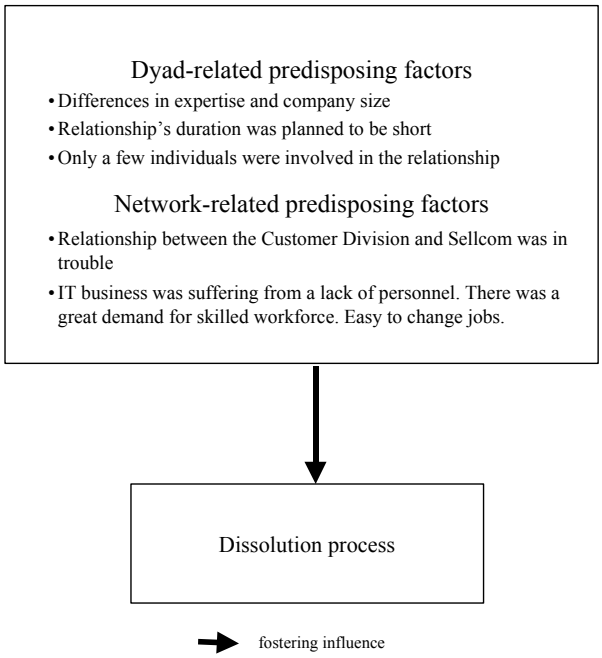


Fig. 65. Dyad- and network-related predisposing factors in the episodic relationship

The amount of expertise in developing data warehouse systems as well as in Sellcom's software tools differed remarkably between the buyer and the seller company. The seller was a highly specialised expert in both areas, while the buyer's experience derived only from working with the original vendor, Sellcom. Furthermore the difference in company size was considerable, Conscom being much smaller than the Customer Division, and even more so if compared to Buycom. In spite of the existence of these predisposing factors, they remained latent; thus the dissolution process was not influenced by these factors.

However, the facts that the relationship was of short duration and of a small scale were reflected in the dissolution process. Although software development itself is very human interaction intensive four months is a short period to develop strong bonds between the companies, be they personal, technological, or planning bonds. In addition, the relationship mainly involved only two individuals from the Customer Division and two from Conscom. In other contexts this number might be considered high, but not in a

tailored software development context. Of course, this was in accordance with the task. It was not a laborious one; therefore Conscom could perform it by using a team of only one consultant and a project manager.

As for the network-related predisposing factors, the most influential factor was that the buyer had a troublesome relationship with the original software developer, Sellcom. Because Conscom's consultants were developing software using only Sellcom's software tools, the buyer had to have a working relationship with Sellcom in order to need further Conscom's services. Thus, the troubled situation between the Customer Division and Sellcom not only was the reason for the Customer Division's decision to start their relationship with Conscom, but at the same time was a factor which endangered the focal relationship. If the original relationship between the Customer Division and Sellcom could not be saved, the relationship between the Customer Division and Conscom would become purposeless.

The following two network-related predisposing factors came from the wider network, i.e. from the whole information technology sector in general. Already during 1996–1997 the lack of skilled personnel in Finnish IT business was severe. In other words, software companies could not find fully qualified workers to fill open positions and thus were forced to train them in the job. The labour market situation also enabled skilled professionals to change their jobs and companies easily. They were also being headhunted from their jobs more intensively than before. The increased personnel turnover in such a personalised business would mean changes in project personnel and potential trouble in meeting the deadlines, thus putting the ongoing development projects with customers in danger. However, these factors remained latent during the development of the episodic relationship because of its short duration.

5.4.2 Precipitating events

As in the case of the continuous relationship, a group of precipitating events took place during the episodic relationship, although the number of events is considerably smaller here. The actor, dyad and network-related precipitating events are classified and discussed in the next paragraphs.

The three actor-related precipitating events are presented in Figure 66. The first event took place when Adrian, the owner of the original data warehouse project and the head of the future user's unit, left for another company. After this, the application did not have any business manager who would have been interested in having it for his or her subordinates' use.

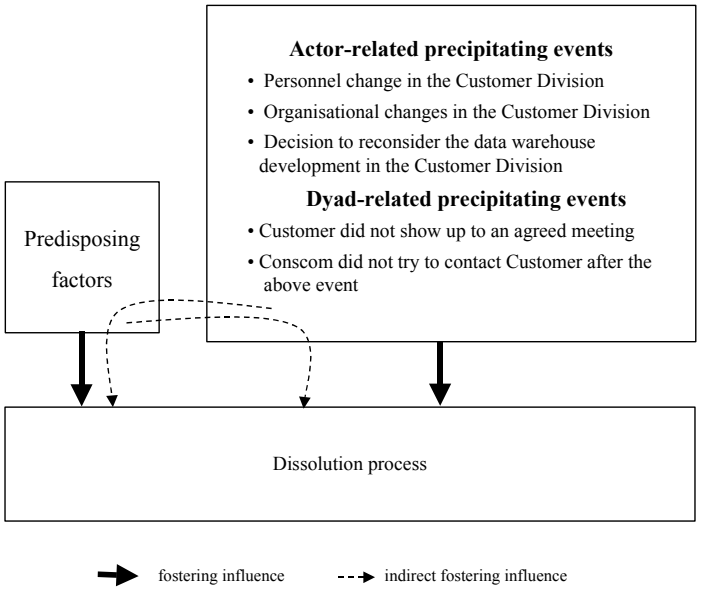


Fig. 66. Actor- and dyad-related precipitating events in the episodic relationship

The second actor-related event was caused by a network-related precipitating event, which took place in the Customer Division's parent company Buycom. Buycom was under a major organisational change process. The organisational change also involved the Customer Division and the future users of the data warehouse system. As an outcome of the change, the unit of the users was decentralised; thus there was no longer a common need for the data warehouse.

As both the head of the user unit and the individual users were spread the rationale for the data warehouse system became somewhat questionable. Thus these events lead to the Customer Division's IT unit reconsidering the whole data warehouse development.

The Customer Division:

> [About organisational changes in the spring of 1997] Well, we've got one going on all the time (laughter). As I recall, the IT side didn't change much, there were some new roles perhaps. In 1996 when we were working on the previous version the role of the analysts was stronger, but for some reason it diminished in spring 1997, partly because Adrian left the Customer Division. In a way the target group for which we'd been developing these tools [the data warehouse] sort of disappeared.

During the project work, no critical events took place that would have influenced the relationship dissolution. The project remained on schedule, and there were no other major problems between the two companies. Thus the customer was satisfied with the vendor

and its service. However, once the project had been finished, two dyad-related precipitating events took place.

The two events were connected to each other. At first, the Project Manager of the Customer Division and the CEO of Conscom agreed to meet and discuss the possibilities of continuing the relationship via the future development of the data warehouse. However, the customer's representatives did not show up for the meeting and did not give any reason for this. The second event was a reaction to the first one. Although this decision would mean the end of the relationship, Conscom's CEO decided that he no longer had good reasons to be active and contact the customer company.

> Conscom:
>
> The reason why we did not continue after this was that we had agreed with Audrey and a couple of other people from the customer company to have a meeting in a software conference in Central Europe in May 1997, but they did not show up for the meeting. After that, I … well, I did not exactly cross them out in my address book, but I did not actively contact them after that. It [not showing up] seemed somehow an unprofessional thing to do.

Figure 67 contains the most influential precipitating events, which all were network-related. This was due to the fact that the two relationships described in this study, the continuous one between the Customer Division and Sellcom and the episodic one between the Customer Division and Conscom, were positively connected. The episodic relationship presupposed the continuous relationship. Therefore, when the Customer Division decided to file an official complaint to Sellcom, this event reduced Conscom's chances of changing its episodic relationship with the Customer Division to a continuous one.

> The Customer Division:
>
> Conscom was only [involved] for a very short time, they did the acute fixing only. --- Because at that stage it could be seen already in March that we'd claim compensations for it [the project with Sellcom]. There was so much that was not all right.

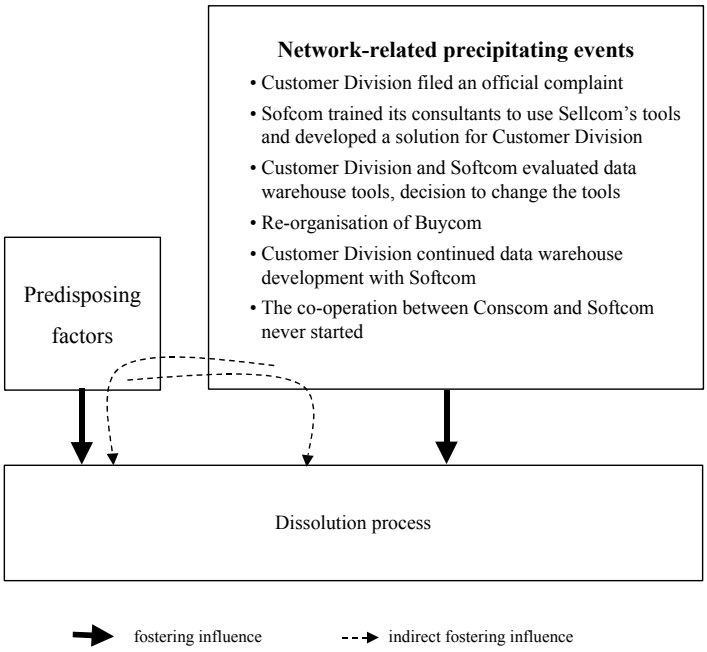


Fig. 67. Network-related precipitating events in the episodic relationship

Softcom, the software consulting company the Customer Division had a continuous relationship with, started to train its consultants to use Sellcom software development tools. Softcom's consultants had seen the state of the relationship between their customer, the Customer Division, and Sellcom. It was not hard for them to realise that they could present themselves as an alternative supplier for consulting services due to two reasons: the Customer Division did not want to use Sellcom's consulting services and Conscom was not yet a long-term partner of the Customer Division. Softcom had already over the years developed a good relationship with the Customer Division.

Thus Softcom started to acquire the same type of expertise which Conscom had and which was the basis for Conscom's relationship with the Customer Division. This expertise would have enabled the Customer Division to end its relationship with Conscom, while continuing the data warehouse development with Softcom using Sellcom's tools according to the original plan. Under these circumstances, Softcom would have provided the consulting services and Sellcom the licenses for its tools. Once Softcom was able to use Sellcom's software, Softcom developed a customer satisfaction solution using it. This was also a way to show the Consumer Division that Softcom can also do a good job in data warehouse solutions.

This network-related event influenced the focal episodic relationship because Softcom was adapting to the needs of the Customer Division and thus was trying to increase the interdependence between itself as a seller and the Customer Division as a buyer. So far there were no decreases in the actual exchange or interaction between Conscom and the Customer Division, but the Customer Division's dependence on Conscom was being

reduced. The initiative of Softcom increased their attractiveness as an alternative partner, in the case that the buyer would continue the data warehouse development with Sellcom's software tools. However, after a second event, the arrangement was not really needed.

While the events in the continuous relationship were contributing to its dissolution, the Customer Division's IT personnel, together with Softcom's consultants, evaluated different software tools available for developing data warehouse systems. This evaluation concluded that Sellcom's tools were not the ones most suited for the needs of Buycom. Moreover, because the re-organisation of Buycom had changed the roles of the users, pressures for changing the specifications for the data warehouse had been created. Related to that, when further enhancement and enlargement of the data warehouse solution was considered the group came to the conclusion that the application that Sellcom and Conscom had been developing could not be used as a basis for enlargement.

Because of these two reasons, a decision was taken not to continue the development of data warehouse system using Sellcom's software tools. Instead, the contract was awarded to Softcom. Softcom was able to use its own development tools; which it was an expert in, and therefore no longer needed to co-operate with Conscom to be able to develop the data warehouse system.

The Customer Division:

Well, this system itself has lived on. That is, the database at the bottom was changed to another in other words there is no Sellcom database anymore but another one. And the customer interface was redeveloped with another software tool, but the idea has not vanished, there are just technologically new approaches and new interfaces and the system itself is in production use, but probably as a version 4 at the moment. Conscom's version was like 1.5 or 2.0.

Researcher:

Now there is nothing that is developed by using Sellcom's tool?

No.

5.4.3 Attenuating factors and events

As in the case of the continuous relationship, a group of factors together with certain events attenuated the influence of the predisposing factors and precipitating events during the episodic relationship. Moreover, similarly, they were not perceived by the managers to be important or strong enough to hinder the dissolution. The attenuating factors are presented in Figure 68 and discussed in more detail in the following paragraphs.

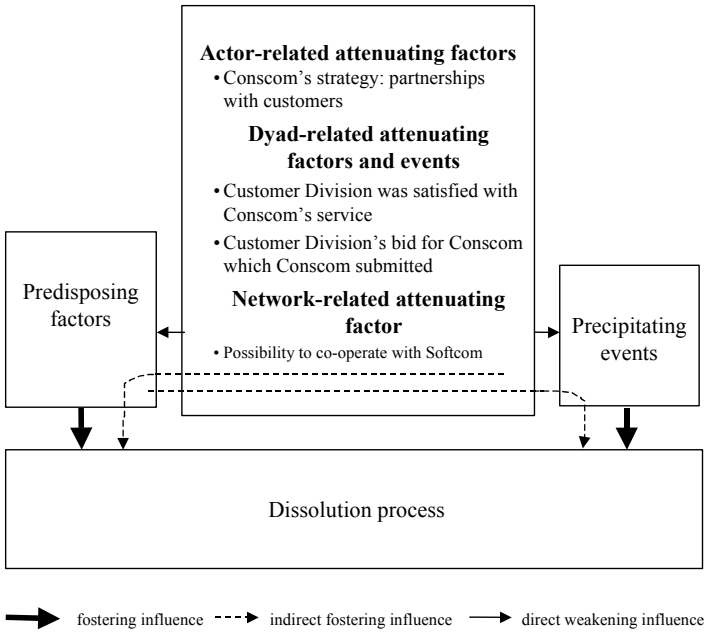


Fig. 68. Attenuating factors and events in the episodic relationship

An attenuating factor that was related to Conscom was its marketing strategy. Conscom aimed to form partnerships with its customers, meaning that it wanted to have long-term relationships which would produce more benefits for both partners than short term project based relationships. However, as the customer firm of the focal relationship saw the relationship as short-term and episodic in nature, the vendor's strategy could not be implemented.

> Conscom:
>
> So, I thought we'd do a think big, start small –thing, like let's do what they assign to us always a little bit better, that way it's a continuing business then. In other words, when we were setting up the resources, we did not start with something like that I would be in there for a month or two and after three months I will be in some other project somewhere else.

Two dyad-related attenuating factors influenced the manager's actions during the relationship's dissolution process. The Customer Division was satisfied with Conscom's service, and it requested a proposal for the future development of the data warehouse system. Conscom took that request seriously and took the time to submit a bid to the Customer Division. If the network-related precipitating events had not taken place, there would have been a good starting point for continuing the relationship. In this case,

however, the attenuating event could not override the effects of the network-related precipitating events.

Researcher:

Was it different to work with Conscom than with Sellcom?

The Customer Division:

Yes it was. --- They [Conscom] were much more systematic. Like that everything they did they also documented. Let's say, if you start to think why something's been done in a certain way, it's a bit tricky to understand it if you don't have any documents. You like noticed right away there was a clear difference in what kind of results they produced.

Conscom:

It seems that in March-May 1997 we expected to continue working [with the Customer Division], probably in cooperation with Softcom. --- In March-April we prepared a considerably laborious tender for further development [for the Customer Division]. We also specified it because the customer requested it.

The request for future data warehouse development involved co-operation with Softcom. Softcom had a continuous relationship with the Customer Division. If Conscom could have connected itself as a part of this co-operation, the relationship with the Customer Division would have continued as well. However, the precipitating event in the Customer Division, i.e. its decision to not to use Sellcom's software tools in the development any longer, overrode the attenuating factor.

5.5 The stages and actor levels of the dissolution process

This section describes the stages that the episodic relationship went through during it dissolution process and the relevant actor levels involved in the dissolving or restoring actions within each stage of the process. In Figure 69 the process is pictured as consisting of six stages.

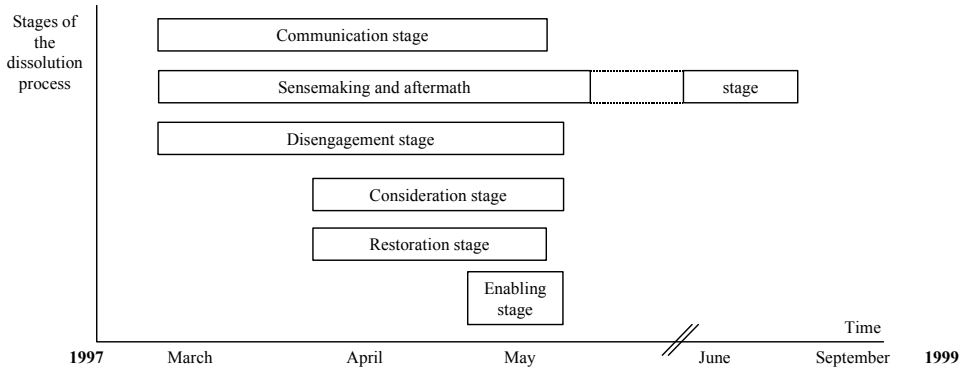


Fig. 69. The stages of the predetermined dissolution process

The stages started as two groups. A first group of stages were the enabling, communication, sensemaking / aftermath, and disengagement stages, which all started at the same time. A second group consists of the remaining two stages, as the consideration stage started at the same time as the actions to restore the relationship. Figure incorporates all the actor levels, meaning that if more that one stage was going on at the same time, the concurrent stages did not necessarily take place at the same actor level. In the following, each of the stages will be described in more detail.

5.5.1 The communication stage

The communication stage of the dissolution process began in March 1997. The first communicative actions took place at the dyadic level and all the rest involved the network level, as shown in Figure 70.

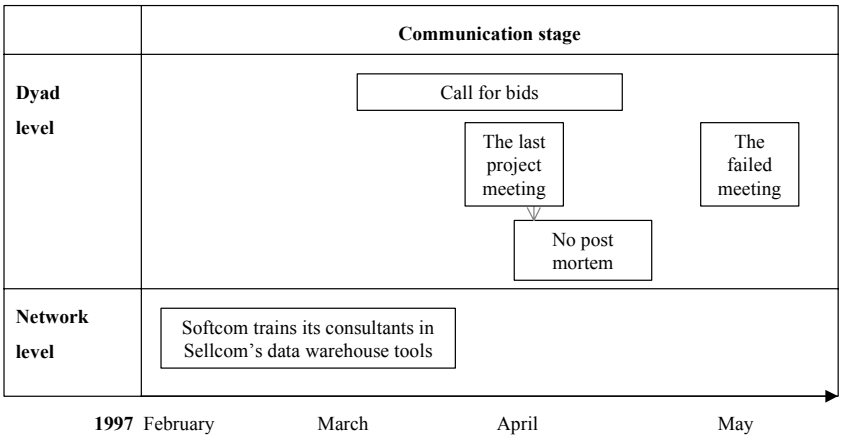


Fig. 70. The events and the actor levels involved in the communication stage

The first event was that the consultants of Softcom trained themselves in Sellcom's data warehouse development tools. In addition, Softcom's consultants got more involved in the project work, as several consultants worked in Buycom with the legacy systems and their interfaces to the Customer Division's data warehouse. Conscom's consultant perceived the increasing presence of Softcom's consultants in the customer's premises and in the data warehouse project as a sign of Softcom's success in developing its relationship with the Customer Division in the area of data warehouse development. This can be seen as indirect communication about the future of the focal relationship, although the sender of the message was not the buyer, but a network actor – in this case another vendor.

Conscom:

Well, the thing that Softcom's consultants, who were of course swarming there [at the Customer Division] and also other people from big consulting companies, I guess that was such a signal. Softcom was training their own people to Sellcom's software tools at the time, so these people came to work with the environments. And while they had Softcom's people working with the operational software and they began to have them working with Sellcom's tools, it really was a sign that there was an agreement that they'll take care of the job. And then there were also others who had been involved already earlier, so they also trained themselves in Sellcom's tools. And this was related to the fact that when this sort of things begin that I sort of show someone how to use Sellcom's tools, and that someone is soon going to take over your work... Well... (laughs). So, I remember thinking about that a little bit. But my motto has been, and still is, that the main thing is that the job gets done and you can keep it simple. It keeps you from thinking too much.

During the last project meeting, the Customer Division applied a more direct communication strategy when it stated that the future development of the data warehouse would be put on hold until there was enough user experience available to evaluate the solution. This still left a door open for the continuation of the relationship.

The third event was noticed in Conscom as something unusual. In fact it was not an event at all, instead the fact that a certain event did not take place was perceived a message. It is a custom in software projects to end the project with a post mortem, in other words a project-closing ceremony. In this get-together both the buyer and the seller give a final closing speech, thank the individuals and companies involved and also bring up some of the aspects that could and should be performed better in the following projects. In the focal relationship, no project closing-ceremony was arranged.

Conscom:

> There was no project closing ceremony. --- But I could think like this: that the bigger game that was going on, which I didn't have to take part in to that extent, however was that then… Because, in fact, no post mortem ceremony [took place] like normally [it does]. The joke is that a project exists because it makes the project starting and closing ceremonies etc. possible. Yet there were no ceremonies, and if it [the software] is in production etc, then, I don't know. You could have thought that there would have been some kind of common occasion or something, so that we would be informed that the stuff is being used.

Thus Conscom was aware of Softcom's presence and its plans to also offer itself to the Customer Division as a partner to develop data warehouse systems. Therefore, to Conscom, the missing project closure meant that its work did not receive a public acknowledgement on the part of the Customer Division nor Buycom. Moreover, Conscom remained unsure about the satisfaction of the customer.

However, the call for bids that the Customer Division sent to Conscom and Softcom asking them to submit an offer jointly communicated the opposite message to Conscom, i.e. that there still was a chance to continue the relationship via new applications. Later on, the fact that the Customer Division did not meet Conscom as agreed during the conference was an indirect communication about the missing will of the Division to continue the relationship. Moreover, there was no direct communication between the companies about Conscom's offer or about the reasons why Conscom's offer was not accepted.

The companies used several communication strategies during the communication stage. The first event that took place at the network level can be labelled as signalling (Ping & Dwyer 1992). Alajoutsijärvi *et al*. (2000) present signalling as an indirect and a self-oriented strategy, but in this case the Customer Division was not using signalling consciously, and thus the strategy cannot be labelled as self-oriented. The sender of the message was actually the network actor Softcom, which did not show any concern for the consequences of its actions to Conscom, its competitor. Actually this type of communication strategy has not been introduced in research so far, and also in this study it was detected in the case of the episodic relationship.

In the last project meeting, Conscom addressed the issue of continuing the relationship, but at that time the Customer Division was already unsure about its original plans for data warehouse development. It had not settled its relationship with Sellcom, the original software vendor, so future plans could not be made. Therefore future of the relationship with Conscom remained open, especially as no project-closing ceremony was arranged. However, without any information suggesting that the influential individuals in the Customer Division already intended to end the focal relationship at this time, these communicative events cannot be labelled as any specific exit strategy suggested in Alajoutsijärvi *et al*. (2000).

However, when the Customer Division sent Conscom and Softcom the call for bids concerning the future development of data warehouse solution, it directly communicated its wishes to continue the relationships with both Conscom and Softcom. However, the Customer Division changed its mind when the evaluation of the different types of data warehouse solutions showed that the solution Sellcom had offered was not the optimal for the needs of the Customer Division. The agreed meeting that never took place can be labelled as an indirect and rather self-oriented cost-escalation exit strategy. It annoyed Conscom, and, as a result, Conscom withdrew itself from the relationship by not contacting the Customer Division or Buycom after that.

The communication stage in this episodic relationship included not only direct communication and communicative events but also such events that, in spite of actors' anticipation, did not take place. Because certain actors were waiting for these events (e.g. the project closing ceremonies) to take place as a part of a normal process, their absence was perceived as a message.

5.5.2 The sensemaking / aftermath stage

During the sensemaking / aftermath stage individuals involved in a relationship make sense of the events and create their own story of the relationship as well as disseminate it. This stage began already before the project had been finished, actually at the same time as the communication stage. Figure 71 shows the actor levels involved in the sensemaking / aftermath stage.

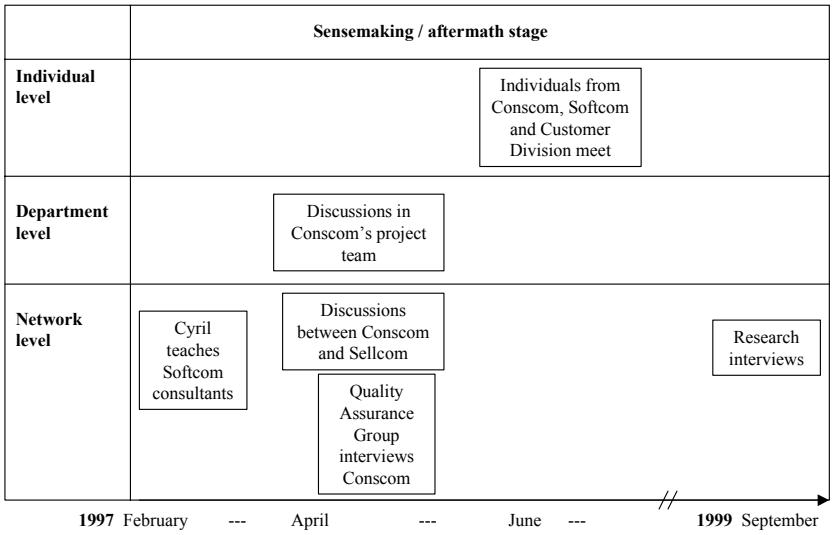


Fig. 71. The events and the actor levels involved in the sensemaking / aftermath stage

This stage began at the network level, as Consultant Cyril worked with consultants from Softcom, and, as they were training themselves in Sellcom's tool, they also asked for pieces of advice from Cyril. While working, Cyril did think about what the consequences for Conscom would be when he was sharing his own knowledge with Softcom's consultants. Anyhow, his decision was to not to refuse to give advice, rather to concentrate to the task that had to be solved and let the Project Manager take care of the rest.

> Conscom:
>
> As a matter of fact, when I was teaching features of Sellcom's product to few of Softcom's consultants, it sometimes came to my mind that perhaps I should not be doing this. But well, we just went through such matters that had to be cleared, so that was it. I didn't play any games, because the division of labour in our team was so clear.

At the department level, once the project had been finished, Conscom's Consultant Cyril and Project Manager Godvin moved on as a team to work with another customer. Working as a team gave them a chance to have a few discussions about the focal relationship. However, special assessment or evaluation meetings concerning this project did not take place at the company level, neither in Conscom nor in the Customer Division. Actually, for Conscom, this was an exception to a rule. Because the project had been only a small and a unique one, Conscom did not go through it in its internal meetings.

Conscom:

Yes in the company we have ... as a matter of fact we should always have [a meeting] in which we go through these experiences, but as we have quite many [projects] - so I remember that this case we never went through in a sort of formal way. --- Because it was such a special case. --- We actually did not go through with it as a group, no.

Researcher:

Did you talk unofficially?

Conscom:

Well, certainly unofficially, because for instance I remember that during that summer we started a new case, which we [Project Manager and Consultant] were involved in. Company C started then which nowadays is quite a large customer to us. We have a good partnership now. Thus we continued to work with the same people, and most certainly we sometimes wondered about it, but then we just started to focus to this new job.

After the relationship had ended, during next summer, Consultant Cyril met his colleagues from Softcom and also the Main User from the Customer Division on a few occasions in his free time. The unplanned meetings took place in the local 'nightlife'. These occasions are treated here as taking place at the individual level, as each person was representing more her/himself than her/his company. Still, the conversations referred to their jobs as their acquaintance originated from the focal business relationship.

In addition, the dissolution was also discussed at the network level in the regular meetings between Conscom and Sellcom. This was because of their partnership and the fact that both Conscom and Sellcom had had a relationship with the Customer Division. However, no plans to win back the customer were made.

Conscom:

I had totally good personal relationships with these Softcom people. Sometimes later in the summer, when we were no more at the customer, we went, ran into each other and went for a beer and the like. And we did not talk about work a lot, maybe a little. But it's good not to give up…

Conscom:

There was no official discussion, but we did exchange a few words both internally and with Sellcom's sales people in connection with some other things that we talked over. The project did not initiate any follow-up actions for anyone.

It has to be noted that the relationship between the Customer Division and Sellcom was connected to the aftermath stage of the dissolution process of the focal episodic relationship. As described earlier in the case description, the Quality Assurance Group was set up to resolve the conflict between the Customer Division and Sellcom. This group also interviewed Conscom's Consultant and Project Manager after their project was finished. This was an event that forced them to think back in time and recall the relationship.

A further network-related event that involved individuals both from the Customer Division and Conscom was the interviews for this study. This research extended the aftermath stage to September 1999 – and through the resulting company reports to February 2000. The interviews once again forced the actors to create a story and to tell it to a network actor, this time to the researcher. The following citations reveal clearly that even two years later the relationship can be looked at in a new light and if the circumstances permit, new contacts can be made between the ex-partners.

Conscom:

That is also a mistake, that when you start to have the first problems sorted out, then you start wanting new. You start to see, "Hey we can get this and that out of the system, we want also this", so that is a mistake from our part probably, it was related to that we wanted to do our best. So we should have just, we should not start designing new reports that is not to try to have too much at one go. But to fix the problems and sort of have the project finished and point out that now it is sort of [finished], and to have it in a real production use as it was. But yes, as a matter of fact, this was two years ago, I remember that I couldn't think it at the time, because after these two years I have run into this in other cases, so now it is more clear to me.

Conscom:

---, but I had realised that, it [the project] was a typical 'a chance to get your foot in the door' situation anyway. We had an opportunity to show what we can do. In that sense, I feel that if we had succeeded completely in it, we would still be there [have a relationship with the customer].

Researcher:

Have you had any contacts with Conscom after the project?

The Customer Division:

The CEO phoned me now after you had talked with him. In between the project and now, nothing. They send me some brochures sometimes and that sort of marketing material.

5.5.3 The disengagement stage

This stage consists of four events, each happening at different actor levels, as seen in Figure 72. The first event in the disengagement stage took place in the network of the focal relationship: Softcom, another software consulting firm in the network started to acquire competence to perform the same task the focal seller was specialised in. This was reflected in the focal relationship because it decreased the buyer's dependency on the focal seller and at the same time increased the amount of available alternative suppliers, thus decreasing exit costs.

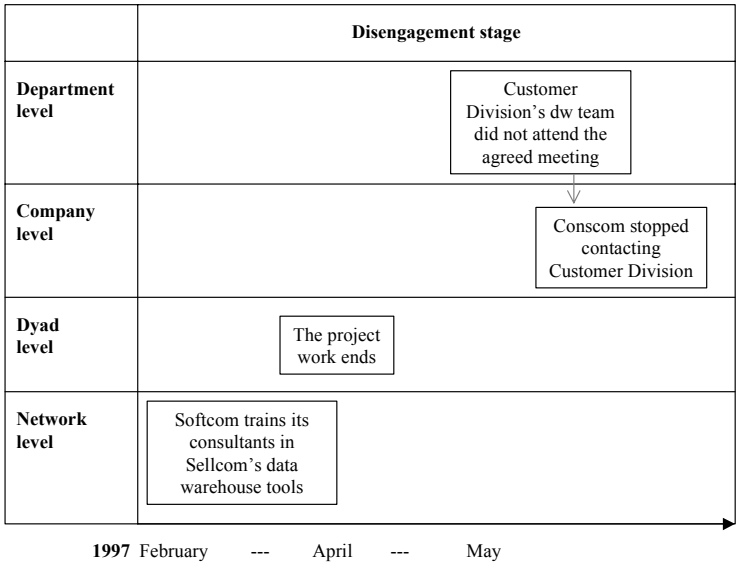


Fig. 72. The events and the actor levels involved in the disengagement stage

The second main event took place in the beginning of April, when the project was officially finished. In the last project meeting, the Customer Division accepted the project and it was closed, thus also disengaging most of the resource ties and activity links. No specific guarantee period was agreed on, and Conscom was not asked to do any changes to the software after the last project meeting. The Customer Division told Conscom that

they would evaluate the solution in production before deciding on further enhancements. The right of Conscom's Consultant and Project Manager to enter the Customer Division's premises (other than as a guest) and to enter the IT systems were thus removed. In both companies the individuals disconnected themselves from the project group they had jointly formed. Moreover, in the summer Conscom's Consultant and Project Manager started to develop a new relationship with another customer company, which quickly received their undivided attention. Thus most of the activity links and resource ties were disjointed.

> Conscom:
>
> Yeah, because then however, we ended the job, I remember that it went something like this, just like Willfred just said that then it sort of ended. That now they [the Customer Division] will evaluate this, that no more enhancements before that.

> The Customer Division:
>
> I think it was at such a level that Conscom asked whether we had any needs for further enhancements, so that in a way it would be settled to them. But, at that stage we didn't want to commit ourselves, when we had to have it [the data warehouse system] in production use first.

However, the links, ties, and bonds were not totally disjointed, because at the same time actions to continue the relationship were taken. These are discussed later on in the restoring of the relationship stage. So interaction between the CEO of Conscom and Project Manager Audrey from the Customer Division still continued, and some joint planning was made related to the call for bids that the Customer Division had sent jointly to Conscom and Softcom. Conscom also remained attracted and committed to work with the Customer Division on the future development of the data warehouse; this was apparent as they responded to the call for bids with a proposal.

Another event in the disengagement stage took place in May. The event consists of two actions, one action was performed by the buyer's data warehousing team and the other was a reaction to the first by the seller. As a part of the actions to continue the relationship, Conscom's CEO had suggested that the data warehousing team of the Customer Division meet and discuss the proposal at an international conference in May. The team had agreed to meet Conscom, but no one from the Customer Division showed up for the meeting. Thus the last activity links between the buyer and seller, namely the communication and joint planning, were disjointed. The behaviour of the buyer annoyed the seller, and as a result, the seller considered it best not to take any further contact to the buyer. The seller thus gave up the efforts to continue the relationship and let the disjointed communication and joint planning links rest in peace. As no communication links survived after this, the actor bonds were cut off along with them.

Conscom:

After that, I … well, I did not exactly strike them out from my address book, but I did not actively contact them after that. It [not showing up] seemed somehow an unprofessional thing to do. --- So, our intention was to start a long-term relationship, but then the situation started to feel even 'politically' the way that there [in the Customer Division] was no 'suction', so we did not keep in touch, although usually we do provide good after-service [for our customers].

The next two stages described in the following two sections, namely the consideration stage and the restoration stage, took place to a large extent at the same time.

5.5.4 The consideration stage

Only two events form the consideration stage, of which the first one happened at the network level and the second one at the company level as shown in Figure 73. The first actions of the first event of the consideration stage took place in the Customer Division. These actions were more related to assessing and deciding about the *continuation* of the relationship than about the dissolution of it, as the Customer Division was considering which company it would hire to develop the data warehouse solution in the future. It decided to send Conscom and Softcom a joint call for tender, based on the assumption that the solution would be developed by using Sellcom's software development tools, for which Buycom still had licences. Conscom had already from the beginning of the relationship wanted to continue it after the first project. Thus Conscom negotiated with Softcom and decided to do the necessary preparations to be able to place the bid.

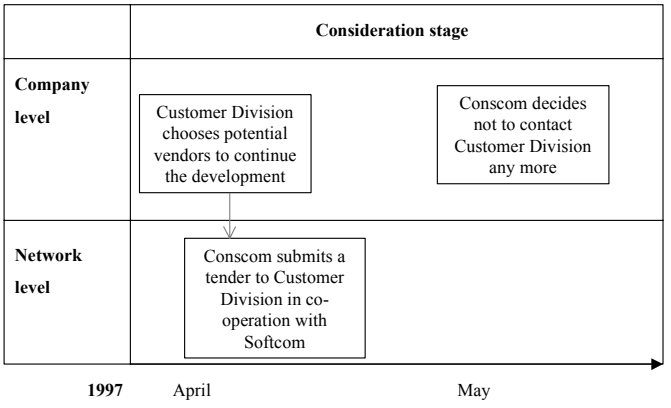


Fig. 73. The events and the actor levels involved in the consideration stage

Conscom's considerations and decisions concerning the end of the focal relationship took place later on in May, after the meeting at which buyer representatives did not show up. Conscom saw this as an unprofessional behaviour and made the decision not to contact the Customer Division, in spite of the fact that this also meant that the focal relationship would not continue. Conscom's decision not to contact the Customer Division after the failed meeting was the CEO's decision, but it applied to the whole company.

5.5.5 The restoration stage

The restoration stage started in late March, the period when the project work was being finished. Figure 74 shows that one main event can be considered to form the restoration stage. However, it concerned not so much restoring the relationship, but rather attempts to continue it after the predetermined ending point, i.e. the end of the project. If successful, these actions would have changed the nature of the relationship from episodic to continuous, already from the beginning, this actually had been the goal of Conscom. The first actions took place at the network level, involving all three actors, and the second took place at the dyadic level.

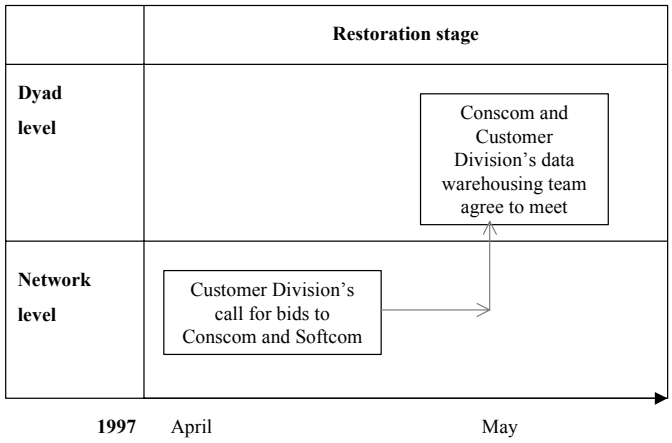


Fig. 74. The event and the actor levels involved in the restoration stage

The Customer Division sent a call for bids for a large order concerning the future development of the data warehouse solution. The bid was sent jointly to Conscom and Softcom, but not to Sellcom. It was envisioned that Sellcom's software tools would be used in the development. Conscom did lot of work, which included discussions with Softcom, to enable it to send in its tender.

Conscom:

In March-April we completed a considerably laborious tender for further development [to the Customer Division]. We also specified it as the customer requested.

In addition, Conscom tried to get a chance to discuss the tender more closely with the Customer Division at the meeting planned to take place during an international conference, which both companies were attending. As already described, none of these restoring actions ended the dissolution process.

5.5.6 The enabling stage

The enabling stage is the last stage to start in the dissolution process of the episodic business relationship. It consists of only event, which took place at the company level as Figure 75 shows.

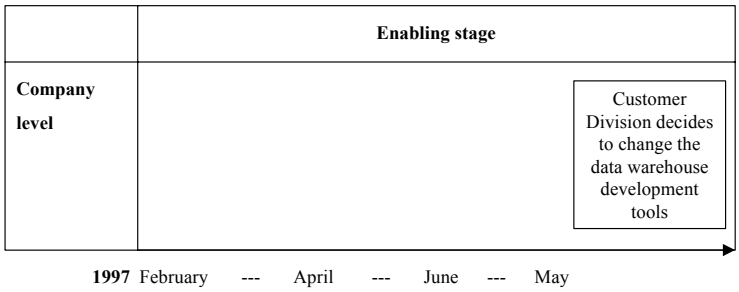


Fig. 75. The event and the actor level involved in the enabling stage

In the event the Customer Division set up a committee to evaluate different data warehouse development tools; some of Softcom's consultants working in the Customer Division were among its members. However, it was the Customer Division's data warehouse team's decision to change the software tools, and that decision enabled the dissolution of the focal relationship. Thus the second event took place at the company level.

The suggestion of the committee was that Sellcom's tools were neither the best ones for the Customer Divison's nor for Buycom's needs. Moreover, the data warehouse application the Customer Division currently had was also evaluated in terms of its expandability to other Divisions, according to the original plan. The result of that evaluation was that its expandability was low and only little could be re-used as a basis for further applications. Therefore the buyer decided to start the data warehouse development again, but using other development tools than Sellcom's. The decision to change the development tools also meant that Conscom's expertise was no longer needed.

This enabled the endings of the two relationships, i.e. the one with Conscom as well as the one with Sellcom. Conscom's consulting services and expertise in Sellcom's software tools were no longer needed because Sellcom's the tools were no longer to be used.

> The Customer Division:
>
> We did some comparisons to other products and analyses of different databases such as Sellcom versus Company B and Sellcom versus Company C, testing performance and so on. We found that Sellcom's tool, I mean as an interface tool, was not necessarily the best possible choice from the very beginning, considering a changing environment such as ours.

> The Customer Division:
>
> --- at that time we had already started a project of further development of the data warehouse, at which time we knew that developing this data warehouse we would not necessarily use Softcom's products. ---
>
> --- Well, the further development of the project, that is the data warehouse, had already been started at the same time, not with Sellcom's consultants but Softcom's, which was now involved. The success of the product choice, meaning Sellcom, had also been called into question.

The dissolution of an episodic/continuous relationship thus started with the communication, sensemaking / aftermath, and disengagement stages and ended with the sensemaking / aftermath stage. The new things that appeared in this dissolution process concerned the communication stage. A network actor as a sender of exit communication and perceptions of an non-existing event as a message were such notions that were incorporated into the modified model of relationship dissolution on the basis of this case.

6 Comparison of the dissolution processes

In this chapter, I will compare the two cases, the dissolution process of a continuous/terminal relationship and of an episodic/continuous relationship. The cases were selected using theoretical selection, to ensure that they were different in a theoretically meaningful way. The nature of the relationship was used as the key selection criterion, as the conceptual model suggested that different relationships might have different dissolution processes. Thus, I now shift my attention to the comparison of the dissolution processes of the cases.

The comparison is made in order to enhance the model building by providing a means to empirically ground the influence of the different elements of the model. In the conceptual model (Figure 7, page 69) it was assumed that the nature of the relationship influences the stages of the process both directly and indirectly, i.e. through reasons and attenuating factors. On the basis of the case study, some modifications to the *a priori* model were needed. The model now acknowledges the changing nature of the relationship more explicitly. This means that the direction of the influence is not only from the nature but also to the nature of the relationship. In addition, the empirical grounding clarified the factors and events that influence the manager's actions and thereby form the dissolution process.

Now it is time to take a closer look at how the elements influence each other. I will start with the nature of the relationship and its effect upon the influencing factors and events.

6.1 The effect of the nature of the relationship upon the influencing factors and events

In the following paragraphs I will focus on the influence of the nature of the relationship on the factors that influence relationship dissolution processes. The relationship between the Customer Division and Sellcom (Case 1) was a continuous relationship, which during its 'life' changed its nature to a terminal relationship. The second relationship between

the Customer Division and Conscom (Case 2) was an episodic relationship, which was also perceived as a potentially continuous one. Although the cases are not clear cut in their nature and different actors (even within the companies) saw them differently, their prevailing nature as described above can be well argued for. In Case 1 the nature changed from continuous to terminal instead of dissolving immediately. This change was influenced by the view of the third important actor, who continued to perceive the relationship as a continuous one. Therefore it was impossible for the disengager company, the buyer, to end the relationship, turning it to a terminal one. In Case 2, although the two parties perceived the relationship with different views of its nature, they both shared the view of it being episodic and of the existence of a mere possibility or a goal of turning it into a continuous relationship. By studying the differences in the influencing factors and events in the two cases, it is possible to find out whether the theoretical model helps us to understand business relationship dissolution by suggesting a link between the nature of the relationship and the influencing factors and events.

The conceptual model of business relationship dissolution presented in Chapter 3 suggests that in cases of continuous relationships, the ending can be chosen, forced or natural. Moreover, it is suggested that in a chosen end, the reason for the dissolution may be an actor's dissatisfaction with the relationship, which leads him, her, or it to end the relationship contrary to original intentions. Case 1 was selected to be an example of a chosen ending and thus I assumed that the influencing factors would be important and forceful enough to produce a level of dissatisfaction with the entire relationship that would change managers' minds about continuing it. If this had not been the case, the chosen relationship would have continued instead of dissolved. In addition, as the nature of the relationship changed to terminal, I also have had to consider the suggestions the theoretical model offers for a desired end. The model states that the relationship will be terminated as soon as circumstances permit. Thus these circumstances refer to the attenuating factors that keep the relationship alive contrary to the wishes of the actor(s) and changes in these factors. So, in Case 1, I expected to find strong predisposing and precipitating factors and events as well as strong attenuating factors. Moreover, I envisioned that the strong attenuating factors would cease to exist, permitting the relationship to be ended.

Case 2 represents an episodic relationship, which faces a predetermined end. In this case, the theoretical model suggests that an episodic relationship dissolves when it has served its purpose. In tailored software production this means that as soon as the software is in production use and the warranty period is over, the relationship ends. Thus in Case 2, I expected to find few influencing factors promoting the dissolution. However, because the relationship in Case 2 was perceived to be continuous by some of the actors, at the same time I expected to find some attenuating factors and/or events as well as some factors and/or events that advanced the expected ending more than the attenuating factors hindered it. Table 5 presents the differences in the influencing factors and events of the two relationship dissolution processes.

Table 5. The effect of the nature of the relationship on the influencing factors and events in the two cases

	Case 1 (Customer Division – Sellcom)	Case 2 (Customer Division – Conscom)
Nature of the relationship	Continuous / Terminal	Episodic / Continuous
Predisposing factors	Task-related - Nothing special Actor-related - Many, related to both actors ➜ precipitating events (failure) Dyad-related - Mismatch in the relationship ➜ precipitating events (failure) Network-related - Other connected relationships ➜ precipitating events - Larger network ➜ precipitating events	Task-related - Special task for Conscom Actor-related - A few, related to both actors Dyad-related - Mismatch in the relationship Network-related - Other connected relationships ➜ precipitating events - Larger network ➜ precipitating events
Number of factors	Many	Few
Precipitating events	Actor-related: - Personnel and organisational changes Dyad-related - Events contributing to low relationship quality - Difficulties in the communication Network-related - Another relationship in the network	Actor-related - Personnel and organisational changes ➜ reconsideration of the task Dyad-related - Single dissatisfying event Network-related - Other relationships in the network
Number of events	Many	Few
Attenuating factors and events	Actor-related - Seller had a high quality product Dyad-related - Attempts to resolve the conflicts Network-related - Influence of other relationships	Actor-related - Seller's marketing strategy Dyad-related - Quality of the relationship Network-related - Influence of another relationship
Number of factors and events	Quite many	Few

The differences in predisposing factors in the two cases of dissolution are fairly obvious. When looking at the predisposing factors, it has to be remembered that these factors can remain latent, or they can be activated, forming the basis for precipitating events to take place. In the continuous/terminal relationship there were many predisposing factors; this extended their influence into precipitating events. In the episodic relationship, the number of predisposing factors was low; only the network-related factors turned into precipitating events. When looking at the factors as such, in the continuous/terminal relationship both the actor- and the dyad-related predisposing factors suggested that there was a possibility of failure in the relationship, while in the episodic relationship, although the task was very special, no other factor was associated with such failure risk.

The differences between the two cases concerning the precipitating events are visible in the dyad-related precipitating events. In the continuous relationship there were several events that lowered the quality of the relationship for both actors. The relationship contained conflicts, which were not resolved to a satisfactory degree. Thus the conceptual model seems to be useful, as it suggests that a continuous relationship could end because of actor dissatisfaction.

In the case of an episodic relationship, the model suggests that the nature of the relationship can be inherently responsible for the dissolution, although also other influencing factors and events can either speed up or slow down the end of the relationship. In Case 2, the episodic relationship stood a chance of changing into a continuous relationship. However, this change did not take place. The buyer had changed its plans concerning the data warehouse development and no longer needed to co-operate with the seller. Thus the buyer never went to meet the seller as agreed. This dyad-related predisposing event influenced the seller greatly; it ended its efforts to continue the relationship. Thus the expected ending of the episodic relationship took place.

All in all, a large number of precipitating events were present in Case 1 and a much smaller number in Case 2. In both cases there were also network-related events that advanced the dissolution, the only difference being that in the case of the continuous/terminal relationship the number of events and of connected relationships was higher.

The differences in the attenuating factors in the two cases run along the same lines as the differences in the predisposing factors and precipitating events. There were more attenuating factors in the case of the continuous/terminal relationship than in the episodic/continuous relationship. The dyad-related attenuating events in Case 1 were attempts to resolve the disagreements and conflicts in the relationship, but in Case 2 the high quality of the relationship was a major attenuating factor. This difference could already be anticipated on the basis of the conceptual dissolution model. Dissatisfaction was suggested to be the major reason for the dissolution of a continuous relationship. Therefore if the wish to end the relationship was not shared with both actors, one partner would try to increase the other's satisfaction, thus restoring the relationship by performing attenuating events. Moreover, in the continuous relationship the influence of other relationships in the network was so strong that it actually changed the nature of the relationship to terminal. In the episodic relationship, the attenuating factors seem to be able to either increase the lifetime of the relationship or, when their influence is strong, to change the nature of the relationship, e.g. to continuous. In the Case 2, the attenuating

factors were not strong enough for the change to take place, and consequently the relationship ended.

The theoretical model suggested that the nature of the relationship influences both the reasons for ending the relationship and the reasons for not ending it. By comparing the two empirical cases, it seems that this proposition still holds conceptually. However, at the same time, the model needs an adjustment. The case study clearly refers to an opposite direction of influence, not only the nature of the relationship affects influencing factors and events but also the factors and events affect the nature. In both cases, the attenuating factors and events strongly influenced the nature of the relationship. Thus the empirical material gives support to the assumption that the nature of the relationship may change during the relationship's life.

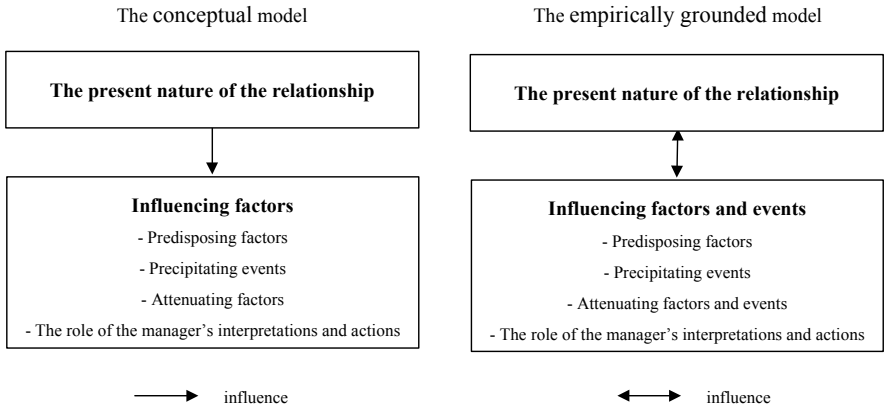


Fig. 76. Adjusting the relation between the nature of the relationship and the influencing factors

In Figure 76 the part of the conceptual model that shows the influence of the nature of the relationship on the reasons as well as the attenuating factors is put side by side with the empirically grounded model, to highlight the changes.

6.2 The effect of the nature of the relationship upon the dissolution process

Next I will take a closer look at the influence of the nature of the relationship on the dissolution process. This is done by first comparing the two cases and second comparing the theoretical model to the empirical data derived from the cases. The conceptual model suggested that the nature of the relationship influences the stages of the process and their order of appearance. Moreover, it was suggested that in a continuous relationship ending via a chosen end, the process would start from the assessment, i.e. the consideration

stage. As for the process, I will not digress on the details of the stages as both dissolution processes included all the stages identified in the model. Instead I will use the first and last stages as a proxy for the differences occurring during the process. In addition, the duration of the process will be used to characterise any differences in the process (see Table 6).

Table 6. The affect of the nature of the relationship on the stages of the process in the two cases

	Case 1 (Customer Division – Sellcom)	Case 2 (Customer Division – Conscom)
Nature of the relationship	Continuous / Terminal	Episodic / Continuous
Stages of the dissolution process		
- the start of the process	Consideration stage Restoration stage Disengagement stage	Communication stage Disengagement stage Sensemaking / Aftermath stage
- the end of the process	Restoration stage Sensemaking / Aftermath stage	Disengagement and enabling stages Sensemaking / Aftermath stage
Duration of the dissolution process	Very long process	Quick process

The start of the dissolution processes in the two cases was indeed different. In the continuous relationship the three first stages, namely the consideration, the restoration and the disengagement stages started almost simultaneously. In a business relationship that is meant to continue, it is logical that the dissolution will start with a consideration of choosing to end the relationship prematurely. In Case 1, this consideration took place at the same time as restoring and disengaging actions; this reflects that not all actors involved in the relationship shared the wish to end it. In the episodic case, three stages started at almost the same time, but only one of the stages, the disengagement stage, was same as in the continuous relationship. In an episodic relationship, the end is considered before or as the relationship is established; thus it is logical that the consideration stage does not have to appear at all in the dissolution process.

The starting stages in the continuous relationship were different in all but one instance from the starting stages of the episodic relationship. The conceptual model suggests that the nature of the relationship influences the process; on the basis of the above, the two cases can be considered to empirically ground this hypothesis, as far as the start of the process is concerned.

The ends of the dissolution processes are also different. In the continuous/terminal relationship, at the end of the process, the seller's last restoration efforts were not successful; thus the process ended in the sensemaking / aftermath stage. Also in the

episodic/continuous relationship, the last stage was the sensemaking / aftermath stage, but it was preceded by the last events of two other stages. The second-last stages were the enabling and disengagement stages, which took place almost simultaneously. The buyer was performing the last enabling action at the same time that the seller's CEO decided to disengage the company from the relationship.

The remaining aspect of the dissolution process yet to be presented here is the duration of the process. The dissolution process took far more time in the continuous/terminal relationship than in the episodic relationship. In making conclusions about this aspect, it has to be noted that also the duration of the continuous/terminal relationship was longer than that of the episodic/continuous relationship, and this could also influence the duration of the dissolution phase. Despite this, both dissolution processes were similar in that they went through all the six stages.

Thus on the whole the dissolution processes of the two cases were significantly different. Next we will study if there are differences between the conceptual dissolution process model and the empirical cases with regard to the path of the dissolution process. The conceptual model suggested that in the case of a continuous relationship the process might start from the consideration stage. In Case 1 this is what happened. However, also two other stages started at the same time, and that also happened in the episodic/continuous relationship. This possibility was not explicitly stated in the theoretical model, although it was pointed out that the order of the stages may change and that the process may return to some stage (e.g. the sensemaking / aftermath stage).

Moreover, the conceptual dissolution process model suggested that the disengagement stage would not be among the first stages of the process. However, in both cases, the disengagement stage was in fact among the first stages. Thus this idea related to the order of the stages, which was suggested in the conceptual model, has to be rejected.

However, the cases confirm the notion that the stages are not sequential, in the sense that one would have to stop before the next can begin. The empirical material reveals that the process proceeds in different actor levels at the same time. Thus many stages, even contradictory ones like restoration and disengagement, can take place simultaneously. One actor may perform restoring actions at the same time as the other is disengaging itself from the relationship.

In addition to the adjustment that is needed in the theoretical model of business relationship dissolution, a number of adjustments are needed in the stages of the process. Although these changes have already been presented in Section 4.5, I will shortly describe them here to be able to elaborate upon the link between the nature of the relationship and the stages of its dissolution process thoroughly. Figure 77 shows the suggested link between the theoretical and the empirically-grounded model as well as the adjustments in the stages of the dissolution process.

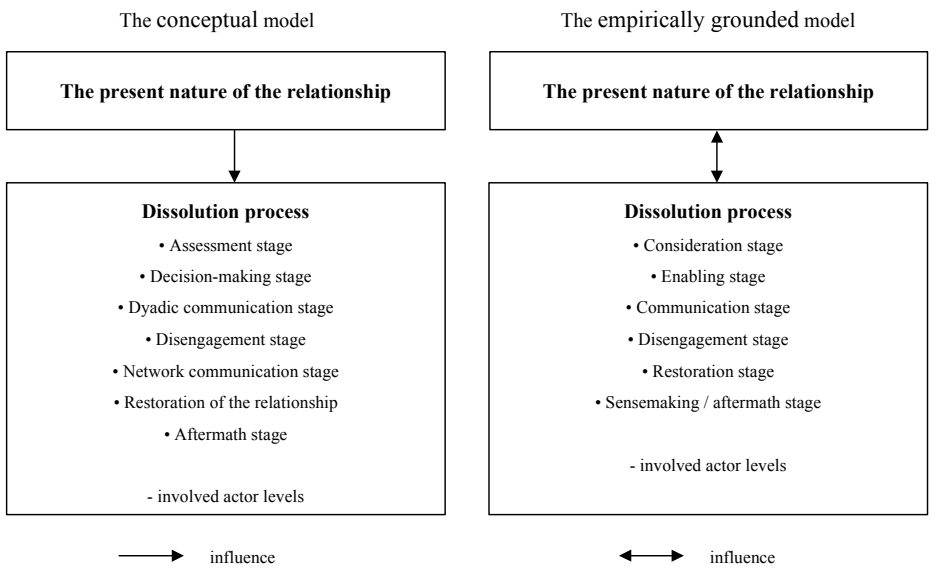


Fig. 77. Adjusting the relation between the nature of the relationship and the stages of the process

The stages with which both cases have been analysed have been adjusted from the conceptual dissolution process model. The adjustments included combining the assessment and decision-making stages into a consideration stage, combining the dyadic and network communication stages into a communication stage, adding an enabling stage, and adjusting the aftermath stage to a sensemaking / aftermath stage. The consideration stage is composed of the actors' decision-making behaviour (including information seeking and uncertainty reduction) concerning the question of continuing or ending the relationship. The communication stage refers to all communication (be it within one collective actor, the dyad or the network) that concerns the ending or the continuation of the focal relationship. The new enabling stage involves all actions aimed at making the ending of the relationship possible. Finally, the sensemaking / aftermath stage refers to all actions that are performed in order to explain the process and safeguard the actors during it (sensemaking) or after it (aftermath).

A few remarks are in order regarding the specific cases and the new stages the dissolution processes went through. The conceptual model suggested that in the case of an episodic relationship, the assessment and decision-making stages might not be needed. In the grounded model this notion refers to the consideration stage. However, in Case 2, the episodic/continuous relationship, I identified actions that formed a consideration stage. The explanation for this is the possibility that the relationship could have turned continuous, as it was this possibility that was being considered. Moreover, the seller had perceived the relationship as potentially continuous already from the start and thus had to consider whether to continue its efforts to maintain it after the influential precipitating event had taken place.

The second issue I would like to draw attention to is the enabling stage. The enabling actions did not receive enough attention in the conceptual model. The cases revealed that once they were taken into consideration as a stage, it was easier to understand and explain the dissolution processes. After I added the enabling stage to the model, it seemed logical to assume that the terminal relationships would be the only ones that needed the enabling stage. Thus in the case of the continuous/terminal relationship (Case 1), the enabling stage could be explained by the change in the relationship's nature to terminal. The relationship went through an enabling stage, because the views and actions of the third actor in the network (Buycom) had previously made the dissolution impossible.

There is yet another factor that explains the enabling actions; it lies in the context of both cases. In the episodic relationship, I also found actions that seemed to fit into an enabling stage, although theoretically this is not logical. An episodic relationship is meant to last for a certain time period or as long as it takes to finish a task; there is thus no need for enabling, if all goes as planned. The factor lies in the task of developing tailored software. Although in Case 2, the relationship was meant to be episodic, the nature of the task created a need for continuity. As earlier stated, in contrast to the development of operational software, the development of a data warehouse is a process-like task. Therefore it was important to the buyer to know that the enhancement of the data warehouse would not stop, although it would end its relationships with the existing partners.

There is still one stage in the dissolution process of the episodic relationship that needs explaining. The restoration stage refers to all the actions meant to restore the relationship and stop the dissolution process. In the case of an episodic relationship, the theoretical model once again leads one to think that there is no need for restoration if all goes as planned in the relationship. However, if the relationship changes its nature, we have a new situation. In Case 2, this happened. The episodic relationship had a possibility - which both actors acknowledged - to become a continuous relationship. Thus the actions to continue the relationship despite the original plan to end it after the task had been completed are labelled as restoring actions.

Yet one important discovery in the empirical grounding remains to be elaborated: the events in the dissolution process influence the nature of the relationship. The nature of the two focal relationships in dissolution phases changed *during* the dissolution processes. Therefore the direction of the nature's influence is no longer one way, from the nature of the relationship to the process, but two way.

In Case 1 the buyer's view of the nature of the relationship changed from continuous to terminal. The buyer would have ended the relationship, but was unable to do so because of the circumstances. The important network actor, Buycom, remained committed in its relationship with the seller. Thus when the dissolution process of the relationship between the Customer Division and Sellcom advanced, but no change took place in the relationship between Buycom and Sellcom, the Customer Division's view of their relationship with Sellcom changed to terminal. Thus the events in the dissolution process changed the nature of the relationship.

In Case 2, the buyer viewed the relationship from its beginning as episodic and although the seller knew this, it perceived the relationship as continuous. However, the buyer's actions in the dissolution process influenced the seller and it changed its view of

the relationship's nature to episodic. These changes in the conceptual model help the understanding of the empirical cases.

6.3 The effect of the influencing factors and events upon the dissolution process

The last arrow in the framework for business relationship dissolution (Figure 7, page 69) is between the influencing factors and the dissolution process. In exploring the effects of the influencing factors and events on the dissolution process the differences between the two cases are studied first. Then the differences between the theoretical model and the empirical cases are examined.

As a basic tenet of the conceptual dissolution model it is logical to hypothesise that it takes many and/or important reasons to end a continuous relationship, but that an episodic relationship may end although no reason for its ending other than its very nature is present. Therefore the cases will be compared with each other by using the number and the importance of the influencing factors and events as indicators of the differences in the dissolution processes.

As already described, the types of influencing factors in the two cases were different, and the nature of the relationship could also influence them. Therefore, using different indicators lowers the possibility that the indirect influence of the nature of the relationship would also account for the effect of the influencing factors and events to the dissolution process itself.

From the theoretical model it can be assumed that a continuous relationship's dissolution process would take more time than in the case of an episodic relationship. Predetermined ending of an episodic relationship is already anticipated and perhaps even planned already at the start of the relationship, so it is logical to assume that it would not be time-consuming or complex. Moreover, in terminal relationships, one can assume that the dissolution takes time because of the strong attenuating factors and events hindering the process.

Table 7 compares the stages of the dissolution processes of the continuous/terminal (Case 1) and the episodic/continuous (Case 2) relationship. There is a clear difference in the number and importance of predisposing factors between the cases. In the continuous/terminal relationship several important predisposing factors existed already when the relationship was established; the most important of these were actor-, dyad- and network-related. In Case 2, the predisposing factors were few, and only the network-related ones turned out to be of major importance.

Table 7. The effect of the influencing factors and events to the stages of the process in the two cases

	Case 1 Customer Division – Sellcom	Case 2 Customer Division – Conscom
Predisposing factors	Task-related - Important Actor-related - Very important Dyad-related - Very important Network-related - other connected relationships - very important larger network - important	Task-related - less important Actor-related - less important Dyad-related - less important Network-related - other connected relationships - very important larger network – important
The number of factors	Many	Few
Precipitating events	Actor-related - important Dyad-related - of major importance Network-related - of major importance	Actor-related - important Dyad-related - very important Network-related - very important
The number of events	Many	Few
Attenuating factors and events	Actor-related - less important Dyad-related - less important Network-related - very important	Actor-related - less important Dyad-related - less important Network-related - less important
The number of factors and events	Quite many factors and events	Few factors and events
Dissolution process duration complexity	 Very long process Highly complex	 Quick process Quite simple

The two cases differ also in their precipitating events, yet even more in the number of events. The continuous/terminal relationship encompassed many events that were perceived by the actors as precipitating its dissolution. The most important of these were dyad- and network-related. Several dyad-related events were perceived by the buyer and a

few also by the seller as reasons to end the relationship. However the network-related events were decisive because they changed the situation and enabled the buyer to end the relationship.

In the episodic/continuous relationship only few precipitating events took place, but these were important enough to prevent the continuation of the relationship. Two dyad-related precipitating events influenced the seller's behaviour, whereas network-related events enabled the buyer to end the relationship.

Figure 78 depicts the relative importance of the influencing factors and their effect on the dissolution process of a continuous/episodic relationship. The managers involved in the continuous/terminal relationship perceived many attenuating factors and events; of these the network-related ones had a major influence on their actions and therefore on the dissolution process. The dissolution process took a long time, about a year. In addition, it was a complex process as many actor levels took part in it.

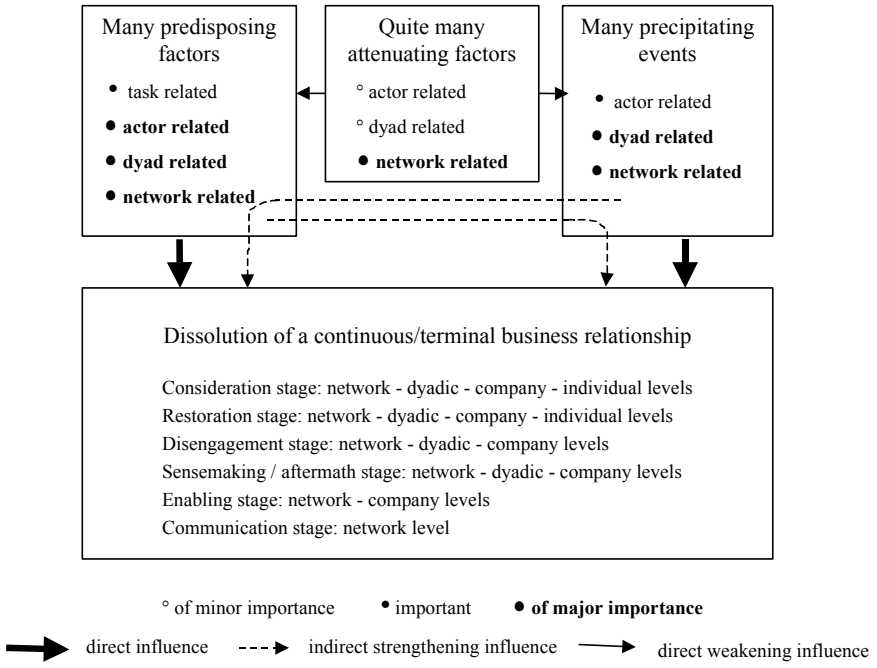


Fig. 78. The factors and events influencing the dissolution process of the continuous/terminal relationship (Case 1)

In the episodic/continuous relationship there were only few attenuating factors and events and none of them played any major role in influencing the manager's actions as shown in Figure 79. Moreover the managers involved in Case 2 perceived only few predisposing factors and few precipitating events that had a major influence on their behaviour. The

dissolution process was quick, about three months and quite simple. Thus the contrast between the dissolution processes is clear.

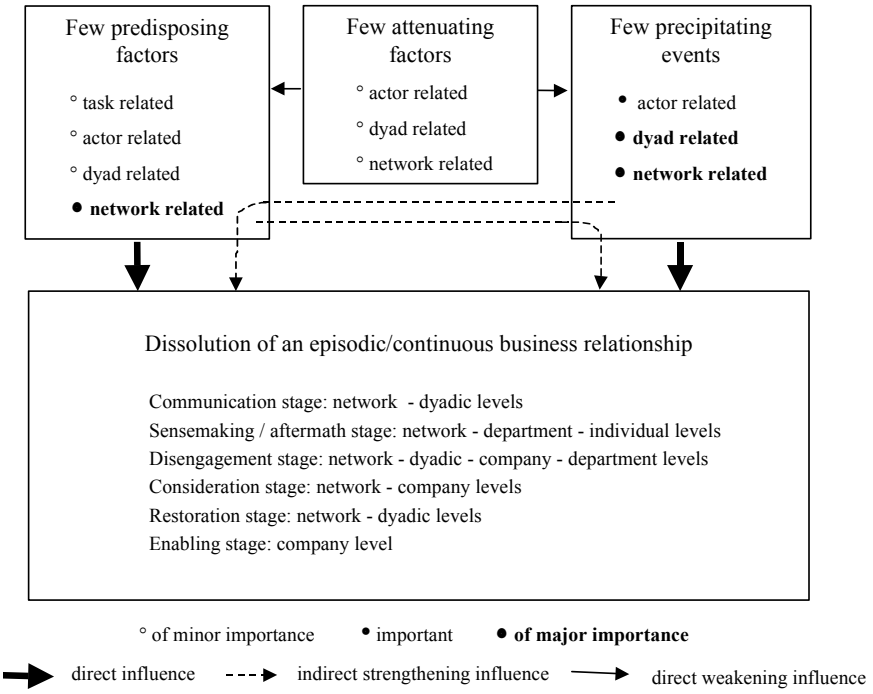


Fig. 79. The factors and events influencing the dissolution process of the episodic/continuous relationship (Case 2)

The proposition that the nature of the influencing factors has an effect on the dissolution process is empirically grounded in the two cases. Moreover the cases can give rise to a new proposition: the number of influencing factors has an effect on the duration and the complexity of the dissolution process. It seems that a large number of important influencing factors increases the duration and the complexity of the process. This was the case in the continuous/terminal relationship. In the episodic/continuous relationship, there were only a few influencing factors and the dissolution process was also quicker and simpler.

However, I will suggest a further modification to the conceptual dissolution process model. The model proposed that the influencing factors have a direct influence on the dissolution process; this proposition is supported by the two empirical cases. However, theoretically speaking, the differences in the empirical cases can also be explained by referring to the effect of the different nature of the relationships. When talking about a chosen end of a continuous relationship, it is logical that there would be more than one reason for dissolution and that the reasons for such a decision would be very important. In continuous relationships, dissolution is contrary to their nature; thus it is logical to

assume that the process, regardless of the influencing factors, would take some time. In terminal relationships, it can also be assumed that the dissolution process would take a long time, as the dissolution is delayed until the hindering circumstance change.

In the case of an episodic relationship the theoretical models suggests that because the end is predetermined, the relationship will end without any major influential factors or events; therefore the process should be rather quick and simple. The studied Case 2 grounds these propositions empirically.

However, the dissolution process of Case 2 was not as simple as the model suggests. This can be explained by the continuous element in the relationship's nature, which brought complexity to the dissolution process. The process could have been simpler and quicker, if both of the actors had not at some point in time looked at the relationship as potentially continuous.

Thus the cases give support to the proposition that the nature of the relationship has a direct effect on the influencing factors and the dissolution process, and an indirect effect via the influencing factors and events on the dissolution process. These changes, as well as the previously explained changes to the theoretical model, are depicted in Figure 80.

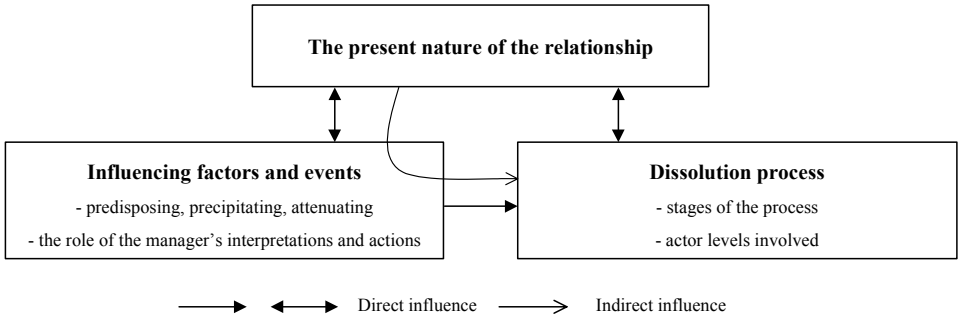


Fig. 80. An adjusted framework for business relationship dissolution

This part of the thesis has scrutinised two cases of relationship dissolution, one of a continuous/terminal relationship and another of an episodic/continuous ditto. The empirical cases were analysed using the theoretical model presented in Chapter 2, yet at the same time the theoretical model was adjusted to fit the empirical data. Seen as whole, Chapters 4, 5 and 6 have described the empirical grounding of the theoretical model of business relationship dissolution in the software industry. The next chapter will first compile all the parts of the process model of business relationship dissolution. Thereafter, a summary of each part of the model will be provided to give the reader a full picture of the empirically-grounded process model.

PART III CONCLUSIONS

7 The empirically-grounded process model of business relationship dissolution

This study was undertaken to answer the question of how to model business relationship dissolution in the context of the software industry. The previous chapters have developed an *a priori* conceptual model, described a case study of two different dissolved relationships as well as compared the *a priori* model with the case data and adjusted the model on the basis of the empirical material. The resulting empirically-grounded model consists of three main elements:

1. The present nature of a relationship and type of end
2. The factors and events influencing the dissolution process
3. The process of business relationship dissolution.

The empirical grounding of each of these elements was presented in Part II, but now it is time to compile all the elements into one whole. Figure 81 summarises all the elements in an empirically grounded process model of business relationship dissolution in software business.

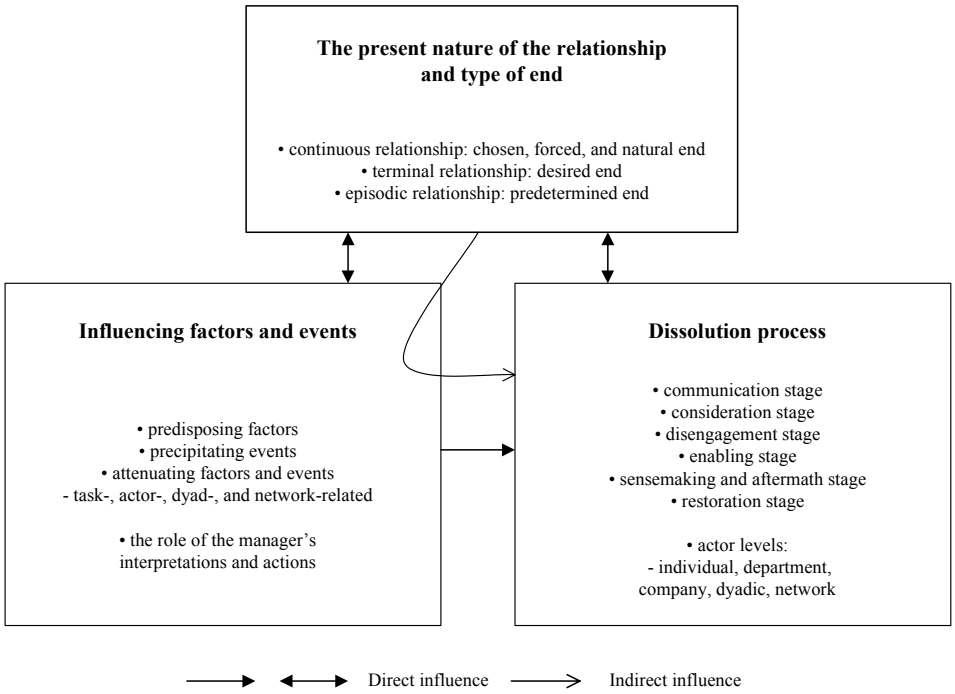


Fig. 81. An empirically-grounded process model of business relationship dissolution in software business

The present nature of the relationship influences directly the influential factors and events and vice versa. The nature of the relationship has an effect on what type of and how strong influential factors are likely to be present and may be perceived during the relationship by managers as reasons to end or to continue the relationship. For example, during an episodic relationship there need not to appear any influential events that would precipitate as reasons for ending the relationship because the nature of the relationship inherently encompasses its end.

However, influential factors may affect the nature of the relationship and they furthermore may determine the type of relationship end, like in continuous relationships. Precipitating and/or attenuating events may even change the whole relationship's nature. For example, in Case 1, the continuous relationship changed to a terminal relationship as a result of precipitating events and strong attenuating factors, this prevented the immediate ending of the relationship.

The present nature of the relationship also directly influences the whole dissolution process. For example, in an episodic relationship, the process may be quicker, shorter, i.e. involve fewer stages, and simpler, i.e. involve fewer actor levels than in a continuous relationship. Moreover, as the relationship's nature effects the influential factors and events, through them it also has an indirect influence on the dissolution process.

Finally, the influential factors and events directly influence the dissolution process. When a relationship is of a continuous nature, it does not encounter a dissolution process without any precipitating events. When the present nature of the relationship is terminal, the relationship will not face a dissolution process unless the reasons keeping the relationship alive, in other words attenuating factors change or disappear. In episodic relationships where the end is predetermined, the nature of the process can be different if e.g. strong attenuating factors are present, which slow the process down or even stop it by changing the relationship's nature to continuous.

The three elements of the framework each contain more than one sub-element; these have been discussed earlier in more detail. In the next sections, each of the three main elements are summarised and contrasted to the existing theory.

7.1 The present nature of the relationship and type of end

The aim of this research is to develop a model that helps us to understand all types of dissolution processes in tailored software business. Therefore it is important that the model incorporates relationships of a different nature. The categorisation of continuous, episodic, and terminal relationships inspired by Caplow (1968 pp. 5–7) gives the model a more general nature than the pre-existing models. For example the Ping and Dwyer (1992) model concerns only continuous, established, and committed channel relationships, where a single actor's chronic dissatisfaction with a relationship is seen as the primary explanation for relationship termination. However, relationship dissolution may occur in any of the phases of a relationship's development (e.g. Halinen 1997 p 282, Rosson 1986), and also satisfied customers may end a relationship (Mittal & Lassar 1998). Thus, a more general characterisation of a relationship is needed.

In *continuous relationships*, the actors share the relationship 'for the time being' and the dissolution comes unexpectedly from the parties' point of view. The dissolution that follows can be characterised as chosen, forced, or natural. In *chosen ending*, one or both actors make a decision to end the relationship. However, relationships can also dissolve without any purposeful decisions by the parties. This is the case in *a forced ending*, as e.g. a change or an event in the broader network in which the relationship is embedded may force the actors to end their relationship although they might want to continue it. A forced dissolution may also be a result of a partner's bankruptcy. In *a natural ending*, a relationship may have gradually become obsolete, as the need for business exchange has diminished. No purposeful decision about the dissolution has been made.

Terminal relationships are unwillingly extant, because the actor(s) would prefer to operate independently or with someone else, but are not able to do so. The parties expect the relationship to continue, but dissolution is their desired outcome - to be realised as soon as circumstances permit (*desired ending*). A terminal relationship may be established, for instance, when the headquarters of a company makes a centralised decision to use one software vendor for particular tasks for the whole group, although some business units would prefer to use other vendors.

An episodic relationship is established for a certain purpose and/or time period, and thus dissolves when it has served its purpose and/or the time period has elapsed. The ending of an episodic relationship is thus *predetermined*, although the relationship may also break up before the predetermined point of dissolution. In such cases the dissolution is characterised as chosen or forced.

One of the major findings of the study is that a relationship can change its nature during its existence. The conceptual model proposed that the nature of the relationship before the dissolution process begins is decisive. However, the empirical data indicated that a relationship could change its nature even during its dissolution process, if the process is long enough. For instance, a continuous relationship can become a terminal one during its dissolution process, if strong attenuating factors hinder the chosen end from taking place.

A second important finding is that the nature of the relationship is not necessarily something that is decided jointly by both actors, although this can be the case. For example, in some episodic relationship situations, it is common that the nature of the relationship is explicitly discussed before its formation. However, it may also be the case that although both parties know that the relationship is meant to be an episodic one, one of them may wish it to be more long-term and actively tries to change its nature into a continuous one. In the tailored software business, as in other project business, this is often the case. In addition, it may well be that the parties do not agree on how they see the relationship's nature - at least not explicitly. For instance, one actor may perceive the relationship as a continuous one, while another, having been forced by a third actor to enter into it, as a terminal one.

Although the classification of the nature of the relationship seems simple, the simplicity actually is deceptive. The nature of the relationship can change, and the actors involved in the relationship can have different views of its nature and thus behave differently according to these (even contradictory) views. Therefore one cannot draw a direct conclusion from the present nature of the relationship, even if it is unanimously perceived by both companies, to the type of end it will some day encounter because both factors may change.

7.2 The influencing factors and events

The model suggests a general categorisation of the factors and events influencing the parties and their actions in dissolving their business relationship. Based on the role of the factors and events and the direction of their influence, the model distinguishes between three groups of factors: predisposing factors, precipitating events, and attenuating factors and events. Both predisposing factors and precipitating events promote and engender dissolution, whereas attenuating factors hinder it and its advancement. Moreover, the influencing factors and events are sub-categorised into task-related, actor-related, dyad-related, and network-related. In the case study all these categories had a role to play.

The categorisation of influential factors and events aims at comprehensiveness and application to all endings, whether chosen, forced, natural, desired or predetermined. It

puts forward the role of factors and events in the dissolution process; they either hinder or accelerate dissolution. Secondly, it pays particular attention to two important issues, the first of which is the way that the effects of the influential factors and events are mediated during the dissolution process.

Predisposing factors already exist when companies enter a relationship, making it more vulnerable to dissolution. Predisposing factors are fairly static underlying and structure-like factors. They may create a platform for managers to more easily pay attention to and interpret some events as precipitating. Predisposing factors can also affect the managers' actions unconsciously, like e.g. a corporate culture.

Predisposing factors can be related to the characteristics of the task the relationship is set up to accomplish (e.g. complex and highly abstract service), to the actors themselves (e.g. poor company performance), to their dyadic relationship (e.g. a poor choice of partner, conflicting goals), or to the network their relationship is embedded in (e.g. considerable number of alternative, available partners). For example, the task of creating tailored software is extremely demanding and prone to performance failures, which adds vulnerability to the relationship.

Precipitating events bring change to the existing relationship and function as impulses for the parties to take actions to end their relationship. These events may be sudden and dramatic (see e.g. Halinen *et al.* 1999) or part of a series of events creating pressure for relationship change. Precipitating events occur during the relationship, even during its dissolution process, and are perceived by the managers as reasons and/or justifications for acting towards its dissolution.

Precipitating events may emerge from within the companies themselves, from their dyadic relationships or from the broader business network in which the relationship is embedded (see Felmlee *et al.* 1990). Company-related precipitating events, e.g. bankruptcies or changes in personnel, may lead to relationship dissolution. Potential precipitating events emerging from dyadic interaction can be, for example, performance failures. In the software industry performance failures such as cost and schedule overruns as well as failures in the technical quality of the software are common. An example of a network-related precipitating event is a competitor making an attractive offer to one of the parties.

Attenuating factors and events form the third category of factors that has important influence on dissolution processes. Attenuating factors and events moderate the effect of predisposing factors and precipitating events. If the perceived importance of attenuating factors and events is high, the managers of the disengager company are likely to continue rather than dissolve the relationship. Attenuating factors exists, like predisposing factors, already at the beginning of the relationship, whereas attenuating events happen during the relationship's life and even during its dissolution process.

Actor-related attenuating factors, for instance long experience, can contribute to the company's efficiency in relationship maintenance. Dyad-related attenuating factors, e.g. the strength of actor bonds and relational infrastructure in the relationship, moderate the effects of precipitating events on potential dissolution. A lack of alternative partners functions as a network-related attenuating factor. If no qualified partners are available, a company may have to remain in a relationship even though it would prefer to end it. Likewise, the events that inspire managers to continue the relationship can be one-sided (e.g. a partner changing its way of working in order to save the relationship), jointly

performed (e.g. partners making common efforts), or initiated by a network actor (e.g. a third actor acting as a mediator in the relationship).

Several influential factors and events can be intertwined and appear simultaneously during the process of relationship dissolution, as the cases have shown. Moreover, they can come into play in any stage of the dissolution process, and should therefore not be seen merely as triggers or antecedents of the process, as in many existing studies of dissolution (e.g. Hocutt 1998, Perrien *et al*. 1994, Perrien *et al.* 1995). Thus, the process is by no means predetermined as new influential factors and events may affect it as it proceeds.

It is not these factors *per se* that cause the dissolution, but the responses of the relationship parties to them (see Duck 1981, Halinen *et al.* 1999, Stewart 1998). Managers are seen as intentional actors, acting to reach the general goal of their company's success in its business area, but also to achieve their own personal goals. They interpret the surrounding business environment and consider which actions would best serve their and their company's goals. Therefore a manager can perceive a certain event in a relationship's context as decreasing her/his company's commitment to the relationship, yet the partner company's manager can see the exact same event as just the opposite. The role of individual managers in the process is thus crucial for understanding the influence mechanisms of the different factors on the dissolution process. The effects of the factors are always mediated via the individual managers, who interpret their importance and act accordingly.

7.3 The process of relationship dissolution

The process of dissolution disconnects the former partner companies from each other by cutting the activity links, the resource ties and the actor bonds that have kept them together. As Dwyer *et al.* (1987) suggested, more than just one stage is necessary to describe the complex process over time. In addition, dissolution is likely to involve several actor levels both in each partner company (individuals, departments, and business units) and in the connected network of relationships (companies, dyadic relationships, broader networks). The proposed model aims to incorporate these complexities.

The dissolution process is described by dividing it into different stages and by presenting its content in terms of activities undertaken and decisions made by the different actors. Although the process is modelled in stages, this does not imply that the dissolution process always proceeds through all of the stages or that the stages have any order, rather the contrary. The stages are used to divide the complex process into smaller and more comprehensible periods and to emphasise that in each stage, managers' actions differ. Thus the content and function of the stages is the main issue that distinguishes the stages from each other. Many of them may, as they in both cases did, take place simultaneously because different actor levels are performing the actions. For example, individuals in the buyer company may be considering the end of the relationship at the same time as the seller company is doing its best to restore the relationship.

My proposition for the process description is presented in Figure 82. The model distinguishes six stages (listed in alphabetical order) in the dissolution process and depicts different actor levels that are actively involved with the process. The seven stages of the conceptual a priori model have been adjusted according to the empirical data. The adjustments included combining the assessment and decision-making stages into a consideration stage and the dyadic and network communication stages into a communication stage, adding an enabling stage, and adjusting the aftermath stage into a sensemaking and aftermath stage.

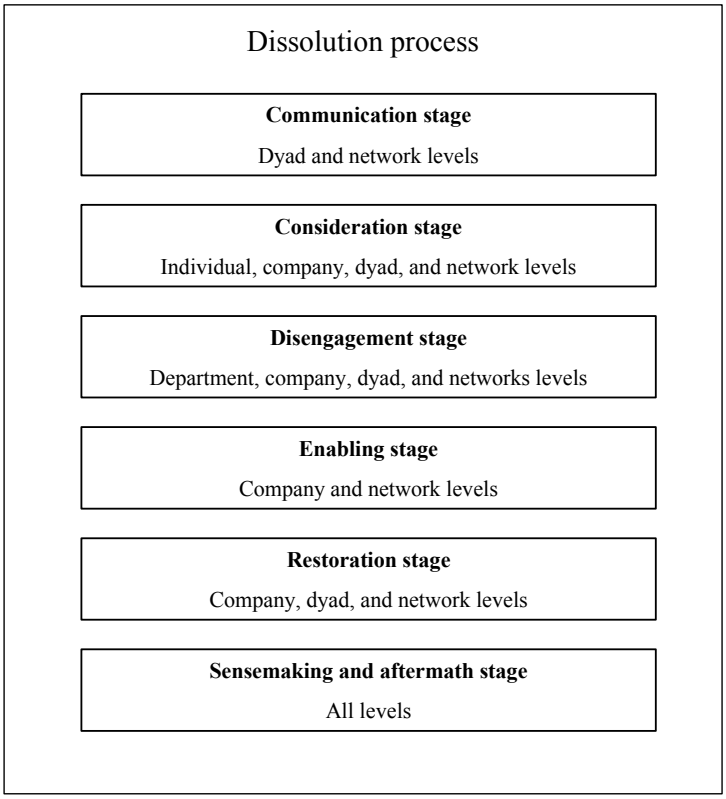


Fig. 82. The stages and actor levels of a business relationship dissolution process

The communication stage refers to all communication that concerns the ending or the continuing of the focal relationship. The consideration stage is composed of the actors' decision-making behaviour (including information seeking and uncertainty reduction) that evolves around the question of continuing or ending the relationship. During the disengagement stage, the activity links, actor bonds, and resource ties are broken down. The enabling stage involves all actions aimed at making the ending of the relationship possible. During the restoration stage, some actors may try to repair the relationship and continue it, and if this stage is successful the dissolution process may end and the

relationship continue. Finally, the sensemakig/aftermath stage refers to all actions that are done in order to explain the process and mentally safeguard the actors during it (sensemaking) or after it (aftermath).

The actor levels suggested by the conceptual model have also been subject to heavy construction work. The a priori model proposed fewer actor levels within nearly each stage than the empirically grounded model now does. After the empirical grounding it became apparent that only two stages were performed by two actor levels, the rest of the stages being performed by at least three levels. The communication stage took place in the dyad and network levels, and the enabling stage was performed by a company or involved some third actor in the network. The restoration stage involved company, dyad and network levels. Each level from individuals to network actors took part in the sensemaking / aftermath stage. The rest of the stages, namely the consideration and disengagement stages were in the two cases performed by four actor levels. This is not to say that in other business relationship dissolution processes, the same actor levels will be performing the dissolving or restoring actions. On the contrary, I would argue that the content of the stages 'dictates' which actor levels can be active at the stage. I see this as an empirical question, which cannot be answered beforehand in this study.

8 Discussion and implications

8.1 Assessment of the study

I will assess this study using realist criteria because this epistemological position has guided my research work. My main reference in doing the assessment is the work of Brindberg and McGrath (1985). They state that they both lean heavily toward "hypothetical realism" as expressed in Campbell (1981) and Brewer and Collins (1981). As their description of hypothetical realism is not far from scientific realism, I will apply their thoughts on validity in this section.

According to Brindberg and McGrath (1985 p 13) validity is an ideal state, which is to be pursued but not attained. They divide the research process into three stages and in each stage validity has different meaning (ibid. pp. 19–20). In stage one or in prestudy validity means value or worth. In the central or execution stage validity means correspondence or fit. Stages one and two include three domains – conceptual, methodological and substantive – that each are to be assessed with different validity criteria. In the last stage, the follow-up stage, validity means robustness or generalisability and refers to the assessment of the stage two findings. Thus, the Validity Network Schema (VNS) by Brindberg and McGrath (1985) is very complex and abstract (ibid. p. 9) and I as the writer of this study, have only aimed to make a modest application of it.

8.1.1 Stage one validity: value or worth.

In stage one, prestudy, the researcher finds a) concepts and conceptual relations or methods, b) comparison techniques or phenomena, and c) patterns among them, which she/he considers to be of value in later stages of the research (ibid. p. 41). The research chooses one domain - conceptual, methodological or substantive - that s/he is most interested in; the validity issue involves only that domain. My choice was the conceptual

domain, as I started this research by developing an *a priori* framework of concepts, although I also considered the context, i.e. the substantive domain. Thus I will assess the validity of the study by looking at both conceptual and substantive domains.

In this stage, validity means value or worth. Thus the question to be answered is were the decisions concerning the conceptual domain done in the prestudy stage of this research useful? I will answer this question using Brindberg and McGrath's (1985 pp. 46–49) criteria of value in the two domains. It has to be noted that the criteria involve interrelated sets of conflicting desiderata, so that all of them cannot be maximised at the same time.

In the *conceptual domain* I have used the question of the meaningfulness of the concepts and relations as the basis for my interpretations within the Interaction and Network approach. The criteria of value are parsimony, scope and differentiation of detail (see also Whetten 1989). The principle of parsimony refers to the amount of concepts and their relations that are conceptualised in a model. Frameworks with fewer concepts are better than those using more, or more complex concepts and relations, all other things being equal. The second criterion is scope: A framework is better if it covers a broader focal problem (Brindberg & McGrath 1985 p 47). The third criterion is differentiation of detail, meaning that a conceptual system is better if it differentiates features of the focal problem in detail, rather than treating them in general or abstract form (see also Corbin & Strauss 1990).

As already mentioned, a single framework cannot maximise all three desiderata of parsimony, scope, and differentiation. Compromises have to be made; they tend to optimise two of the three, but minimise the third. The conceptual framework of the dissolution of a business relationship in tailored software business has sought high comprehensiveness. It provides detailed differentiation of the concepts and also retains a broad scope. Thus, because the model contains several concepts and relations, the degree of parsimony has not been optimised. Therefore visual representation of the framework was presented in Figure 6 (p 68) to clarify my own thinking and to increase reader's comprehension (Whetten 1989).

In addition, Brindberg and McGrath (1985 pp. 48–49) describe another set of criteria which has to do with the logical coherence of the concepts and relations within a focal framework (see also Corbin & Strauss 1990, Sheth, Gardner & Garret 1988 p 30). The framework should not contain mutually contradictory propositions nor logical gaps. In other words the system should relate the concepts to each other in a coherent way and also describe and explain the phenomena adequately, leaving no areas unexplained. I have tried to fulfil these requirements by following the logical process of conceptual analysis with each element of the a priori model. Each element has been incorporated in at least one of the Figures 3–5, to ensure that no contradictory relations between the elements are suggested.

The *substantive domain* involves ongoing, real-world systems; its criteria of value are system well-being, system task performance effectiveness, and system cost. Only those conditions and behaviour are desirable, which advance the health, safety, and positive development of the system, facilitate its task performance, or decrease its system costs. In this particular matter, I have stated in the introduction that dissolution can be both unwanted and desired, but also that in both cases the knowledge derived from the study can be used to the welfare of the company and to facilitate its task performance. In

addition the execution stage of this research has provided the individuals involved in the ex-relationships a possibility to talk things through and to unburden their mind with regard to the matter.

8.1.2 Stage two validity: correspondence

Before discussing the validity of the execution stage of this study, I will describe the type of research path the study has followed as the correspondence validity issues depend on what type of research path the study in question has followed (Brindberg & McGrath 1985 p 93).

Brindberg and McGrath (1985 p 60) identify three different study paths or research styles. An experimental path involves combining elements and relations from the conceptual domain and the methodological domain to form a study design. This design is then implemented by applying it to the substantive domain. The other two paths are theoretical and empirical. A theoretical path aims at testing a hypothesis and an empirical path at interpreting observations from the substantive domain.

The experimental path is the one that I have more or less followed in doing this research, although I did not consciously try to follow it. In the path, my study design again bears resemblance to what Brindberg and McGrath (1985 p 67) call a concept-driven design. My primarily interest was the conceptual system and I chose a method – the case study – that fit the system as well as the phenomenon that the study focuses on.

Thus the first choices restrict the following choices, as all of them, the substantive, the conceptual and the methodological domains, have to fit together, to show correspondence validity. I started the research from the conceptual domain but the substantive domain was already present, as the concepts were chosen to describe the particular empirical setting of the tailored software business. Therefore, instead of not modifying the conceptual domain, as Brindberg and McGrath (1985 p 105) suggested, the aim of the research was to further develop the *a priori* conceptual model, thus changing it if that was needed in the light of the information gathered using the case study method.

As described in Chapter 3 (Empirical research design), I used several procedures to increase the correspondence validity of the case study, e.g. triangulation (see Stake 1995 p 100–115) and using free reports (see Miller *et al*. 1997). According to Brindberg and McGrath (1985 pp. 119–137) the execution stage is actually information gathering, which in the last stage of the research is transformed into knowledge.

8.1.3 Stage three validity: robustness.

A study adds little to the body of knowledge, unless its results are compared to other studies focusing on the same problem. In assessing the robustness of the study, the issues of replication, convergence, and the limits of the research are to be discussed. Although the last two issues represent different perspectives of the same theme, Brindberg and

McGrath (1987 p 120) separate them to highlight the need for researchers to examine both the scope and the limits of their findings.

As Brindberg and McGrath (1985 p 122) state, full replication is never possible because no two occasions are alike. Therefore the issue of replication can be approached through the question of reliability. The goal of the researcher is to make sure that if a later investigator would follow the exact same procedures as s/he did and would conduct *the same case study*, the findings and conclusions would be the same (Yin 1989 p 45). Thus it is important to document the procedures that were followed while conducting the case study.[14] In this study I have already described the case study procedures in Chapter 3, but here I will address the sources of information that I used while writing the description. At this point, I as a researcher have to settle for an attempt to try to describe the route that I have taken as accurately as possible and to assure the reader that I have collected and kept safe as much material as I have deemed possible.

This documentation can be done with the use of a case study protocol and case study database (Yin 1989 p 45). The case study protocols (one for each case of a dissolved relationship) of this study include an overview of the study (which was also used in getting the access), a description of the field procedures (also described earlier in Chapter 3), the case study questions and the a priori index for the case study report. Some of these sections are also included in the Appendix.

The case study data bases are actually two files containing the documentary information, archival records, transcribed interviews, and my personal notes. Documentary information consists of for example the minutes of meetings, fault reports, and other written material that I have received from the case companies, their internal magazines, as well as the newspaper and magazine clippings that I have collected. Archival records include organisational charts (of which some are also presented in this report) and lists of the people involved in the focal relationships. The interview file consists not only of the transcribed interviews of the case, but also of the feedback the interviewees gave me after reading the transcriptions and also the preliminary case descriptions along with the company's representative's comments to these.

Finally, the collection of my personal notes includes copies of all the letters and e-mails that I have sent and the original answers that I have received concerning the case as well as the notes that I took during the interviews and during my case analysis. Some of the latter are included in a NUD*IST software database, which also includes all the interviews and the results of the different 'rounds' of coding applied to the data. With this I end the discussion on the issue of replication of the study and continue with the two remaining and related issues of robustness, the convergence and the limits of the research.

The convergence analysis in the conceptual domain compares the original concepts and their relations with an alternative set to find out which one works best. The aim of this research was to develop a process model of business relationship dissolution, and

[14] Czarniawska (1998 p 70) presents a claim that it is more accurate to speak of conformity rather than reliability, as she states that "it is not the results that are reliable but the researchers who are conforming to dominant rules". She suggests that results are replicated not because the researcher has applied the exact method to the same object of study, but because institutionalised research practises tend to produce similar results and sometimes only legitimate conclusions are expected from researchers. However, I feel that this study has not followed 'dominant rules' of case study research nor are there any expected conclusions that I should have reached.

thus this model should now be compared to alternative models that explain the same phenomenon. When starting this research, no such model was available, and therefore I decided to set that as the goal of the research. Time has past since I began the research so alternative models may now be available. In order to find such alternative models, I use a recent review of the research on ending exchange relationships by Halinen and Tähtinen (2000) as my main source.

Halinen and Tähtinen (2000) have reviewed 45 articles from 1980–2000.[15] They divide these studies into four approaches, of which the business marketing approach is of interest here. The decision to choose only the business marketing approach is a restriction made on purpose. I fully acknowledge that the studies focusing on consumers switching behaviour (e.g. Keaveney 1995, Roos 1999) contain valuable results and areas of interest (e.g. emotions in the ending process) that can contribute to the research on business relationship dissolution. However, the framework developed in this study has already used studies of consumer relationship dissolution as an inspiration. Another reason is that I consider that interorganisational business relationship dissolution differs from consumer relationship dissolution and that the differences hinder a single model from sufficiently describing both kinds of relationship dissolution. Therefore the substantive domain limits the study, and the applicability of the model in other contexts remains as an issue for future empirical research.

The business marketing approach includes 20 studies on business relationship ending, of which 10 place their focus on the ending process (Halinen & Tähtinen 2000). However, I have excluded three of the studies, Tähtinen (1998), Tähtinen and Halinen-Kaila (1997), and Tähtinen and Halinen (1999), because they report more or less the previous stages of this study and therefore are not real alternatives to this study. Thus, a pool of seven studies remains to be examined in more detail.

Of these seven, the studies by Alajoutsijärvi *et al.* (2000), Havila (1996), and Havila and Wilkinson (1997) focus not on the whole process of ending, but on a specific stage of it (Halinen & Tähtinen 2000). Thus they are also excluded from the comparison. The remaining four studies are Gadde and Mattsson (1987), Giller and Matear (2000), Grønhaug, Henjesand & Koveland (1999), and Rosson (1986). Each of them is evaluated in the following.

Gadde and Mattsson (1987) found that in a seemingly stable network of relationship, changes – even dramatic ones – happen, and that these can be traced if sufficiently detailed data is gathered about the purchasing strategies of the buyer companies. They discover both entry and exit patterns taking place as a company once used as a single source was gradually eliminated from the supplier base. Two types of exit patterns were observed, which I label the straight road and the winding road. On the straight road the position of the supplier weakens from year to year. On the winding road, the position also changed from weaker to stronger. However, the data that Gadde and Mattsson relied on did not allow them to explain the patterns, nor did they describe the actions of the both parties within the different patterns. Thus when comparing the results of Gadde and Mattsson (1987) to the process model of business relationship dissolution, both the focus of the model and the differentiation of details are smaller in Gadde and Mattsons's (1987)

[15] This review includes many of the studies that are used in this research to develop the theoretical model. However, I will now treat them as candidates for the alternative models.

contribution. Thus the concepts of Gadde and Mattsson (1987) do not describe the same phenomenon in as detailed form as this research, and therefore I cannot consider the study as an alternative model.

Giller and Matear (2000) study four cases of terminated relationships, and focus on what they call "the termination strategies" used within the dyadic phase (a label from Duck 1982) of termination. However, Giller and Matear (2000) do not recognise that what they call "the termination strategies" are explicitly labelled as communicative strategies by Baxter (1985 p 244), Alajoutsijärvi and Tähtinen (1987), and Alajoutsijärvi *et al.* (2000).[16] Despite this, I will examine their study further because the study also suggests a model of inter-firm relationship termination. The model derives from social psychology but also from consumer, channels, as well as business-to-business marketing research, yet seems to model only such relationships in which one or both actors make a decision to terminate the relationship. As for the process of termination, Giller and Matear (2000) state: "The relationship termination process begins with an event triggering the termination and extends through to the consequences of the termination…". The figure itself includes the following actions: a decision to terminate the relationship, a selection of termination strategy(ies), an identification of anticipated outcomes, and a reaction to the termination. However, these actions are not described fully in the paper. Because the article actually focuses on a specific stage of a particular type of dissolution, I will not regard it as an alternative to the model produced in this study.

When taking a closer look at the study by Grønhaug *et al.* (1999), one realises that their main focus rests also in a particular aspect of the ending process. They are most interested in finding out why close and long-term relationships fade away whilst the individuals (of one collective actor) involved in the relationship do not understand the ongoing change. The study discovers that the individuals come to hold so rigid mental models during the long relationship that these models restrict them in perceiving the changes in the relationship. The study sheds light on important aspects of dissolution but not the dissolution process itself. Therefore, I do not consider its conclusions as an alternative to mine.

Finally, the study by Rosson (1986) focuses on changes in international channel relationships. They find that the ending of exporter-distributor relationships is often triggered by various adverse events. Additionally, the relationship can deteriorate in a fairly predictable way but also in an unpredicted manner. Finally, the terminated relationships are sometimes replaced with other exporting modes. Their conclusions concerning the ending of business relationships do not reach a deeper level; therefore I will not treat Rosson (1986) as an alternative model. Having said that, I have rejected all the potential studies offered by Halinen and Tähtinen (2000).

Thus no existing model tries to describe exactly the same phenomenon as this one and my process model of business relationship dissolution in software business seems to be a first attempt in such theory development. To conclude the assessment of it, I will note that the Finnish tailored software business has been the empirical context that I have used in this study. Without replication with concerning different type of subjects and different

[16] I am also confused by the termination strategies that Giller and Matear (2000) identify in their four cases. In Table III they treat Baxter's (1985) fait accompli –strategy as other-oriented, whereas both Alajoutsijärvi and Tähtinen (1997) and Baxter (1985) describe it as self-oriented.

contexts it is impossible to say anything conclusive concerning the scope and the limits of this study. However, when selecting the context, I tried to find one that would most advance the theory development, in other words allow as many facets of the phenomenon to be revealed as possible. The tailored software context can be considered as a good choice as it captured the complexity of the dissolution process nicely. Therefore, I am inclined to think that the local theory development done in this study can be, with slight modifications, applied to other business relationships in the professional services as well.

8.2 The theoretical contribution of the study

This research discusses the dissolution of a business relationship in tailored software business. By constructing an empirically grounded process model, this study's focus is on building new theory. It is therefore of utmost importance that the study is able to contribute to the emerging theory of relationship dissolution or relationship ending. To be more precise, the result of the study, the empirically grounded process model, contributes mainly to theory development concerning business relationship dissolution. Let us then look at which aspects of the theory development this study deals with.

The first theoretical contribution relates to the concept of a dissolved business relationship. The conceptual discussion presented in this research on existing and dissolved relationships is part of the local theory that was purposefully grounded in the context of Finnish software business. The starting point for defining a dissolved relationship was a definition of an existing business relationship. Although this is a very logical road to follow, it has not been followed to the same extent in earlier research. This research tries to show the usefulness of careful conceptual discussion and with that open a road to future conceptual elaboration concerning both dissolved and existing business relationships. This road may lead towards the theory development that Dumont and Wilson (1970) suggest, starting from implicit theory and leading to theory sketches and explicit theories. This research can be seen as one step on this ladder.

The second theoretical contribution lies in accepting a challenge cast by the many researchers. As noted in the introduction to this study, several researchers have pointed out the importance of this topic, but still the research area has not attracted sufficient research attention. In business-to-business marketing the need for a comprehensive understanding of the dissolution phase of a relationship's life has remained unfilled. By saying this I do not want to diminish the importance of the pre-existing research, but rather mention that it lacks the comprehensiveness that guided my research strategy. This study presents a comprehensive model of the dissolution phase and in doing so is able to take full advantage of the existing dissolution research. I have been able to rely on all the research efforts made so far, because my model building has not focused on some specific aspect of the dissolution process, but has aimed at covering all aspects. These include business relationships of different nature, all kinds of influencing factors and events, and all stages of the process, also the restoring one. However, the model is grounded in one context, but the context was selected to provide heterogeneous cases to aid the theory

building. Therefore, although the model is originally local, it may well in future studies aid theory development at a more general level.

The third theoretical contribution is the content of the model. As the process model contains three sub-categories, I will discuss each of them in the following sections. The three categories are the nature of the relationship (continuous, terminal, and episodic), the influencing factors and events, and the process of business relationship dissolution.

The nature of the business relationship as conceptualised in this study has been very narrowly treated in the research so far. This may be partly because of the lack of interest in conceptualising the phenomenon. Whatever the reason, this research hopes to have proven to the research community that the nature of the relationship, i.e. the views of the actors concerning the duration of the relationship and their willingness to continue it into the future, is of fundamental importance to dissolution theory development. By not including the nature of the relationship in our models, we miss a lot of the variance of relationships and one potential explanation for the rich variety in the lives of business relationships. It may even be that we have missed this variety because we have not been looking for it.

This research has extended the knowledge concerning the different natures of business relationships. This being the first empirical research applying the categorisation, the potential for providing new knowledge was obvious. Tähtinen (1999) suggested, perhaps more implicitly than explicitly, that a relationship could change its nature during its life. This study has empirically grounded that proposition. The two cases of this study provided examples that a continuous relationship might turn terminal and an episodic relationship might become continuous. The possibilities are by no means restricted to these two. It is very logical to propose that an episodic relationship may well turn terminal and that a terminal relationship may become episodic or continuous. Moreover, there is no need to suggest that this kind of change in the relationship's nature may happen only once. However, if a relationship may change its nature several times this creates a question of the usefulness of the concept. However, multiple changes do not refute the claim that the nature of a relationship entails consequences for the interaction in the relationship, not to mention its dissolution. These consequences are also more important than the concept itself. However, the concept may help us understand the structure that is behind the difference in the processes.

In addition, this study revealed that the nature of the relationship is not the same for every actor. Companies, their employees, and yet other actors in the network may perceive the nature of the same relationship differently. Still, the perception of the actor may guide its or her/his actions in the relationship; therefore it has a bearing on the development of the relationship. This proposition is in this research connected to the dissolution phase, it may well hold also in the other stages of relationship development.

Thus different perceptions of the relationship's nature are possible, but if the proposition holds that the interactions in the relationship are based on these different perceptions, how then can a relationship as an interaction process survive? This is a question that remains mainly outside the focus of this research, but based on the two empirical cases I dare to suggest one possible answer: The two dissolution processes both were marked by actors' vastly differing perceptions of the nature of the relationship. It may well be that a relationship cannot survive unless the actors' perceptions of their relationship progress towards a more commonly held perception. After all, a relationship

is not a continuous unless both actors in the relationship perceive it to be so. Thus in conflict situations, the view that is 'shorter' in time may be the view that influences the relationship's development more. This is logical as one party alone can decide to break up the relationship. For example, in the case of a continuous/terminal relationship, the terminal view of the buyer company seemed to guide the interaction towards its dissolution, as soon as this became possible.

The influencing factors and events form the sub-model that has attracted the most research attention so far. Therefore the contribution to this discussion has been most challenging part of this research. But if we take a closer look at the earlier research, it has focused mainly on single influencing factors like service failures, pricing or changes in personnel (e.g. Keaveney 1995, Perrien *et a*l. 1994, Perrien *et al*. 1995) or antecedent conditions like commitment (Hocutt 1998), relationship value (Gassenheimer, Houston & Davis 1998) and dis/satisfaction (Mittal & Lassar 1998, Ping 1995). Michell *et al.* (1992), Roos (1999), and Stewart (1998) incorporate some influencing factors with some antecedent conditions into their models, but still fail to provide comprehensive suggestions on either category. The three categories of predisposing factors, precipitating events, and attenuating factors and events that this study proposes are based on two aspects of their nature. Firstly, the direction of their influence – the two first ones promote the dissolution whereas the last one hinders it. Secondly, the time of their appearance and influence – the predisposing factors exist already when the actors form their relationship and the two last ones appear during the life of the relationship, even during its dissolution process. These distinctions are new in the research, especially the time distinction, and their empirical grounding suggests that they are useful in understanding business relationship dissolution.

Beyond this, the proposed categorisation adds a less discussed element to the antecedents of business relationship dissolution, namely the attenuating factors and events. To understand the dynamics of the dissolution process, it is essential to have knowledge about all elements that contribute to this dynamics. Moreover, attenuating factors not only hinder the dissolution process but also contribute to the maintenance of business relationships. By engendering attenuating factors in relationships, their lifetime can be made longer. The conceptualisation and classification of all influencing factors is thus important.

The stages of the dissolution process provide a detailed view of the dissolution dynamics. No longer do we need to talk about the dissolution phase as a single entity, instead we can refer to the stages, i.e. to different action periods within the phase. Moreover, the model gives support to the notion that the end of a relationship is not similar to the beginning of the relationship, but needs its own conceptual language, if it is to be understood. The content and function of the stages of the dissolution are different from the earlier phases of the relationship's development.

The fourth theoretical contribution is the proposition concerning the influences that the three elements in the model have on each other. As no previous model has taken all these elements into discussion at the same time, no pre-existing suggestions of their interconnections were available. This study suggests that the nature of the relationship influences both the influencing factors and events and the process of dissolution, but also that that influence has two directions. As already stated, the nature of the relationship

may change and both the factors and events that the influence the dissolution process, as well as the actions in the process promote the change.

The process model of relationship dissolution is one of the few models that have applied a processual perspective (see also Ping & Dwyer 1992, Tähtinen & Halinen-Kaila 1997). The compiling of stages includes individual, company, department, dyadic, and network levels, thus reflecting the view of structural embeddedness that underlies the process[17]. The model also turns our attention to temporal embeddedness, i.e. the different time periods that can be used as a tool to analyse the process or any process. By analysing both the different periods (actions, events, stages and phases) and the different actor levels, the research on business relationships can seek higher specificity.

The dissolution process model highlights actors' actions and the fact that these actions drive the dissolution process, but also may stop or stall it. Restoring actions are as important in the process as the terminating ones. It is also emphasised that not every dissolution travels through each of the stages and certainly not in a prescribed order or even any order. The cases strongly suggest that in fact, the order of the stages may not be an important issue at all, as many of the stages may take place simultaneously. The view of a dissolution process that proceeds stage after stage from the first to the last stage is much too simple. Thus the model is flexible enough to let the complexity of these processes be discovered.

In addition, this study describes the characteristics of buyer-seller relationships in tailored software business. So far, the literature in both related fields, marketing and information technology research has lacked a description combining these perspectives. The lack of a common view is also very much demonstrated in small software companies. They similarly relate marketing only to the first steps of establishing customer relationships and thus do not consider the development, maintenance, or dissolution of their customer relationships as marketing. This notion brings us to the managerial conclusions. But before presenting these, I'll add a few words about the methodological contributions of this study.

The focus of this research was not on developing new methods or testing the existing strategies. In spite of this, some remarks concerning the methodology may be useful for future researchers involved in studying business relationship dissolution. This study is dyadic as both of the companies and also some of the closely connected network actors were included in the research design. This methodological choice proved to be a fruitful one, as it allowed me to see different views of the same phenomenon. This made the research more complex, but such is also life.

Moreover, I used different actor levels (e.g. individual level, company level) in describing the process of dissolution. This created a picture of the process a more details than would have been possible by using only the dyadic level. Thus it was possible to find differences in the perceptions of individuals within the same organisation and to discover how these were reflected in the relationship. Of course, the large number of inner details meant that some restrictions had to be made concerning how many network actors I could include in the study. However, since the main goal was to study relationship dissolution, albeit with a network view, I decided to restrict the network view to the size of only a

[17] For different forms of embeddedness, see e.g. Halinen and Törnroos (1998), Hedaa and Törnroos (1998), and Holmlund and Törnroos (1997).

small window that was opened to me via my contact to the individuals of the partner companies.

8.3 Managerial contribution of the study

The knowledge derived from this study, although theoretical, has managerial relevance to the Finnish software business and to other business settings where long-term business relationships are found. It can be used in dissolving relationships but also when relationships are developed with other companies.

Already when establishing new relationships, management should be aware of factors that may later foster relationship dissolution. Such predisposing factors are e.g. complex tasks, dissimilarities between the companies, or different expectations concerning the relationship. Equipped with knowledge about these factors and the difficulties they may create, managers could better evaluate the chances of success beforehand and set their expectations of the relationship appropriately. Predisposing factors can be seen as risks involved in the relationship; thus a kind of risk-analysis could be performed. Identification of such risks enables a firm to take actions to minimise the risks; thus enabling it to also better prepare for relationship maintenance.

Moreover, it is suggested that some of the predisposing factors are related to the industry itself; e.g. in tailored software business, the task in every buyer-seller relationship is a complex and a difficult one. If a company identifies industry-related predisposing factors, it may become better equipped to recognise risks. In addition to these foreseeable risks, each relationship can also involve its own particular risks, e.g. difference in management styles, which can first be evaluated within the relationship. However, a deeper understanding of the factors and events that may promote, or hinder dissolution also equips management with better skills to enhance and maintain ongoing business relationships when potentially troublesome relationship-specific situations arise.

In maintaining relationships, a company is well equipped if it can remain alert to precipitating events that can put the future of the relationship in danger. Such events in tailored software include changes in contact persons or in the ownership of one of the partners as well as changes in the economic situation, which can contribute to changes in e.g. the customer company's IT strategies. Precipitating events that take place within the relationship and seem to be common in tailored software development are performance failures, such as cost and time schedule overruns. Continuous assessment of these events and the whole relationship, e.g. its bonds as well as the network in which it is embedded, allows a company wishing to save a certain relationship to have more time to react to such harmful events. Also paying attention to the more hidden exit strategies which a partner can apply (such as decreases in contacts and other changes in behaviour) helps the opposite party to identify the danger of dissolution and to subsequently make efforts to save the relationship.

Precautions are very important if a company wishes to maintain important relationships. Dissolution may be prevented if attenuating factors are promoted already from the beginning of the relationship; even during the dissolution process, attenuating

events may be used to save the relationship. For example strong mutual commitment and trust, versatile personal relationships and actions that aim at replying to the partner's complaints can override the reasons for relationship termination. The attenuating factors have to be built up well in advance during the relationship, but even during the dissolution process, the disengager company may reconsider the ending, if its partner can change the situation via restoring actions. An important issue is that the relationship has been developed openly to enable direct communication, so that the disengager company feels that it can directly address the issues that are behind its ending considerations.

Engendering voice by e.g. establishing multiple channels of giving and receiving feedback in a relationship is an important precaution that may impede dissolution. Voice gives the partner a chance to correct the situation by taking restoring actions. By maintaining frequent and open channels of feedback a certain relationship can also be more easily developed. If voice is encouraged in e.g. mutual monthly reviews, potential problems can be addressed early and turned into solutions. Moreover, a company can learn from successful relationships. Lessons learned in one relationship can, to a certain extent, be applied in other important relationships, if those lessons are shared within the company.

Management may also sometimes want to end some relationships. If a relationship no longer is profitable, and it is not expected to be so in the future, it may be a candidate for dissolution. An understanding of how to manage the process is valuable in these situations. In most cases it is important to know to communicate the wish to the partner, so that the partner does not get severely hurt. By applying other-oriented exit communication strategy, e.g. mutual relationship talk and thus allowing the partner to discuss the state of the relationship, the chances for a more pleasant dissolution for both companies are higher. On the other hand, if there is a need to teach a partner company a lesson in front of the network (or on behalf of the network), a very self-oriented exit communication strategy applied together with extensive network communication may be of use.

Even if a given business relationship dissolution was unwanted, some good may still come out of it. Reflecting a recent relationship dissolution within the company provides opportunity to turn even the most unpleasant dissolution into a useful learning experience for the company. There is often as much to learn from a failure as there is from success stories (Hamilton 1996). At its best, the lesson learned will help the company better manage other relationships and potential dissolution situations. This, of course, requires that the situation is handled in a positive way; not as an opportunity to find and punish the persons to blame. When successful, such occasions offer the individuals who were involved in the relationship and its dissolution a chance to express their views and feelings on the subject and, in this way, process their aftermath stage with support from colleagues. This could be a very useful way of safeguarding the motivation to continue working in the company, although the person might feel some regrets over what had occurred in the relationship. As research has shown (Goodwin *et al*. 1997), an account loss may put pressures to the account manager to such extent that s/he considers changing jobs.

Although a company may not itself be involved in a dissolution process, its ability to recognise when other actors' relationships are entering a dissolution phase offers significant opportunities to it. If a firm can present itself as an attractive replacement

partner for the company which is breaking its present relationship, it can establish new relationships and acquire a better position in the network (see also Rosson 1986).

8.4 Avenues for future research

As this research presents an empirically grounded framework of business relationship dissolution, the obvious avenue for future research is theory testing. The process model needs to be tested, and the first context to do it is tailored software business. As the context has already proven to be useful in theory development, it would be in line with the research strategy applied in this research to do further empirical testing within the same industry. Obviously, the model would benefit from an examination in other industries, too. I assume however that modifications would be needed to the model if it were applied in a different context, as context and action are interwoven. In addition, it would be valuable to know if there are e.g. similar patterns in the dissolution processes across industries and how different influencing factors and events change the dissolution process across industries.

The nature of the relationship, i.e. whether it is continuous, episodic or terminal, affects the influencing factors and events but also the conduct of the dissolution processes. An interesting future research avenue would be to find out what exactly these effects are. Does the nature of the relationship influence the potential dissolution process directly and indirectly through the predisposing factors, precipitating events and attenuating factors and events, as suggested in the model? How much does the nature of the relationship restrict the range of potential influential factors and events? Can any patterns or regularities of influencing factors and events with regard to the nature of the relationship be found? If patterns are found in the tailored software business, can they be found across industries?

The different stages of the dissolution process: i.e. the communication, consideration, disengagement, enabling, restoration, and the sensemaking / aftermath stages, all deserve dedicated research in their own right. For example, the communication stage is one turning point in the dissolution process. The decision to use either an exit or a voice strategy as well as the partner's response to the strategy may set the direction for the relationship, with regard to whether it will dissolve or can be saved. Therefore this stage merits extra attention. From the same reason, the communication stage can be very important to the overall perception of the relationship quality. As the relationship quality itself is a new area in research (see Järvelin 2001), there is a lot to be examined concerning dissolution quality.

Moreover, the communication stage is important to both the partners and the other actors in the network. As a change in a relationship influences also other connected relationships, a chain reaction within the network may follow. It can be assumed that in tightly connected networks the news of one relationship entering the dissolution phase may be communicated rapidly and widely through the network.

Also the position of the ex-partners may change because of the dissolution and because the partners may want to safeguard their positions. How could this safeguarding

be done? Could new relationships be created already during the early phases of relationship dissolution? If this is possible, what are the effects of this on the dissolution process? It might speed up the process or, on the contrary, it might be purposefully slowed down to complete the safeguarding before the final ending.

In addition, we do not know if dissolution processes, which include the search for a new partner (in other words switching), differ from other dissolution processes. The communication of a potential or actual dissolution may extend its influence from the suppliers and customer to yet other actors in the network, including potential employees and investors. An example of the latter is found in Hozier and Schatzberg (2000), as they study the impact of advertising agency terminations and reviews on the ad agencies' stock prices. This type of interdisciplinary research would benefit from co-operation of marketing and finance researchers.

The sensemaking and aftermath stage could offer companies and the individuals involved in relationship dissolution valuable opportunities to learn. However, before these can be fully taken advantage of, individuals may need to receive help in dealing with perhaps negative feelings and thoughts, as well as the regrets they may have. We need more information about the time after the dissolution, e.g. how individuals try to cope. How could we enable them to gain full advantage of the experiences by sharing them and learning from them?

Another issue that still remains unknown is what kind of network dynamics does the dissolution of a relationship engender. Halinen *et al.* (1999) present a conceptual elaboration on the relationship between dyadic change and network change. They refer to relationship dissolution as a radical change and as a connected change when it affects other actors and relationships in the network. A connected dyadic change may trigger radical changes in the remaining relationships, i.e. more relationship endings and/or new partners to the network.

There is also a need to study business life after the dissolution, as Havila (1996), and Havila and Wilkinson (1997) have demonstrated. It may well be that there is still life after the business relationship has ended and that this shred of life may result in a re-activation of the relationship or in the development of a new one (see ibid.). This leads the researchers to more in-depth conceptualisation of a dissolved and a sleeping relationship. On the other hand, if an ex-partner switches e.g. the service provider to a new one, we don't know whether the ex-partner acts differently in the new relationship because of the ending of the previous one. Moreover, there is an interesting question related to the customer base of a company: Are the 'switchers' different customers that the 'loyal ones', who have not switched from another supplier. And if they are, should they be treated differently? These questions have already been a focus of some research (e.g. Ganesh, Arnold & Reynolds 2000) on consumer relationships, but as far as business relationships are concerned, to my knowledge no study has addressed this issue.

Furthermore, relationship maintenance would benefit from further knowledge about the relationship restoration process. How can the use of the voice strategy instead of exit be encouraged? What kind of actions would satisfy the voicer? How does the relationship change after voice; for instance, does a successful voice make the bonds stronger? Does an episode of voicing increase the likelihood of voicing again, or is the one chance the only one that the business partner gets? The area of business relationship restoration would truly benefit from answers to these questions.

An issue that is very important is the conceptual elaboration of the concept of an existing business relationship. In dissolution research this is important because the dissolution process always starts from an existing relationship. If we as researchers do not explicitly state what we mean by an existing relationship, the relationship dissolution concept can be understood in many ways. This leads to the situation where we are perhaps researching different phenomena meaning that results of studies focusing on relationship dissolution cannot be compared. However, quite recent research is available, discussing the concept of an existing business relationship (e.g. Holmlund & Törnroos 1997, Lambe, Spekman & Hunt 2000, Mittilä 2000 pp. 144–155, Tähtinen 1999). Thus I urge researchers to make use of existing research in their conceptualisations of the relationship whose dissolution they start to investigate.

A few more words need to be said about conceptualisations. A recent review of dissolution research (Halinen & Tähtinen 2000) presents an even grimmer picture that the one I just painted in the previous paragraph. The review reports that research focusing on business relationship dissolution (mostly applying the Interaction and Network Approach as the theoretical background) has used altogether nine different terms to describe business relationship ending. What makes the conceptual confusion even worse, is that there are only four studies of the total twenty reviewed that explicitly define the concept they use in the study (ibid). Part of the explanation may lie in the newness of the research tradition: The theory of business relationship dissolution is only evolving; therefore each researcher uses the term that s/he feels appropriate, as no terminological conventions have been established.

Halinen and Tähtinen (2000) share the same concern as this study, as they suggest that different terms should be used when referring to different kinds of endings. They suggest e.g. that ending could be used as a general term, and that dissolution could refer to naturally ending relationships. I think that this suggestion deserves thorough consideration, although in this study I have used the terms dissolution and ending interchangeably. It remains a task for the future researchers to ponder whether the suggested meanings capture the variety of dissolution processes adequately.

Research on business relationship dissolution would also benefit from the some of the issues that are important in the consumer switching literature. For example the issue of emotions and their influence on the dissolution process as well as the speed and finality of the process could be a fruitful areas of research. Emotions can e.g. be assumed to play an important role in the sensemaking and aftermath stage. In stressful endings, if disappointment and/or sorrow are never brought out in the open and dealt with within the company, the individuals have to find alternative ways of dealing with these emotions. One solution might then be employee exit; in other words, if the person perceives the ending of a business relationship as a personal failure, that may push her/him into changing jobs (see Goodwin *et al*. 1997).

On the other hand, consumer research concerned with customer exit and switching behaviour could also derive insight from the model developed in this dissertation. Especially the processual nature would probably be easier to model in consumer settings, in cases where the consumer is the one who exits. In these cases, there would be only one main actor as the partner to the company, which would restrict the actor levels considerably, compared to different levels in a business relationship.

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Appendix 1 Interviews and discussions with industry experts

Kari Aarvala, Marketing Director, Tekla Ltd, 2.10.1998.
Jukka Haltimo, Vice President, SysOpen Companies Ltd, 29.10.1998.
Jarmo Huotari, Production Manager, Sonera Juxto Ltd, 3.11.1996, 7.11.1996, 29.9.1998.
Timo Julkunen, Business Unit Manager, CCC Companies, 28.10.1998.
Antero Jurvanen, Business Unit Manager, CCC Companies, 21.10.1998.
Esa Kettunen, Business Unit Manager, CCC Companies, 20.10.1998.
Liisa Koski-Lukkari, Marketing Director, ICL Finland Ltd, System Solutions, 29.10.1998.
Kari Mannermaa, Research Professor, Continuing Education Centre, University of Oulu, 24.9.1998.
Kimmo Rahkamaa, Managing Director, Dycom Ltd, 29.10.1998.
Juhani Saukkonen, Development manager, Continuing Education Centre, University of Oulu, 29.9.1998.
Pirkko Valtonen, IT-Services Association TIPAL, 7.11.1997
Reino Viippola, Development Manager, Modera Point Ltd, 3.11.1998.

Appendix 2 Letters to the case companies

COVER LETTER

26.6.1997	23.1.1998	9.9.1999
N.N. and P. P. The Customer Division Buycom	Managing Director Sellcom	Managing Director Conscom

PARTICIPATION IN A RESEARCH PROJECT

A research project is under progress at the Department of Economics of the University of Oulu on tailored software business relationships and the project dissolution processes. The researcher is Marketing Assistant, M.Sc. Jaana Tähtinen.

We kindly ask you and your firm to participate in this research. By participating you agree to let the researcher to interview employees who have been involved in software acquisitions which have either ended or are about to end. / By participating you agree to let the researcher to interview the employees who were involved in the project with Customer Division during 1997.

We hope that you will participate in this research project, which is further described in the enclosed letter. The key element in this project is the co-operation of the participating firms. If you have any questions involving the research, I will be more than happy to give you further information. The researcher, Jaana Tähtinen, will soon contact you by phone.

Yours truly,

Kimmo Alajoutsijärvi
Professor
University of Oulu

26.6.1997	23.1.1998	9.9.1999
N.N. and P. P. The Customer Division Buycom	Managing Director Sellcom	Managing Director Conscom

DOCTORAL THESIS ON THE DISSOLUTION PROCESSES OF BUSINESS RELATIONSHIPS
(The Dissolution of Business Relationships. Case: Tailored Software Acquisition)

Research project theme and task

There is little research-based information on long-term business relationship dissolution. At the University of Oulu there is a research project under progress that aims to model the ending processes of software projects. Marketing Assistant, M.Sc. Jaana Tähtinen is the researcher and Kimmo Alajoutsijärvi, Professor of the University of Oulu and Aino Halinen-Kaila, Professor of the Turku School of Economics and Business Administration supervise the licentiate thesis project

The significance and application of the results

The knowledge to be acquired from the research can be used in both the software buyer and seller firms. Modelling the dissolution of a relationship will result in a frame of reference for directing the end of the relationship – either by preventing it or by speeding up the progress according to the situation.

In return for their time spent, the firms participating in the research will get the change to see their dissolution process from the viewpoint of an outside researcher and to take advantage of the researcher's experience in developing firms and supporting the learning process. The firms will also be involved in developing scientific research that aims to take concrete business needs more into consideration. They will furthermore be the first who get to apply the research results.

Research method

Case research will be the used research method. The researcher will study two buyer-supplier relationships that have ended or that are going to end. This means that one of your firm's supplier relationship that has ended will be chosen, and that the researcher will model the relationship dissolution process with the help of interviews with the people involved in the relationship as well as archive material. The dissolution processes will be modelled and the different reasons for dissolution will be categorised according to the empirical data as well as

previous theoretical research. The data collection is envisioned to start in the end of the summer of 1997.

The letter to Sellcom: The relationship to be researched is the data warehouse project, between your firm and the Customer Division during 1996 - 1997. N.N. from Buycom has acted as the contact person and IT Director P.P. gave the permission for the research.

Personnel from the Customer Division who were involved in the project have already been interviewed. The participation of your firm is crucial so that the empirical material will cover both viewpoints

The letter to Conscom: The relationship to be research is the data warehouse project, between your firm and the Customer Division in 1997. This project represents a so-called 'normal' ending of a project. N.N. and M.M. from the Customer Division and Buycom acted as the contact persons; IT Director P.P. gave the permission for the research.

Personnel form the Customer Division who where involved in the project will be interviewed in September of 1999. The participation of your firm is crucial so that the empirical material will cover both viewpoints.

Confidentiality of the research

All the data gathered in the research is strictly confidential; thus only anonymised results will be published. Names of the firm or personnel or any details recognisable from the project will not be published unless otherwise agreed.

Your permission concerning the research

To guarantee your permission, Researcher Jaana Tähtinen would be more than happy to come to tell you more about the research and the collection of data. She will be contacting you shortly to make an appointment.

Yours truly,

Professor Kimmo Alajoutsijärvi
University of Oulu
Phone: (08) 553 2929
kimmo.alajoutsijarvi@oulu.fi

M.Sc. Jaana Tähtinen
University of Oulu
Phone: (08) 553 2920
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Appendix 3 Case study interviews and discussions

Case 1: The Customer Division and Sellcom

The buyer: The Customer Division

The interviewees in the focal relationship	Type of contact	Date and duration
System Manager Ada	2 interviews 1 telephone interview	18.12.1997, 30 min and 8.1.1998, 30 min 24.2.1998
Business Controller Adrian	1 interview	2.10.1998, 1 h 20 min
Project Manager Audrey	1 interview, e-mails	18.12.1997, 2 h 29.11.1998, 21.1.1998, 6.2.1998, 6.3.1998, 18.3.1998, 14.4.1998, and 31.8.1998
Market Analyst Jack	1 interview, e-mails	9.1.1998, 40 min 15.4.1998
IT-Manager Lucy	2 interviews, 1 telephone interview	3.2.1998, 1 h and 26.8.1998, 2 h 25.2.1998
Project Secretary Mabel	1 interview, 1 telephone interview	18.12.1997, 1 h 7.2.1998
IT-Manager Miriam	2 interviews, 1 telephone interview	8.1.1998, 1 h and 26.8.1998, 1 h 25.2.1998

The seller: Sellcom

The interviewees in the focal relationship	Type of contact	Date and duration
Consultant Jacob	1 interview e-mails 1 telephone interview	4.2.1998, 1 h 15.4.1998 25.2.1998
Sales Manager Joseph	1 interview e-mails	27.2.1998, 1 h 15 min 15.4.1998
Consulting Manager Julian	1 interview, e-mails	5.2.1998, 1 h 30 min 5.3.1998
Senior Management Consultant Laura	1 interview, e-mails	4.2.1998, 2 h (+45 min general discussion) 5.3.1998
Sales Director Martin	1 interview, e-mails	4.2.1998, 1 h 25.2.1998, 5.3.1998 and 10.9.98
Managing Director Wallace	2 interviews, e-mails	4.2.1998, 1 h and 26.8.1998, 1 h 23.2.1998

It was impossible to interview Sellcom's Project Manager Jeremy and Consultant Philip as they had left the company.

The network actor: Buycom, Head Office and IT Services:

The network actor interviewees	Type of contact	Date and duration
Manager Amos	1 telephone interview	23.1.1998
Technical Support Employee James	1 interview, 1 telephone interview	18.12.1997, 45 min 20.2.1998
Technical Support Employee Katherine	1 interview, 1 telephone interview	17.12.1997, 2 h 40 min 25.2.1998
Development Manager Lewis	1 interview, 1 telephone interview	8.1.1998, 1 h 25.2.1998
Information Technology Director Paul	2 telephone interviews	22.1.1998 and 24.2.1998

The network actor: Softcom

The network actor interviewees	Type of contact	Date and duration
Consultant Angus	1 interview, 1 telephone interview	3.2.1998, 30 min 26.2.1998
Project Manager Fanny	1 interview, 1 telephone interview	8.1.1998, 45 min 16.2.1998

Discussions concerning the selection of the case relationship:
The Customer Division:
A contact person from the Customer Division
- 1 letter, telephone and face-to face discussions, e-mails

IT Director from the Head Office
Director of 3rd Division
Director of 4th Division and a contact person from 4th Division
A contact person from the Head Office's Buying- and Logistics Services
- 1 letter and telephone discussions with each

Sellcom's Managing Director
- A letter, a telephone discussion and e-mails

Case 2: The Customer Division and Conscom

The table includes all the interviews that provided information about the case.

The buyer: The Customer Division

The interviewees in the focal relationship	Type of contact	Date and duration
Project Manager Audrey*	1 interview	18.12.1997, 2 h
IT Manager Lucy	3 interviews e-mails	3.2.1998, 1 h, 26.8.1998, 2 h and 9.9.1999, 45 min 25.2.1998 – 3.3.2001
Project Secretary Mabel**	1 interview, 1 telephone interview	18.12.1997, 1 h 7.2.1998
IT Manager Miriam	1 interview e-mails	21.9.1999, 45 min 15.11.1999

*The Customer Division's Project Manager Audrey had already left the company at the time of the interviews concerning Case 2. She was contacted by mail on 9.9.1999 for additional interviews, but no reply was received.
**Project Secretary Mabel was also out of reach during the autum of 1999, as she was on her maternity leave.

The seller: Conscom

The interviewees in the focal relationship	**Type of contact**	**Date and duration**
Senior Consultant Cyril	1 interview 2 telephone discussions e-mails	21.9.1999, 1 h 45 min 13.9.1999, 15.9.1999 13.9.1999, 14.10.1999
Managing Director Wilfred	1 interview e-mails	21.9.1999, 30 min 10.9.1999 – 3.3.2001

It was impossible to interview Conscom's Project Manager Godwin, as he was on sabbatical in the U.S.

The network actor: Buycom:

The network actor interviews	**Type of contact**	**Date and duration**
Technical Support Employee James	e-mails	15.9.1999
Technical Support Employee Katherine	1 interview, 2 telephone interviews	17.12.1997, 2 h 40 min 25.2.1998, 16.9.1999
Development Manager Lewis	1 interview, 1 telephone interview	8.1.1998, 1 h 25.2.1998

The network actor: Sellcom:

The network actor interviews	Type of contact	Date and duration
Consultant Jacob	1 interview e-mails 1 telephone interview	4.2.1998, 1 h 15.4.1998 25.2.1998
Sales Manager Joseph	1 interview e-mails	27.2.1998, 1 h 15 min 15.4.1998
Consulting Manager Julian	1 interview, e-mails	5.2.1998, 1 h 30 min 5.3.1998
Sales Director Martin	1 interview, e-mails	4.2.1998, 1 h 25.2.1998, 5.3.1998 and 10.9.98
Managing Director Wallace	2 interviews, e-mails	4.2.1998, 1 h and 26.8.1998, 1 h 23.2.1998

The network actor: Softcom:

The network actor interviews	Type of contact	Date and duration
Project Manager Fanny	1 interview, 1 telephone interview	8.1.1998, 45 min 16.2.1998

Discussions concerning the selection of the case relationship:

The Customer Division:
- Telephone and face-to face discussions and e-mails with two contact persons

Conscom:
- A letter and an electronic mail with the Managing Director.

Appendix 4 The discussion themes

This list was with the interviewer during the interview. The interviews started with questions that concerned the interviewee, after which he/she was asked to tell a story about what had happened in the project, from the beginning to the point when the interviewee was no longer involved with the project. After the story the interviewer asked additional questions from the list that did not come up spontaneously during the storytelling.

INTERVIEWEE:
- Education, working experience
- involvement in prior software projects in this firm, in other jobs
- what were the interviewees tasks in this project (steering committee, project group, project manager, test team, user etc.), what did the tasks include, did they differ compared to the ones in other projects? How much time did the project require in relation to total working hours?
- Did the interviewee know the other firm / personnel from the other firm beforehand?
- Does s/he have any contact with the other party on the firm/personal level now? Was there any contact right after the project ended?

COMPANY:
- Changes during the relationship
- in the personnel (in the steering committee, project group, supporting personnel)?
- in business (strategies, customers, focus points etc.)?
- in the organisation/group of companies?
- other changes?
- The significance of the relationship to the firm
- buyer: for what use was the software intended, significance for the firm, price, user volume?
- seller: the project's share of the turnover, personnel tied to the project, other simultaneous projects, was it a new type of software to be developed or was there previous knowledge of similar solutions?

RELATIONSHIP:
- Start of the relationship
- the determination of the need for the software (who was involved, how did it happen?)
- the requirement specification (who was involved, how did it happen?)
- the choosing of the supplier (who was involved, who were the supplier candidates, how did it happen?)
- contract negotiations, the contract (who was involved, how did it happen, the atmosphere?)

Project teams
- the line-up?
- the meetings, how often, the atmosphere?

The project stages
- the requirement specifications (who was involved, how did it happen, exceptional events, memorable episodes, nice events?)
- the development (who was involved, how did it happen, exceptional events, memorable episodes, nice events?)
- the acceptance testing (who was involved, how did it happen, exceptional events, memorable episodes, nice events?)
- the adoption for production runs (who was involved, how did it happen, exceptional events, memorable episodes, nice events?)

Ending the project
- was the decision to end the project made, if so, by whom, when, why, how such a conclusion was made?
- what happened after the decision in the firm – in the counterpart firm?
- what was told to the other party?
- project closures, reviews, post mortems etc.?

Atmosphere in the relationship
- eagerness to invest
- the level and fluctuation of trust (firm or person)
- the level and fluctuation of commitment (firm or person)
- eagerness and ability to co-operate

Problems in the relationship
- schedules, keeping the dead-lines?
- cost estimates?
- bugs, defects and other shortcomings in the software?
- how were problems solved (generally, were there any exceptions?)

The state and the future of the relationship
- willingness to co-operate (now / after the relationship had ended)
- how was the ending processed post mortem (within own firm, contacts with partners, other contacts)
- the evaluation of the whole relationship: success – catastrophe, was anything learned? Was the project a success on personal level, was anything learned?

Added after the first two interviews:

Review process
- who initiated it?
- who performed it?
- who was interviewed?
- how did the process proceed?
- results?

The official complaint
- how did it progress?

Appendix 5 Glossary of software terms

Adapted from Jones C (1994) Assessment and Control of Software Risks, Englewood Cliffs, Yourdon Press.

Acceptance test	A form of testing in which users exercise software prior to formally adopting if for production runs. By definition, acceptance testing should be formal.
Application	A generic term for a program or system that handles a specific business area. The term is used more often for information systems, but is a generic term that can be applied to systems and real-time software too.
Application software	Software developed primarily for a business or managerial purpose. The term overlaps MIS and information systems, and is often used in contrast to systems software or software necessary to operate a computer.
Architecture	Generally defined as some intermediate stage between the initial requirements and the specifications during which the entire complex of hardware, software, and design considerations will be viewed as a whole. The output is an architecture specifications.
Bugs	Refers to errors or defects that find their way into programmes and systems. Some software quality researchers find it desirable to replace the term with other terms such as errors, defects, faults and failures.
Coding	A common definition of coding includes the tasks performed by individual programmers; i.e. low-level design, actual writing of source code, desk checking, and unit testing. Coding is not always the major cost element of the software. For large systems, defect removal costs and paperwork costs usually exceed coding costs.
Consultant	A contract programmer who works for a standard rate.
Customer support	Answering user questions and helping software clients to use the product.

Data warehouse	A relational database filled with large volumes of cross-indexed historical business information that users access with desktop-based query tools. The warehouse resides on its own server and is separate from the transaction-processing or run-the-business system.
Defect	An error or problem which if not removed could cause a program to either fail or to produce incorrect results.
Defect removal	The sum of all activities that are aimed at removing defects from software: desk checking, reviews, inspections, editing and all forms of testing.
Design	The tasks associated with specifying and sketching out the features and functions of a new application prior to formal coding.
Desk checking	The private review and debugging that individual programmers carry out.
Development	The sum of all tasks and activities necessary to build a software product.
Documentation	The printed and displayed materials which explain an application to its users.
Enhancement	The modification of an existing program or system in order to add new functions that were not present before the enhancement took place.
Environment	The set of tools and the physical surroundings in which software is developed.
Fault report	A written description of a software defect. Fault reports are normally written by someone other that the programming staff themselves.
Hardware	A physical computer and its peripherals such as disk drives and printers.
Information system	A software that produces some kind of data or reports to the staff and management of an enterprise.
Integration	The process of fitting together the various components of a system so that the entire system works as a whole.
Interface	The coupling between two or more parts of a program or system, or the coupling between two or more systems. Errors and bugs associated with this coupling are a major source of trouble for software.
Invalid defect	A bug report which, upon analysis, is either not a bug at all or if it is a bug is one in some other software product rather than the one to whom the bug report was sent. Commercial software vendors routinely receive in excess of 15 % invalid defect reports from their clients, with user errors, hardware errors, and errors in some other product being the largest contributors to the load. Substantial costs accrue to software vendors in exploring the invalid defect reports and explaining the users where the true fault resides.
Language	The specific assembled, compiled or interpreted language used for a program or system (e.g. Basic).

Legacy system	The production database from which the source data is migrated to the data warehouse.
Machine independence	Software that can run on multiple computer types.
Maintainability	The relative ease or difficulty of modifying an existing program or system. The effort of maintaining a well structured software is much smaller that of poorly structured.
Maintenance	Has two meanings. 1. Any change made to an existing program or system once it enters production. 2. Defect repairs made to an existing program or system after it is delivered to users.
Major defect	A high severity bug that often causes total product failure or serious disruption.
Meeting and communication costs	One of the hidden but very costly aspects of large software development organisations. Meeting and communication costs can even exceed the coding costs.
Milestone	A major checkpoint in the activities being carried out on a software project (e.g. completion of requirements, completion of coding etc.).
Minor defect	A comparatively trivial bug such as a spelling error.
Monthly status reports	For large software projects, it is normal to report progress and problems on a monthly basis.
Physical environment	The office space, furniture and basic surroundings available for software staffs.
Platform	The hardware and support software which any given program is intended to operate.
Politics	Management disputes and disagreements that are common in all large organisations. Politics have a surprising and major impact on software, and more than a few large projects have been disasters or even cancelled because the various managers and executives involved disliked each other and refused to co-operate.
Post mortem	A meeting of management and staff held after completion of a software project to discuss what went right, what went wrong, and what might be done in the future to improve development. Post mortems normally take about 4 hours and are well worth the investment.
Program	A unified collection of code, often segmented into modules, that performs a specific business or technical task. Programmes are usually considered to be smaller that systems.
Programming	All the tasks needed to develop and maintain software: design, specifications, coding, testing, documentation etc.
Project	Set of programmes and deliverables that will be created using more or less consistent methods by a team that is assigned to the task more or less from the beginning to end.

Project management tasks	Tasks which managers are normally responsible when in charge of a software. The usual set of project management tasks includes planning, estimating, sizing, tracking, measurement, and assessment.
Project manager	The senior executive in charge of a software project.
Prototype	A partial version of a programme done as an aid to designing the final product.
Quality	This term is extremely ambiguous for software. It has been variously defined to mean conformance to user requirements, high levels of customer satisfaction, reliability, and a low number of bugs found in a given program or system.
Quality assurance	The overall meaning of the word is some type of formally assigned responsibility for ensuring that quality is not ignored.
Red flag item	A serious problem that requires management attention. The term is used in the context with monthly reporting.
Reliability	The failure interval associated with a program or system in actual usage.
Requirements	The statement of needs by a user that triggers the development of a program or a system. It has been observed for software that the requirements themselves are among the chief sources of error. It is very common that requirements for software projects are incomplete, ambiguous, and frequently change.
Resource	A worker or staff member.
Resource levelling	Balancing the available staff hours or days against the tasks to be accomplished.
Resource overlap	A staff member working on several tasks during the same day, such as design and coding.
Reverse appraisal	A review of managerial performance by employees who report to the manager.
Review	A more or less formal examination of the specifications, code or other deliverable from a software project, or of the project as a whole.
Risk	The probability that a software project will experience undesirable events, such as schedule delays, cost overruns, or outright cancellation. In considering aspects of risk for large systems, the risk of schedule slippage approaches 100 % since most such systems are late. The risk of cost overruns is greater that 50 %. The risk of outright failure and cancellation is about 10 %.
Risk analysis	A more or less formal study of the potential hazards that might be encountered in the course of developing a new software system.
Software	Computer programmes and systems and the associated documents that describe them.
Software engineering	The application of accepted canons of professional knowledge to the tasks of software development and maintenance. In reality, what is called software engineering is often very far form the ideal.

Specifications	A general term for a wide variety of paper-based descriptions of a program or system.
Standard	A set of protocols that should be followed unless a formal deviation is approved.
System	A linked collection of programs or components that performs a generic business or technical function. The largest size unit that is used for software.
System test	The final stage of testing on a completed project, when all hardware and software components are put together as a whole.
Testing	Set of defect removal tasks that include executing all or part of the application on a computer.
Training	Providing some form of tutorial or education to staff members.
Usability	The overall effort required to learn, operate, and utilise software or hardware.
Warranty	A guarantee from a vendor to a client that a product will behave as advertised. Software has been notably for resistance to offering warranties.
Work group	A set of people who must communicate and share materials while working on a common project.

Appendix 6 Internal documents used in the case descriptions

Case 1: The Customer Division and Sellcom

- Minutes of project group meetings
- Minutes of steering committee meetings
- Minutes of complaint meetings
- Risk analysis report
- Project plan
- Overheads from internal presentations (user groups, status report, experiences from the project, suggestion to end the project)
- Project review
- Defect and defect removal reports
- Communication between Sellcom and Customer Division (e-mails, faxes and memos)
- Internal communication within Sellcom and within Customer Division (e-mails, internal memos).
- Acceptance test –release agreement, acceptance agreement

Case 2: The Customer Division and Conscom

- Overheads from internal presentations (status report, experiences from the project)
- Software modification report/diary, January – April 1997.
- Memos concerning the events that took place in January and February 1997.

Appendix 7 Coding schemes

First coding scheme

4. Dissolution process
    - 1.1. Assessment stage
        - 1.1.1. Individual level
        - 1.1.2. Company level
    - 1.2. Decision-making stage
        - 1.2.1. Individual level
        - 1.2.2. Company level
    - 1.3. Dyadic communication stage (dyadic level)
    - 1.4. Network communication stage (network level)
    - 1.5. Disengagement stage (dyadic level)
    - 1.6. Aftermath stage
        - 1.6.1. Individual level
        - 1.6.2. Company level
        - 1.6.3. Dyadic level
        - 1.6.4. Network level
    - 1.7. Restoration stage

2. Reasons for dissolution
    - 2.1. Predisposing factors
        - 2.1.1. Task-related
        - 2.1.2. Actor-related
        - 2.1.3. Dyad-related
        - 2.1.4. Network-related
    - 2.2. Precipitating events
        - 2.2.1. Actor-related
        - 2.2.2. Dyad-related
        - 2.2.3. Network-related

3. Attenuating factors
   3.1. Actor-related
   3.2. Dyad-related
   3.3. Network-related

4. Dissolved relationship
5. Existing relationship

Free nodes:
- Communication
- Previous contacts
- Time spent in the relationship

Second, modified coding scheme

1. Dissolution process
   1.1. Consideration stage
      1.1.1. Individual level
      1.1.2. Company level
      1.1.3. Dyadic level
      1.1.4. Network level
   1.2. Decision making stage
      1.2.1. Individual level
      1.2.2. Company level
      1.2.3. Dyadic level
      1.2.4. Network level
   1.3. Communication stage
      1.3.1. Company level
      1.3.2. Dyadic level
      1.3.3. Network level
   1.4. Disengagement stage
      1.4.1. Individual level
      1.4.2. Company level
      1.4.3. Dyadic level
      1.4.4. Network level
   1.5. Sensemaking/Aftermath stage
      1.5.1. Individual level
      1.5.2. Company level
      1.5.3. Dyadic level
      1.5.4. Network level
   1.6. Restoration stage
      1.6.1. Individual level
      1.6.2. Company level
      1.6.3. Dyadic level
      1.6.4. Network level

2. Factors influencing the dissolution
    2.1. Predisposing factors
        2.1.1. Task-related
        2.1.2. Actor-related
        2.1.3. Dyad-related
        2.1.4. Network-related
    2.2. Precipitating events
        2.2.1. Task-related
        2.2.2. Actor-related
        2.2.3. Dyad-related
        2.2.4. Network-related

3. Attenuating factors and events
    3.1. Actor-related
    3.2. Dyad-related
    3.3. Network-related

4. Dissolved relationship
5. Existing relationship
6. Background information
    6.1. Buyer
    6.2. Seller
    6.3. Gender
        6.3.1. Female
        6.3.2. Male