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changing to third party **LOGISTICS**

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Abstract

Third party logistics (TPL), the procurement of an integrated set of logistics services in a long-term relationship between a shipper (goods owner) and a service provider, is today a viable option for how companies carry out their logistics activities. Very little has been written on implementation or change issues in a TPL setting; these issues are identified as important, but not elaborated. There is however reason to believe that implementation of TPL arrangements, or rather establishment thereof, involves a complex change process involving substantial change for a wide range of actors in both the shipper's and the provider's organisation.

When comparing literature that deals with the TPL establishment process with a stream of research that is concerned with logistics change, it comes to light that there is a discrepancy between the theoretical and methodological foundations of the former works, and what is written in these pieces regarding the process. It is concluded that recommendations for how to manage the establishment process are given without being founded in a theory of process, or research designs capable of studying process. The theoretical underpinnings of TPL literature are founded in a view of change as a matter of conducting rational analysis and conceiving the strategically wisest decisions for the logistics system as a whole. Implementation is viewed as an unproblematic exercise of issuing directives to affected actors, asserting that all actors are rational, therefore rationally conceived decisions will be accepted and implemented accordingly.

Therefore the overarching purpose of this research is:

To explore the change process of third party logistics establishment

To fulfil this purpose the two streams of research mentioned above are combined. A meta-model of process consisting of the three interrelated dimensions *content*, *context*, and *process* forms the starting point for the study of process, but this is not sufficient for a study of change; a theory of change which is capable of capturing the mechanisms of the change process as it unfolds is also needed. Therefore the theory of change of the second stream of research mentioned above is adopted.

The theory of change encompasses three *models of change*, which are archetypical representations of the mechanisms underlying change processes according to different assumptions of what change is and how change comes about. These models are denoted the *linear*, the *processual*, and the *circular*. One important aspect of this theory of change is that the approach to change should be aligned with the extent of

learning requirements on the actors who are affected by or involved in the change. An actors perspective is therefore called for, and adopted in this thesis.

This thesis is the first step of a wider research effort concerned with studying the process of establishing TPL. Therefore, of the three dimensions of change, the *content*-dimension is excluded from study in this thesis. Governed by the meta-model of process, two research objectives are formulated:

To explore the context within which the TPL establishment process unfolds and describe the contextual dependence of this process

&

To describe the change process of TPL establishment in terms of the linear, processual, and circular models of change

The empirical investigation applied is a single-case retrospective study, in which the case is the establishment process between a Swedish company and an international TPL service provider. A total of fifteen actors have been interviewed; ten on the shipper side of the dyad, five on the provider side. Although the TPL establishment process is an interorganisational process, this thesis focuses on the intraorganisational process of the shipper, why the empirical material from the other side of the dyad is not used in this thesis, The interorganisational aspect, as well as the intraorganisational side within the provider's organisation are nevertheless important, and will be included in future research.

The interviews were carried out in an unstructured manner, in which the interviewees were asked to retell the story from their own perspectives. Actors from varying positions, who were involved in the process, are included in the study; in the total sample all groups who were most affected or involved are represented. The interviews rendered ten stories of the studied process.

These stories were then analysed by means of a pattern-matching logic, in order to seek out the important contextual dependencies of the process, and to explore the mechanisms of the change process, as it evolved in context.

After having conducted this first step of the ongoing research effort, four main conclusions can be drawn:

- ▷ The TPL establishment process is context dependent.
- ▷ Not only rational mechanisms are at play in the process.
- ▷ It is important to acknowledge actors, not only systems.
- ▷ It is important to acknowledge the process, not only the decision.

Acknowledgements

The book that you now hold in your hands is a thesis that deals with the change process associated with establishing third party logistics. Writing this book has been the main content of the first part of a personal process of mine. Staying true to the theory of process adopted in my research, this discussion should however encompass not only content, but also process and context. A very important ingredient of the process has been the guidance from my advisors. I am indebted to Mats and Dan for their patience, wisdom, and encouragement as I have hovered between hope and despair. Thanks to you, and Jan and Håkan's invaluable comments and support during the end of the writing process, despair has gradually vanished and been replaced with hope and eventually a finished thesis.

Context is indeed important, not least in the case of my research process. One important aspect are my colleagues at Logistics Management and the department in Linköping who make any working day enjoyable and interesting; Björn and Maria for camaraderie and understanding when it is needed, Bengt for invaluable golfing tips, Daniel for being cheerful and always up for a chat... I could go on for a couple of pages if I should mention all who deserve mention, but I will have to cut it short and say: Thank you all! Some have not only been part of context, but also taken part in the process. Kicki and Mona deserve special mention for helping out when it was needed the most.

An important starting point for this study of process was finding suitable study content. I found good content indeed, and to all you within "*Shipper*", "*Provider*", and "*Logicon*" who have shared your time and experiences of the process that became my case, I wish to extend my gratitude. The stories you have told me have become a full and rich case in this thesis, and it is my hope that you will find the text that I have added around the case interesting and worthwhile reading. I wish also to thank the funding bodies, Vinnova and Ollie and Elof Ericsson's foundation for granting the funds that has made this research effort possible.

Friends and family are an important part of personal context, and I wish to express my gratitude and apologies to all those I have neglected, and have let me neglect them, during the last and most intense phase of this process.

Last, but on the contrary to least, a "thank you" that the English language does not contain powerful words enough to express goes to Anneli. Without your encouragement, support, and love this book would never have been written.

To all you who have in one way or the other contributed to my process, I raise my glass of Laphroaig, with its "... iodine-like, seaweed character of Islay" (Jackson, 1999, p. 241), and propose a toast. Cheers, and thank you!

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1 Introduction

Third party logistics (TPL), the procurement of an integrated set of logistics services in a long-term relationship between a shipper (goods owner) and a service provider, is today a viable option for how companies carry out their logistics activities. Recent research has shown that a steadily increasing number of companies choose to use this option, and that the market for TPL services is growing rapidly, in both Europe and the US (Berglund *et al*, 1999; Langley *et al*, 2002). According to a recent study¹, the total turnover of US TPL industry grew by 6,9% from 2001 to 2002, posting an eighth consecutive year of stronger growth than the overall US GDP. There are also indications that the services provided in TPL arrangements are increasing in both scope and complexity (Berglund, 2000) , and Razzaque & Sheng (1998) point at a growing interest for the phenomenon in journals and other publications.

Another area where research interest is growing is the management of logistics change, literature on the subject being however rather sparse to date. Carlsson (2000), who studies operative logistics change, concludes that logistics research has mainly focused on the reasons for and effects and content of logistics development, i.e. largely answering questions about *why* and *what*. Management of the change process itself, i.e. the *how* issue, has received much less attention and Carlsson (2000) points out that although this dimension has been identified as important, it has in general not been thoroughly examined. More systematic research on management of different logistical change efforts is called for.

Looking at the TPL field from this angle reveals that it is no exception, very little has been written on implementation or change issues in a TPL setting. These issues are, as for the logistics field in general, identified as important, but are not elaborated. As one of the most commonly cited implementation problems in their 1994 and 1995 surveys of shippers, Lieb & Randall (1996) mention *overcoming resistance to change*, a finding that is repeated in the 1997 provider survey (Lieb & Randall, 1999). In another survey, Langley *et al* (2002) quote *unsatisfactory transition during the implementation stage* as one of the most commonly cited areas of improvement with TPL providers. Looking back in time, Maltz & Lieb (1995) identify shippers' inability to change internal processes as possible impediments to TPL.

¹ See <http://www.eyefortransport.com/index.asp?news=35801> and http://3plogistics.net/Latest_Mkt/Logmkt.htm

This goes for the transition to TPL, i.e. the activities that constitute the changeover from the state before TPL was used, to an up-and-running partnership. But there is more to establishing TPL than merely implementing a new solution. This is something that takes place through a lengthy process, and within a TPL arrangement the parties must also work with development and change within the scope of the ongoing partnership, an equally important factor for achieving long-term success (Leahy *et al*, 1995). Recent studies however reveal that shippers regard TPL providers as very good at handling operations and responding to problems arising in the short term, but perform a lot worse when it comes to system design, preventing problems, or supporting longer term development (Rosén, 1999; Andersson & Jockel, 2002; Langley *et al*, 2002). In Halldórsson's (2002) recent dissertation, similar findings can be made in the empirical material.

Establishing a TPL arrangement might constitute an extensive change, and change does not come about overnight or without effort. Several actors on different levels in both the shipper and provider organisations have to take action, in order to establish the partnership. That is the topic of this thesis, i.e. the TPL establishment process, which I define as all those activities that are necessary for bringing the two parties from a state when the shipper provided the logistics services in-house, or procured them as single services from one or multiple providers but managed them in-house, to a state when these activities are transferred to, and provided and/or managed by one provider under a long-term, partnership-like arrangement.

An initial question of this study has been how the change process of establishing TPL has been treated in the TPL literature. After having studied a number of pieces that deal with TPL², it comes to light that only a few authors have provided descriptions of this process, or parts thereof. These accounts quite consistently depict the process as a sequence of steps or phases. This is as far as contemporary TPL literature goes regarding processual aspects. There is however reason to believe that the establishment process has great importance for the success of TPL efforts:

Because outsourcing logistics activities represents a major shift in the way business is conducted, it involves numerous changes in interpersonal and intercorporate relationships. Those changes must be identified early in the process and managed in a very proactive manner if the shift to third-party logistics is to produce the maximum benefits while minimizing related costs. Well defined and effectively delivered training programs would appear to be quite important in easing the transition.

(Lieb & Randall, 1996, p. 320)

² See Chapter 2 and Appendices 1 to 4.

This quotation is an example of what Carlsson & Mårtensson (1994) entitle *normative imperatives*, a last-chapter checklist of briefly mentioned critical factors for achieving the full effects of the logistics concepts discussed in the particular paper. This has given rise to a second initial question, which concerns how issues of change processes are treated in logistics literature. This second question is answered in chapter 3.

The TPL literature lacks studies into change issues. Critical success factors have been recognised (see e.g. Andersson, 1997; Razzaque & Sheng, 1998), but no guidance is provided as for how to fulfil them, e.g. how to manage change, how to define and deliver training programmes. An addition to the current theoretical base is needed to advance along the *how* dimension of TPL establishment. There is evidence that TPL establishment is complex and very time consuming. Maltz & Lieb (1995) conclude that it may take up to 18 months from forming a project team to signing a contract; Andersson & Norrman (2002) have witnessed even lengthier processes, 25 and 32 months respectively for two separate cases.

Currently more complex arrangements of increasingly more advanced logistics services are being outsourced (Berglund, 2000; Langley *et al*, 2002). A proposition is that this will require different approaches to establishing TPL relationships in order to reap the potential rewards of such arrangements. There are authors who argue that in the ever faster pace of change, and increasing complexity, the importance of mastering logistics change increases (Carlsson & Sarv, 1997; Abrahamsson & Wandel, 1998; Sarv *et al*, 2002). As TPL usage is increasing in numbers of users and in the scope and complexity of the service arrangements, I argue that advancement along the *how* dimension of TPL establishment is absolutely necessary.

In-depth studies of the TPL establishment process are thus called for, as the critical success factors stated by authors in the field give little support for companies considering the TPL option. If research along this proposed stream ultimately could render prescriptions, it would benefit both shippers and providers. Studies have shown that issues related to transition and implementation are seen as impediments to success by both shippers and providers (Lieb & Randall, 1996, 1999; Langley *et al*, 2002). For the shipper, a sound approach to change might shorten the establishment time, reduce initial problems and associated extra costs, all of which ultimately would contribute to competitiveness and profitability.

This most likely applies to providers as well; if TPL establishment could be eased it is reasonable to believe that providers would be able to increase profitability of new accounts, and to retain existing ones. The survey by Langley *et al* (2002) concludes that highly satisfied clients are much more likely to renew a contract, than those that are merely satisfied, and that the cost of acquiring a new customer is five times that of retaining an existing one.

purpose

It is clear that more research is necessary to develop knowledge on the change aspect of TPL establishment. The ultimate goal of any such effort should be to issue prescriptions for how companies entering TPL arrangements ought to manage change, but in order to do this, an exploration of the change to TPL is needed first. Therefore, the overarching purpose of this licentiate thesis is:

To explore the change process of third party logistics establishment

To fulfil this purpose, I have chosen to combine the two streams of research mentioned above, i.e. the stream that deals with the process of establishing TPL arrangements, and that which deals with management of logistics change. This combination gives rise to a number of questions, which I attempt to answer through an empirical investigation of the process.

2 Third party logistics

This first theoretical chapter is intended to give a more detailed answer to the first initial question raised in the introduction: *How has the change process of establishing TPL been treated in TPL literature?*. But before this answer can be given, it is necessary to describe what the focal phenomenon is, i.e. third party logistics.

TPL is a relatively recent concept, at least in the logistics literature. The first instance in which the term is used that I have come across³ is in a CLM⁴ book authored by LaLonde & Cooper in 1989. Contemporary to this book is another CLM book (Bowersox *et al*, 1989) in which *third party arrangements* are discussed as one of several different types of *logistics alliance*. There is also an article by Sheffi (1990). In a contemporary article, Bowersox (1990) discusses logistics alliances and *logistics partnerships*; terms that in literature are used along with *contract logistics* with basically the same meaning as TPL (Skjoett-Larsen, 1995; Pruth, 2002). But van Laarhoven *et al* (2000) point out that the terminology in the field is not consistent; in some instances TPL might be used as a label for traditional, arm's-length provision of single services, whereas in other instances the author uses the term to designate the provision of an integrated set of services under a long-term, partnership-like arrangement.

CLM offers a definition of TPL in its glossary of terms⁵:

Third-Party Logistics (3PL): *Outsourcing all or much of a company's logistics operations to a specialized company.*

This definition is however not complete without also quoting the definition of TPL provider:

Third Party Logistics Provider: *A firm which provides multiple logistics services for use by customers. Preferably, these services are integrated, or "bundled" together by the provider. These firms facilitate the movement of parts and materials from suppliers to manufacturers, and finished products from manufacturers to distributors and retailers. Among the services which they provide are transportation, warehousing, cross-docking, inventory management, packaging, and freight forwarding.*

³ This is not to be interpreted as I mean that I know for sure that this is the first instance it is ever used by anyone.

⁴ Council of Logistics Management

⁵ Available through CLM's website <http://www.clm1.org/>, Updated October 1st, 2002.

By these definitions TPL appears as an application of the outsourcing concept on the logistics function, in which an outside company provides a considerable part of the logistics service needs of the outsourcing company. But there is something more than outsourcing included in this definition, as it is stated that a bundling of these services is preferred.

Looking at a recent European definition...

Third-party logistics (3PL) are activities carried out by an external company on behalf of a shipper and consisting of at least the provision of management of multiple logistics services. These activities are offered in an integrated way, not on a stand-alone basis. The co-operation between the shipper and the external company is an intended continuous relationship.

(ProTrans, 2001, p. 2)

... a slightly different picture appears, as this definition stresses that the TPL arrangement encompasses activities which might be management of the provision of the services, not only producing the services as such. This means that the third party – with whom the shipper establishes the arrangement – must not actually produce the operative services, but in such a case is responsible for integrating and managing the producing party(-ies), i.e. lower tier providers⁶. Tiered execution of services is quite common among TPL providers (Berglund, 1997).

There is also a clearer statement regarding integration of multiple activities; whilst the CLM-definition states that bundling is *preferred*, this latter definition entirely excludes provision of single services or management activities. It also emphasises the temporal dimension, as it is stated that the relationship between shipper and provider is seen as continuous.

It is to this latter type of definition the TPL research that previously has been carried out at Linköping University ascribes (see e.g. Andersson, 1997; Berglund, 2000). I adhere to this definition, as it opens up for multi-tiered provision structures in which the third party acts as an integrator, whilst at the same time blocking out provision of single basic services such as transportation.

Looking at the CLM definition, it states that TPL involves *outsourcing* of a company's logistics operations. In order to relate TPL to outsourcing, a number of definitions of the latter are given below:

⁶ For a discussion of execution tiering in TPL arrangements, see Abrahamsson & Wandel (1998).

IS outsourcing, the process of turning over part or all of an organisation's IS functions to external service provider(s)...

(Lee *et al*, 2000, p. 1)

... moving functions or activities out of an organisation...

(Ellram & Maltz, 1995, p. 55)

... the process of transferring an existing business activity, including the relevant assets, to a third party.

(Lonsdale & Cox, 1998, p. 1)

When comparing these definitions to the definitions of TPL above, it is clear that TPL and outsourcing are closely related, but that TPL according to the definition to which I adhere is something that is more complex, in that it encompasses more than outsourcing of single services. It is a long-term partnership arrangement between two parties – a shipper and a service provider – encompassing management and/or provision of multiple logistics services. Berglund (2000) points out that TPL means that service provision shifts from being a mere functional support activity (as in traditional single-service provision), to an integrated component of the shippers logistics process, which in turn makes closer relationships between the parties necessary. Nevertheless the fundamental characteristic of both these concepts is that the responsibility for something is transferred from the own organisation to an outside party. Because of this close kinship, literature dealing with outsourcing of non-logistics functions is also included, in order to find out if there is knowledge on the process of establishing outsourcing arrangements that could be applied to the establishment of TPL.

A partnership arrangement obviously does not just occur by itself, overnight and without effort. Companies that enter a TPL arrangement, put simply, move from a state before TPL to one where the arrangement is up and running. This move is what I in the introductory chapter define as the *TPL establishment process*.

I have chosen to use the term *establishment* in contrast to the more commonly used *implementation*, since a partnership is hardly something that can be implemented, and using the latter would denote a view of TPL as something that would be a simple execution of a conceived plan. As I argue further on in this thesis, this is the dominating view of contemporary TPL literature and it is my firm belief that this view hampers the development of solid prescriptions of how to approach the establishment of TPL. In the following section, I present how the TPL establishment process is described in the literature.

a literary point of departure

In the introduction to this thesis it is claimed that very little has been written on establishment issues regarding TPL; this claim is based on an initial literature survey. The survey covers 38 articles in academic journals, two conference papers, seven academic dissertations and theses (henceforth theses), one academic research report and one book. An overview of the surveyed literature is offered in Appendix 1, in which there is also a description of how the survey was carried out. As concluded above TPL is closely related to the more general concept outsourcing, therefore a survey of literature that deals with outsourcing of functions apart from logistics has also been conducted. In this second survey, 35 articles in academic journals, two conference papers, two academic theses, and five books are included. An overview is offered in Appendix 2.

Appendices 1 and 2 are of the same format, offering a condensed overview of the type and scope of the surveyed literature. The two bodies of literature – TPL and general outsourcing – share two common traits: An overwhelming majority discuss outsourcing from the perspective of the buyer in the buyer-supplier dyad, and most of the literature deals with the decision to outsource as such. One conspicuous difference is that TPL literature is dominated by empirically founded works, whereas general outsourcing literature is equally populated by pieces that approach the phenomenon from a conceptual / theoretical angle. The empirical TPL works are mostly in the form of cross-sectional studies of TPL users, which render descriptive statistics of types of services outsourced, most common reasons for outsourcing, etc. Razzaque & Sheng (1998) point out in their literature survey that TPL publications, with few exceptions, tend to “... *either focus on specific aspects of third-party logistics, or are narrow in their scope and objective*” (p. 90). This description is to some extent valid also for the more recent publications included in the survey, although pieces that offer more than demographic overviews of TPL users are becoming more common.

Another visible difference between TPL and general outsourcing literature is that the theoretical foundations of TPL articles commonly are other works dealing with TPL, probably due to their empirical nature, whilst general outsourcing literature to a greater extent leans on explicitly identified theoretical foundations or “schools”, such as transaction cost economics⁷ or the resource-based view of the firm⁸.

In both these domains, there are a number of works that discuss the process of establishing a TPL or outsourcing arrangement. These pieces I have chosen to go a little deeper into in the remainder of this chapter.

⁷ Common references are Coase (1937) and Williamson (1975; 1985; 1991).

⁸ Common references are Penrose (1959), Wernerfelt (1984), and Prahalad & Hamel (1990).

the third party logistics establishment process

The first instance in the literature I have studied where the process of establishing TPL is mentioned is in fact in the same publication in which I have found the first mention of the term TPL, that is in LaLonde & Cooper (1989). The authors offer a brief account of a suggested *partnership development process* in conjunction with different approaches or strategies for how to manage transition to a new relationship. The four-stage process, the illustration of which is presented in Appendix 3 along with the illustrations of change strategies, is an incremental and iterative cycle. Unfortunately, the presentation offered by LaLonde & Cooper is very short, and it is unclear whether their process outline is conceptually conceived, or empirically based. The strategies for managing change also offer very little support, as these are merely descriptions of whether the transfer of service provision should be carried out in one great leap, in smaller steps or gradually. No other issues regarding change are mentioned, why I choose to disregard this piece from here and onwards.

It is not until the latter half of the nineties that a small number of publications deal with what was earlier defined as the TPL establishment process, one of the first being Skjoett-Larsen (1995). In this paper, the author presents six general phases of a TPL relationship. In a contemporaneous dissertation, Sink (1995) develops a framework for the buying process for TPL services, which is further elaborated in an article by Sink & Langley (1997). Bagchi & Virum (1996) propose a three-phase planning and management model for logistics alliances. In a later article (1998), these same authors develop this model further⁹ and name it a logistics alliance process model, which according to the authors fits into the well-known PDCA-cycle¹⁰. The most recent process description is offered by Andersson & Norrman (2002), who look into the purchasing process for TPL services.

Even though the terminology used by these authors differs somewhat, as does the scope of activities included in the process, as well as the internal order of some of the activities, I find that they offer quite a consistent picture of the TPL establishment process. Below I will present the contributions to this picture that each of these works give, and combine these into one general process outline. I have chosen to use Skjoett-Larsen's six-phase model as a starting point. In Table 1 a translation of the original summary offered by the author is presented. Instead of incorporating the graphical illustrations offered by the other authors here, these are presented in Appendix 3.

⁹ Although there is no direct reference in the latter paper to the former, the two models are quite similar and seem to be based on partly the same empirical material.

¹⁰ See Deming (1986)

*Table 1. Phases and activities in a third party-relationship.
(Skjoett-Larsen, 1995, pp 24-25, translation from Danish)*

Phase	Activities
Preparation	<ul style="list-style-type: none"> • Current logistics cost • Service level targets • Current service level assessment • Develop request for proposals
Selection	<ul style="list-style-type: none"> • Screening of TPL market • References • Pre-qualification round • Evaluation of hard and soft factors • Mutual visits
Contract	<ul style="list-style-type: none"> • Main contract • Working manuals
Implementation	<ul style="list-style-type: none"> • Establishment of team organisation • Interfaces between information systems • Staff exchange • Staff training • Joint problem solving • Frequent meetings
Improvement	<ul style="list-style-type: none"> • Continuous improvements • Fair risk-sharing • Fair gain-sharing • Education and training • Develop social contacts
Renegotiation	<ul style="list-style-type: none"> • Evaluation of the process • Assessment of changes in working environment • Contract revision • Expansions/Restrictions • New tendering round/Renegotiation

preparation

The first phase of TPL establishment is according to Skjoett-Larsen (1995) one that is mainly about the shipper doing their homework properly. As outsourcing logistics activities have widespread strategic and organisational consequences, it is important that any decision to outsource is preceded by an extensive analysis of the current

logistics system, costs, and service levels, as well as establishing cost service targets to be achieved through TPL. This is emphasised also by other authors, e.g. Lal *et al* (1995) and Boyson *et al* (1999). In addition, Andersson & Norrman (2002) stress the importance of specifying the scope and types of service that are to be performed by the provider in the future TPL arrangement. These activities are basically the same that Sink & Langley include in the second step of their buying process, i.e. *develop feasible alternatives* (see Appendix 3)

Sink & Langley and Bagchi & Virum offer process descriptions that differ from those of Skjoett-Larsen, in that these include a step or phase prior to preparation, *Identify need to outsource logistics* and *Need awareness*, respectively (see Appendix 3). The point offered is that the process of establishing TPL includes the events that lead to identifying TPL as the desired future state. Sink & Langley state that the buying process starts with an identified need to respond to a problem or an arisen opportunity. Common factors behind this are an initiative to enhance customer service, decrease fixed and variable cost, or to increase capacity. They also point at the emergence of a “change agent”, who champions the idea of outsourcing logistics. Bagchi & Virum point at companies’ macro and micro environments, such as developments in the European union, increased competition, higher customer expectations and increasing costs, in conjunction with the shipper’s overall business vision and goals, as well as “organisational shake-up”, for instance when a new CEO joins the company. Examples of influencing factors identified by other authors are an overall strategy of focusing on core business, a desire to ease implementation of structural change (most notably a centralisation of the distribution structure, at least in European firms), cost and investment reduction, and service improvement efforts (van Laarhoven & Sharman, 1994; Andersson, 1995; Skjoett-Larsen, 1995, 2000b).

The last activity in the first phase according to Skjoett-Larsen is the development of a request for proposals (RFP), an activity that is included in all the other descriptions as well. This is the activity in which, according to the authors, much of the work regarding service specification is carried out.

selection

With a detailed RFP ready, the shipper should identify potential providers, through using multiple sources of information. Financial strength and capability to provide the requested services are important factors for choosing candidates. Skjoett-Larsen proposes mutual visits and references from external actors as ways of gathering information for the final choice of provider, Sink & Langley also put forward the use of outside consultants. Bagchi & Virum suggest applying a quantitative tool such as the analytic hierarchy process¹¹.

¹¹ See e.g. Saaty (1990).

Andersson & Norrman however point out that in some instances, due to the complexity of the sought-after TPL arrangement, there might not be any providers that are capable of offering the services at all. Rather, the choice may very well be one of finding the candidate that is most apt for developing the necessary capabilities.

contract

When a provider is selected and the services to be included in the arrangement are specified, a contract between the parties is signed. Skjoett-Larsen suggests that a brief main contract is formulated, in which the main terms of the deal are specified. This should be complemented with detailed working manuals, in which tasks, service targets, and such are specified in detail. Sink & Langley state that routinely contract periods of one to three years are agreed upon, but longer periods might be required if suppliers are to undertake major investments for the specific arrangement, they also stress the importance of including an escape clause. Andersson & Norrman point out that negotiations and contracting are heavily dependent on the complexity and uncertainty of the arrangement. In some instances, service specification, negotiation of terms and contract formulation might take place during or after the fact, i.e. operations might commence before the formal contract is signed.

implementation

This phase includes transferring responsibility for provision of the included services from the shipper to the provider. The use of cross-functional teams with members from both organisations is common, as is exchange of personnel for training purposes. Skjoett-Larsen emphasises that the human factor is most decisive for the success of a TPL arrangement, and stresses the importance of transferring routines and competence between the parties. The parties should also be prepared that problems not only can, but will emerge underway, and that it is the responsibility of both parties to work jointly in solving these. This integrative approach is emphasised also by Bagchi & Virum.

Sink & Langley state that a strictly planned approach is required in order to smoothly implement the partnership; this should be manifested by the writing of a thorough transition plan in co-operation between the two parties. The written plan should contain directives for issues as comprehensive as the organisational structure of both parties, process descriptions and a timetable for events and activities. These authors also point out the embedment of certain activities in others in the TPL establishment process. Similar to Andersson & Norrman, they state regarding implementation:

While one might surmise that implementation begins at the date and time specified in the formal contract, this is not always the case. In fact, it often starts in the supplier selection stage and can play a prominent role in the final choice of a provider.

(Sink & Langley, 1997, p. 180)

improvement

When the transfer is completed and the provider has assumed responsibility for producing and managing services, the TPL arrangement moves on to the improvement phase. The main activities of this phase are, apart from the provider actually providing the service, are continuous evaluation and development. Education and training, risk and gain sharing, and further development of social bonds are important ingredients. These are basically the activities that Bagchi & Virum and Sink & Langley include in the last steps of their respective models (see Appendix 3), the latter however also point out that a TPL arrangement might have to be terminated due to unacceptable service levels or cost.

renegotiation

When the initial contract period comes to an end it is time for renegotiation. This should be started well in advance of the end of the contract period, as time for evaluating the process should be provided for, as well as allowing for the shipper to develop a new RFP and obtain bids from competing service providers.

an outline of the TPL establishment process

The reviewed papers offer a quite consistent description of the activities that make up the TPL establishment process, although the terminology varies, as do partly the order and scope of activities included. The starting point is when the shipper *recognises a need* to outsource logistics activities; this is closely linked to a *specification* of the services to be provided by the third party. Specification is either carried out solely by the shipper, or jointly with the provider; in the latter case this activity is probably also closely linked to *supplier selection* and *negotiations*. Depending on the objective that is to be achieved through TPL, the outsourced services may vary in scope and complexity, as well as in geographic coverage. A supplier of these services is *selected*, and an agreement is reached through *negotiations*, which ultimately may lead to a *contract* being signed between the parties.

At some point along this process the service provision commences. From the literature it is clear that this *transfer* might go on before, during and after several of the aforementioned activities, it may take place either gradually or through more dramatic shifts in quantum leaps. Regardless of how, at one point a state is reached where the provider carries out *operations* on behalf of the shipper. But the process does not end here, the operations can undergo changes in terms of altered scope of the services provided, i.e. the specification is altered, and *improvement* of those services that are included in the TPL arrangement may be made. Ultimately the contract period comes to an end, which necessitates renegotiations. The outcome of this activity renders three possible options; a continuation of the partnership, a shift to another service provider or a shift back to in-house provision or arm's length procurement of the services.

These activities constitute generic process components of TPL establishment; an illustration of a generic process is offered in Figure 1.

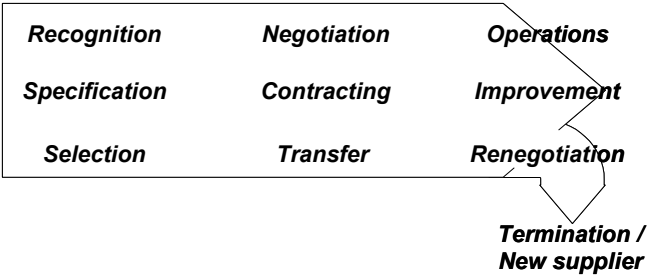


Figure 1. An outline of the TPL establishment process as portrayed in the literature.

In any given process all these activities exist to some extent. The duration of each varies from case to case, as does the causal relationship between them. In some cases the process might be distinctively linear and sequential, whilst for others several steps might be carried out in parallel or in another order than depicted (Andersson & Norrman, 2002). This is emphasised also by Sink & Langley:

In fact, the study data revealed that it is common for firms to cycle and recycle through the phases or even bypass one or more of them. In essence, no simple linear relationship exists between the stages of the third-party logistics purchasing process.

(Sink & Langley, 1997, p. 174).

I believe this is as far as it is possible to go in presenting the TPL establishment process on a phase- or step-basis. The pieces reviewed above are founded in different empirical observations, and have partly different theoretical underpinnings; nevertheless, although the authors sing slightly different verses, they all join in on the same refrain.

the outsourcing establishment process

What about the outsourcing establishment process then? It seems that the literature on outsourcing is mostly concerned with decision making, i.e. the *why* and *what* of outsourcing; this finding is supported by e.g. Brandes *et al* (1997) and Wasner (1999). In this sense, there is little difference between outsourcing literature and what is written on TPL. One functional area seems to be more extensively covered than others, that is outsourcing of information systems/ information technology (IS/IT).

Researchers have applied constructs from different theoretical fields to analyse, explain and issue prescriptions about outsourcing decisions. Cheon *et al* (1995) have assessed outsourcing literature and make a distinction between a strategic management and an economic view, a division to which Lee *et al* (2000) add a social view. Within the strategic management view resource-based and resource dependency theories are mentioned as the main fields, whereas in the economic view the main theories are transaction cost economics and agency cost. Power-political and social exchange theories are mentioned as the main constituents of the social view of outsourcing (Cheon *et al*, 1995; Lee *et al*, 2000).

Even though I have seen examples of the social view in outsourcing literature (e.g. Lee & Kim, 1999; Kern & Willcocks, 2000), I dare say that the strategic management and economic views dominate, and within these, resource-based theory and transaction cost economics are most commonly used.

Among the studied literature, I have identified a number of pieces that deal with the process of establishing outsourcing arrangements, the outsourcing process, for short. These are, in chronological order, Pagnoncelli (1993), Rothery & Robertson (1995), Corbett (1996), Lonsdale & Cox (1998), Greaver (1999), Wasner (1999), Zhu *et al* (2001), and Chen & Soliman (2002). However, with only one exception, these are of the same type as those that deal with the TPL establishment process. The authors suggest a number of phases or steps and, as in the TPL literature, the terminology and scope differs slightly, but the basic sequence and overall content are similar. Therefore I have chosen not to go into any detail on these here, as these pieces do not give what I sought for, i.e. knowledge on the establishment of outsourcing that could be useful for understanding establishment of TPL. I have opted to present the graphical illustrations and tables offered in the original pieces in Appendix 4, thus making it possible for the interested reader to make their own comparisons. But, as stated there is one exception, which I will go into in more detail on in the next section.

an exception in outsourcing literature

One author who assumes an alternate posture to the processual aspects of outsourcing is Wasner (1999), who finds existing descriptions of outsourcing to entail a view of outsourcing as a rational make-buy decision, followed by transfer of control over the outsourced activities, and appraisal:

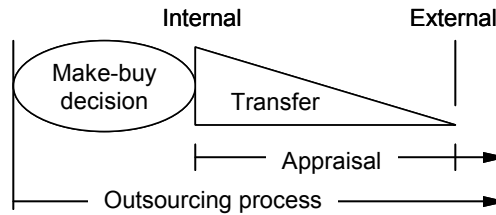


Figure 2. Illustration of the existing process view on outsourcing. (Wasner, 1999, p 26).

Wasner (1999) finds this type of process description incorrect. The sequence of a rationally conceived decision followed by transfer is consistent with a traditional view of strategic implementation, where a formulation of strategy precedes implementation (see e.g. Bourgeois & Brodwin, 1984). Wasner is critical to this view as it does not regard implementation as problematic, nor does it consider that intended strategies may evolve or change over time as they are implemented. There is also a lack of recognition that a decision may sometimes be a post-rationalisation of events, i.e. that implementation might very well have preceded formulation, nor does it take into account that individual behaviour and actions that indeed may have an effect on the process. Thus, inspired mainly by Normann's (1975) "process view"...

The process view is characterized by the absence of goals (formulated as future states intended to be attained), rather only a vision of a future state can be formulated based on the insights possessed momentarily. Based on the vision, a number of initial steps in a process can be formulated. Once the steps have been taken, experiences are to be appraised, the vision to be altered according to the new state of knowledge, and new process steps to be formulated.

(Wasner, 1999, p 31)

... Wasner instead suggests that the outsourcing process should not be conceived of as a rational make-buy decision followed by transfer. Rather, the process is likely to consist of a number of incremental decisions and activities, some of which that are very much entangled, others that are more or less independent. Also, as suggested by Mintzberg & Waters (1985), certain emergent factors might have such an impact on the process that the realised strategy might differ from what was originally intended.

Wasner concludes that existing outsourcing literature is “...being set exclusively in the intended dimension”, thus calling for a need to explore “... whether outsourcing is sufficiently understood as a rational phenomenon” (p. 33).

Based on an analysis of two extensive empirical cases, both from large Swedish companies engaged in outsourcing of manufacturing activities, Wasner concludes that the portrayal of outsourcing in literature is insufficient:

Based on the empirical findings and in response to the first research question, I suggest that outsourcing is inherently processual, i.e. it is not simply a matter of selecting a perspective, rather outsourcing is to my mind more correctly described as a processual phenomenon than as a static one.

(Wasner, 1999, p. 82)

This processual characteristic also implies that the dominating strategic focus in the literature fails to acknowledge the operational aspect of outsourcing. The following illustration of the outsourcing process is instead offered:

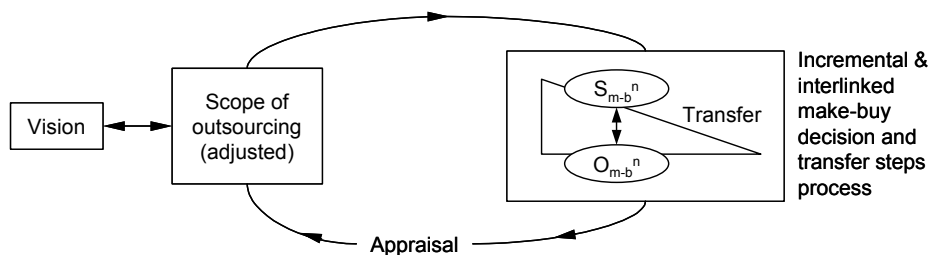


Figure 3. The intraorganisational outsourcing process (Wasner, 1999, p 84).

It is pointed out that the outsourcing process indeed is complex, since it involves two organisations, neither of which has complete control over the process, and since it is lengthy and can only be reversed to a limited extent, thus potentially having substantial long-term consequences. The intraorganisational process within the outsourcing company, which is Wasner’s focal process, consists of make-buy decisions and transfer activities at both the strategic and operational level, these two parallel activity levels are interlinked and initiative may shift between the two as the process evolves.

Wasner’s (1999) statements stand in stark contrast to the view in other literature, i.e. that the main concern with regard to outsourcing is a strategic one, and that the most important task is to conceive strategically wise decisions. Given the chosen perspective, Wasner is able to conclude that the outsourcing process is made up of not only activities on the strategic level, but also on the operational, and activities and decisions on both these levels need to be coordinated.

3 A change process perspective

The second initial question posed in the introduction is: *How are issues of change processes treated in the logistics literature?* The answer to this question is given in this chapter. As noted in the introduction Carlsson (2000)¹² concludes that logistics research has largely neglected the *how*-issue of change; emphasis has primarily been placed on *what* and *why* type questions. Researchers have met a business climate of a faster pace of change and increasing competition with development of knowledge on new solutions and concepts for mastering these challenges.

Carlsson's analysis of the logistics literature concludes that certain main themes are recurrent. The most dominating theme is that the content of different changes are presented, i.e. what has been done, and what effects the specific change has had. Also the driving forces behind certain change efforts are presented. Closely linked to the driving forces is the business context in which the changes have taken place, these are often presented as a backdrop for explaining why certain changes have taken place. Context is also discussed in terms of prerequisites for implementing a specific solution or concept. Advancements in information technology is also a major theme; in earlier logistics writings as a driving force for change, later as a factor making new, advanced logistical solutions possible.

Another conclusion of Carlsson's is that logistics researchers have identified that logistical change efforts of different sorts often face substantial difficulties in reaching substantial and fast impact in the organisation. Several authors have pointed out that managing the change process is important, but that little support is given in logistics literature. As Carlsson puts it:

The main pattern that emerges in the literature review is that it is the content of change that is in focus, and towards the end of the publication the authors conclude that implementation is difficult, but important for making the specific solution work. The authors express this in general management terms and often in the form of normative imperatives. The weakness is that systematic empirical and theoretical groundwork regarding the change process is missing. The contributions above all become accounts of practical experiences and necessities, but the theoretical contribution is weak since there is no scientific link between theory, empirical data and conclusion.

(Carlsson, 2000, p. 14, translation from Swedish)

¹² This is the concluding part out of a total of four comprising Carlsson's doctoral dissertation. Other constituents of the dissertation are Carlsson & Mårtensson (1994), Carlsson (1997), and Carlsson & Sarv (1997).

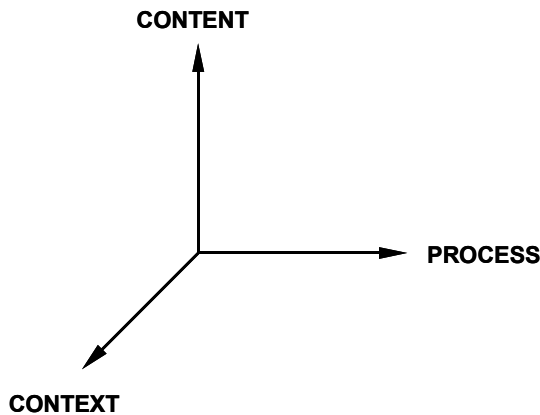
a model to study process

Carlsson thus assumes a stance regarding change that differs from what is common in the logistics literature. His work is founded in an approach to studying strategic change developed by Pettigrew and colleagues (see e g Pettigrew, 1987, 1990; Pettigrew & Whipp, 1991). Central in this approach is a basic model of strategic change, which is presented as a meta-level analytical framework that...

...offers analytical structure at a broad level but no over-restrictive theoretical web, and plenty of space to adjust research designs and study questions as one moves from one content area of change to another.

(Pettigrew, 1990 p. 283)

The basic model consists of three dimensions, *Content*, *Context* and *Process* (See Figure 4.) The *content* dimension deals with the *what* of change, in terms of changing strategies, structures, or business processes (Pettigrew, 1987). *Context* refers to the structures and processes in which the process is embedded. Pettigrew (1997) emphasises that a study of process cannot be undertaken without taking context into account; change is affected by, and affects, both outer and inner context, examples of the former being a firm's economic, political, and competitive environment, examples of the latter are the firm's structures and corporate culture. An analysis of context gives answers to much of the *why* of change (Pettigrew, 1987).



*Figure 4. The basic model of strategic change.
(Adapted from Pettigrew & Whipp, 1991, p. 26)*

A process is by Pettigrew (1987) defined as “... the actions, reactions, and interactions from the various interested parties as they seek to move the firm from its present state to its future state.” (pp.657-8). Thus the *process* dimension encompasses the mechanisms at play among the actors that are affected in a change process, the *how* of change.

A contextual analysis involves studies of processes at different levels of analysis, as well as parallel processes at the same level. Both the external environment, e.g. changes on the business sector level such as shifting competition, and the internal process surroundings, e.g. driving forces behind a certain strategic choice must, according to Pettigrew, be studied and linked to the focal process:

Thus explanations of the changing relative performance of firms should be linked to higher levels of analysis (sector changes and alterations in national and international political and economical context), and lower levels of analysis (the drivers and inhibitors of change characteristic of different firms' culture, history, and political structures). There is also recognition that there are processes at different levels of analysis, (firm level of internationalization as well as sector level internationalization), and also multiple processes at the same level of analysis (firm level of strategy and technology development).

(Pettigrew, 1997, pp. 340-1)

Thus, depending on at which focal level the analysis takes place, any process might either be on the focal level, or above, below or parallel. The studied process might be part of a process on a higher level, or incorporate one or several other processes on lower levels. One could say that the analytical framework offers scalability to a research design in which it is adopted.

It is important to note here that Carlsson's (2000) study explicitly excludes the *external* context, it has only been taken into consideration when “... it has influenced the change under study... ... thus limiting the possibilities to relate approaches to change to the context dimension” (p. 18, translation from Swedish). This is not to say that context has been excluded altogether; the context of the change under study, what in the terms of the basic analytical framework would be referred to as *internal* context, has been taken into account.

a theory of change

But there is more to a study of change process than acknowledging different entangled dimensions and that these interact as the process evolves over time. Guided by statements made by Van de Ven (1992), Carlsson (2000) concludes:

The basic model is not sufficient for analysing and developing knowledge on the change process of operational development. It is also necessary to have a theory of change that underlies the analysis of the change process. ...[quoting Van de Ven (1992)] ... My interpretation is that a theory of change that explains why and how change comes about is necessary. It is this theory that drives and forms the basis of analysis of change processes.

(Carlsson, 2000, p. 55, translation from Swedish)

Based on a study of logistics literature, in conjunction with literature from the literature areas *strategic change* and *learning organisation*, Carlsson (2000) thus identifies three different *models of change*, defined as “...*basic assumptions about what change is and how change comes about*” (p. 33, translation from Swedish). One of these is what Carlsson coins the *linear* model, which is solution-oriented and according to which change processes are primarily concerned with rational decision-making and solution design. Implementation of the decided solutions is viewed as unproblematic exercises of issuing directives. But in the literature Carlsson also identifies the *processual* and *circular* models. The former is the model that is visible in the works of e g Pettigrew, which emphasises e g social and political processes, the latter stems from learning organisation literature and according to this model change is a circular learning process. A more thorough presentation of the models is given in a separate section below.

Instead of adopting any one of these three fundamental logics of change, Carlsson chooses to adopt all three models and to test their explanatory power empirically. From this analysis emerges a conclusion that none of the models is by itself able to explain the mechanisms of any given change process. Rather, they have merit in complementing each other, as they can reproduce the mechanisms of different types of change.

In his literature review Carlsson concludes that there are few references within the logistics literature that deal explicitly with change processes, and that the dominating logic of change underlying most logistics literature is the linear model. Apart from the literature studied by Carlsson, I have come across other examples of clearly linear approaches to change in logistics literature in the form of those frameworks for logistics development offered in textbooks by Bowersox & Closs (1996), Taylor

(1997), and in the recent Swedish addition of Aronsson *et al* (2003). These all suggest a similar sequence of steps or phases that should be worked through in order to develop a logistics system. The starting point is an assessment of the current system, which is followed by development of alternatives. These alternatives should then be compared to the current state and eventually it should be decided which of the alternative paths to follow. The activities of these phases are entirely analytical. Once a decision has been reached, it is time to implement the design. The process ends with a follow-up assessment of achieved results.

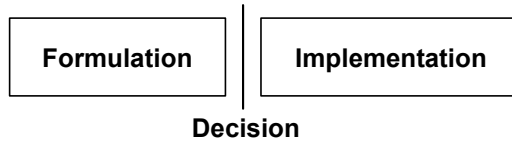
Carlsson argues that the processual and circular models of change are not recognised in logistics literature. I have however found a few examples of recent works that differ slightly from the dominating, *what*-oriented, linear view, mainly by pointing at the importance of “human issues” in general. Skjoett-Larsen (2000a) points out that: “*In the end, it is the employees and not the systems and processes that will ensure solutions to the logistics tasks...*”, making it necessary “*...not to underestimate the human and cultural aspects in the implementation of projects of change in the company*” (p. 386). Similarly, van Hoek *et al* (2002) argue that supply chain managers need not only technical capabilities, but also emotional, whilst Gammelgaard & Larson (2001) stress communication skills.

There are also a few authors who discuss organisational learning aspects in logistics, e.g. Drew & Smith (1998) and Ellinger *et al* (2002), thus drawing on the circular model of change. But both these articles discuss only logistics managers’ learning, i.e. those whose task it is to design solutions and issue directives. This would be perfectly fine if every organisation consisted solely of logistics managers. To my mind, however, these papers give away that the authors still are fundamentally rooted in the linear mode of thinking, basically stating that “if logistics managers can develop their learning skills, they will be even better at designing good solutions”. They also lack in the sense Carlsson points out regarding other logistics literature, in that the conclusions are not founded in systematic theoretical and empirical investigations of the change process as such. This is not to say that these pieces are of no value; indeed, I believe they underline the necessity of more research into the change aspects of logistics management.

the models of change

Carlsson (2000) concludes that two main phases exist in the *linear* model, *formulation* and *implementation*; these two are clearly separated from each other, the latter following the former, see Figure 5. During the formulation phase, logistics experts formulate solutions on the basis of thorough analysis and known concepts. The formulation phase eventually concludes with a decision on the solution to implement. Implementation of these decided solutions is then carried out through the formulation of directives to those who are to execute the new design in the organisation. An

analogy to construction work would be that architects and engineers are one group of actors, construction workers another. The latter, albeit skilled in construction work, are charged with the task of realising the schemes and designs conceived by the former. The building is first designed, and then erected.



*Figure 5. The linear model regards change as a rational decision-making process.
(Carlsson, 2000, p. 56, translation from Swedish)*

According to Carlsson's *processual* model, change is regarded as a social process among affected actors; actors interact and influence each other, and all to varying degrees partake in, and have influence on the process. Change is regarded as continuous, rather than divided into discrete episodes; these are one of the cornerstones of Pettigrew's theory of change (cf Pettigrew, 1987). In contrast to the linear model, formulating or designing solutions is not so much of interest as organisational *formation*, i.e. actions and behaviour intended at creating a momentum for change. There are political elements in the process, as it is recognised that decisions might not be taken solely on the basis of rationality, but rather that certain actors have been, or become, influential enough to gain approval for ideas. As Carlsson (2000) puts it: *"To be able to affect the course of events the actor has to be active on the 'strategic arena', where critical decisions are conceived."* (p. 41, translation from Swedish). Implementation is not viewed as unproblematic, nor clearly separated from formation, see Figure 6. Rather, at any given point in time, formation and implementation are likely to interact; in some instances implementation might in fact precede formation. This reasoning is in line with Mintzberg & Waters' (1985) statement that intended strategies are not always realised, and that realised strategy might in fact be a post-formulation of emergent strategy.



Figure 6. The processual model assumes interdependence between formation and implementation. The phases may be temporally separated, or integrated, and implementation may precede formation. (Carlsson, 2000, p. 57 & pp. 75-76, translation from Swedish)

The *circular* model differs from the other two, as change is not regarded as something separate from everyday life in the organisation. Rather, this model asserts that organisations must comply with an ever evolving environment through continuous learning. This is achieved through well-developed platforms for learning from

experience within the organisation, thus allowing actors to develop the system in which they are part. Change is regarded as a circular learning process, which in its simplest form is a continuous cycle of the activities doing and learning (Figure 7). Doing is not limited to carrying out the activities that constitute the work processes of the organisation, but also taking action in changing these, experimenting with new ways of carrying them out. The learning element is one of observing outcomes of actions and reflecting upon these, thus developing the actors' mental models of how the world works (cf Kolb, 1984; Senge, 1990).

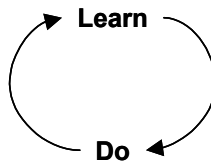


Figure 7. The circular model of change. (Carlsson, 2000, p. 57, translation from Swedish).

formation, formulation, and implementation

In the descriptions of the models of change offered above, it is close at hand to think of *formation* and *formulation* as mutually exclusive; this is however not how these illustrations should be interpreted. In the linear model of change formation takes place solely through formulation, and in the processual there is also formulation, but this is not the only aspect of formation. Formulation might also be part of *implementation*, as the content of change is shaped as the process evolves. Also in the circular model of change these two components are present, in that change is a continuous cycle of formation and implementation.

My interpretation of Carlsson's (2000) use of these notions is that there are two phases in any given change process, *formation* and *implementation* (see Figure 8 below). Formation encompasses all that leads to acceptance of a certain solution and thus all activities, actions and events that in any way affect this acceptance are part of formation. In the linear model acceptance is expected to come from rational arguments regarding a formulated solution, i.e. the formation activities are analytical and rational, and are the responsibilities of a group of experts. In a processual change approach formation encompasses more than merely formulation; in fact, rationally founded formulation might not be an important part at all. Other activities, intended to create conditions for change, might dominate the process. In the circular model formation is deemed to take place constantly given the assumption that there always is a better way to carry out operations; formulation is part of both doing and learning.

The other phase is implementation, which encompasses all activities, actions and events that lead to manifesting a certain change in operations. These two phases are

not always as clearly separable as what is conveyed by this description, and in certain instances implementation and formation take place in parallel. Implementation might even forego formation.

strategic and operative

Carlsson’s work is concerned with operative change, i.e. changes in companies’ operations. This does however not imply that the strategic level is disregarded; there is interdependence between the two. Decisions made at the strategic level are manifested in operative changes. Carlsson’s most illustrative description of this dependence is offered in one of his descriptions of a change process carried out according to linear logic:

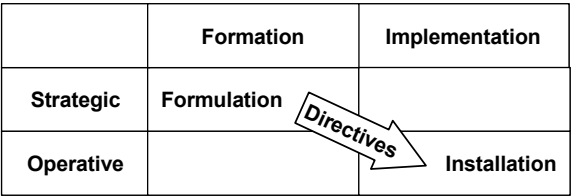


Figure 8. Change according to the linear logic.
(Carlsson, 2000, p. 72, translation from Swedish)

Apart from giving yet an illustration of change according to the linear logic, Figure 8 illustrates several important characteristics of change processes. There is the connection between formulation and formation, two notions that are used almost interchangeably by Carlsson. There is also a characteristic feature of linear logic, that when a certain design is implemented, the actors on the strategic arena view this as an installation of a specific solution.

The strategic arena is where the most influential decisions are made, those that have substantial impact on the system’s development as a whole. But there is also the operative arena where there also is decision-making, and the actions and activities that actually manifest strategic decisions in operations are carried out. Certain actors have by virtue of their position in the organisation access to these arenas; some hold executive positions with responsibilities that are part of setting the company’s strategic course, some have operative responsibilities and thus have an influence over the realisation of strategy in operations. But actors can also have, gain or lose access to arenas as the process evolves, by means of certain events or action or behaviour.

combining meta-model of process and theory of change

Carlsson concludes that the models of change are not mutually exclusive, rather they complement each other and several models might be at play in the same change process. There is not one single best way to manage logistical change; rather, the approach should be adapted to the content of change in order for the change effort to be effective. Carlsson has shown that a change process that is initiated and led by actors on the strategic arena can on an overall level be linear. But when solutions are formulated and it is time to implement, the change leaders can approach this according to a circular logic by arranging opportunities for learning among the affected actors, thus giving these opportunities to develop mental models in accordance with those of the leaders.

Regarding the relationship between the different models of change on the process dimension, and the content dimension, Carlsson (2000) writes:

In the logistics literature the linear model has dominated. The empirical patterns however show that this model can only reproduce the mechanisms of marginal changes. In the frame of reference two other models are identified, and by analysing the empirical material it comes to light that these are better suited for reproducing the mechanisms of more extensive change.

(Carlsson, 2000, p. 98, translation from Swedish)

Unfortunately Carlsson's research has not regarded the context dimension in relation to process in the same extent as the relation between content and process. Subsequently the formulations are rather vague, stating that in a stable context the linear model is likely to prevail, while as the context becomes more dynamic, the processual and circular models might come into play. Therefore extent of change is assessed along the content dimension.

A central notion that Carlsson has brought in from the literature is *mental models*, in short, an individuals' basic assumptions of how reality is constructed, assumptions that guide behaviour. Change can either be within existing mental models, i.e. not affecting the fundamental assumptions of reality, or it can be a change of the mental models as such, i.e. questioning and altering the fundamental assumptions of reality. Marginal changes are changes that take place within the boundaries of existing mental models, and are thus best reproduced by the linear model. As change becomes more extensive, and complexity increases, existing mental models gradually come under scrutiny, and perhaps new assumptions of reality, new mental models, are developed. In such case, the processual and circular models are better at reproducing the mechanisms of change.

The development of mental models is an issue of learning; marginal change means marginal learning, i.e. an adaptation of thoughts and behaviour within the domain of existing views of the system in which the actor is part. This type of learning does not involve changing the boundaries of this domain. More extensive change however means that another type of learning takes place; the boundaries are expanded, moved or perhaps altogether exchanged. Linked to the degree of learning, Carlsson offers the following, to my mind very illustrative, description of how the extent of change content and the models of change relate:

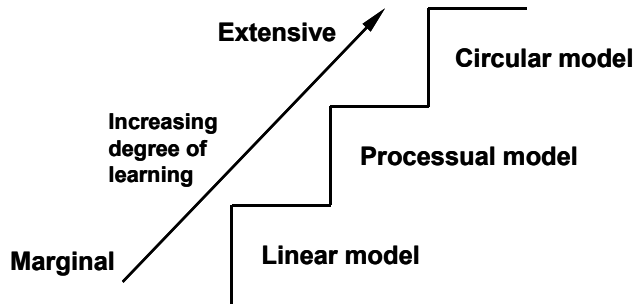


Figure 9. The link between change models and extent of change.
(Carlsson, 2000, p. 81, translation from Swedish)

It is important to note that the message is not that the change view that has dominated logistics literature is altogether wrong; rather, it should be regarded as insufficient. Carlsson is very clear that the linear model can reproduce the mechanisms of marginal changes quite well, and marginal changes may in fact be the case in some logistics change processes, but there is also evidence that the processual and circular models have more merit in reproducing more extensive change. The insufficiencies become apparent when extensive change is approached according to the linear logic.

It is also important to bear in mind that whether a certain change is marginal or extensive is a question of from which perspective it is appraised. Even though it is close at hand to think of the extent of change from an objective system-point-of-view, this is not how Figure 9 should be interpreted; the message is that change is subjective. As Carlsson puts it:

When considering a specific change, it is the affected organisational unit and the actors within that constitute the starting point for classification. This means that the assessment of whether a certain change should be regarded as marginal or extensive starts in the unit that is directly affected by the change. The reason for this is that it is the internal conditions and learning requirements of the actors directly affected by change that are of importance in the change process.

(Carlsson, 2000 p. 81-82, translation from Swedish)

The stairway analogy in Figure 9 also illustrates the interdependence between the models of change. If change is marginal, it is sufficient to dwell on the first step, but if change is more extensive, it is necessary to reach the processual and perhaps the circular steps. In order to do this, one must first tread on the linear step.

approaches to logistics change

The models of change presented above are the theoretical cornerstones of Carlsson’s theory of change, these are however rather abstract. But Carlsson (2000) also discusses different approaches to change in conjunction to the theoretical models, approaches that “... *can be regarded as operationalisations...*” of the models of change (p. 91, translation from Swedish). The point offered is that there are different ways to approach change, and that the choice of approach is – or should be – contingent on the context of change, but also that change is presumably approached by means of a combination of these three ideal approaches. The nomenclature and characteristics of the three approaches is presented in Table 2 and the following paragraphs. The text in the remainder of this chapter is in its entirety based on pages 91 through 94 of Carlsson (2000):

Table 2. Three approaches to operative development.
(Carlsson, 2000, p. 92, translation from Swedish)

Approach	Solution-driven	Programmed process	Learning approach
Model of change	Linear	Processual	Circular
Fundamental logic	Solutions produce results	Processes produce results	Conditions are decisive
Change management	Implementation	Formation and implementation	Learning by doing
Focus	Structures	Actors	Structures and actors
Actors	Passive	Engaged	Actively creating
Leadership tools	Directives, instructions	Messages, goals	Dialogue
Key role of leader	Expert	Motor	Constructor

Each approach is founded in one of the three models of change; these are fundamentally linked to the underlying logic of what it is that renders good results of change. The *solution-driven* asserts that results stem from designing good solutions, the better the solution, the better the result. As designing good solutions is the prime task of any change effort, change is characterised by rational decisions followed by rational action; once the solution is decided it is implemented. Focus is on designing structures, guided by a logic, which asserts that new structures will render behaviour. Experts are deemed best skilled in designing structures, why these actors dominate the change process. The actors in the structure that is undergoing change are thus passive, and are expected to follow the directives and instructions that are issued by their leaders.

The middle approach is the *programmed process*, which is founded in the processual model of change. Rather than emphasising solutions, this approach is centred around processes, asserting that a good process will render good results. Thus in its purest form, this approach is the direct opposite of the former. Change management is concerned with creating good conditions for change, by creating opportunities for the affected actors to partake in solution design, thus encompassing both formation and implementation. Actors are focused instead of structures; it is assumed that social processes among the actors will give the structures. Following this, the experts' role are not as protruding, as leaders are aware that achieving change results through formulation of directives is difficult, instead leadership is exercised through formulation of goals and visions. The leader's role is one of a motor of the process, not formulator of instructions.

The last of the three is the *learning approach*. Similar to the programmed process, change management is concerned with creating good conditions, but according to this approach these strivings are concentrated on prerequisites for learning. A fundamental assumption is that there is always a better way of carrying out operations, which is why individual solutions are less important than systematically supporting processes of learning by doing. Development of both structures and actors are integrated in this approach, in the sense that development of the actors' knowledge of the system in which they are part is essential. The role of experts shifts from one of designing solutions to one of designing learning processes. System actors are regarded as actively creating, thinking individuals. The approach requires a well-functioning dialogue between system actors and external experts.

4 A comparison

In the preceding two chapters, I have reviewed two portions of logistics literature. Both of these look at processes of change, however from different angles. The first portion is concerned with a specific application area, the establishment of TPL, whilst the second covers logistics change processes in general. Even though the authors of the reviewed TPL works do not explicitly claim to discuss a *change* process, establishing a TPL arrangement involves substantial change, and the authors do in fact issue some prescriptions for how to manage the change process. Therefore one could expect that the descriptions offered by these authors, and the descriptions of logistical change processes as offered by Carlsson, would display an array of similar characteristics. They do, but only to a limited extent. In this chapter I clarify the similarities and differences, and identify what I believe are the underlying reasons for the latter.

Looking at my review and summary of the pieces that deal with the TPL establishment process, the attentive reader will have noticed that the way in which I have reproduced the process descriptions in the second chapter is not only in a *descriptive* manner, but also *prescriptive* to some extent. This is a deliberate choice of mine, since this is how the process frameworks/models are put forward by their originators. The prescriptions in this body of text are thus not mine, but those that are given in the original publications. In the summary offered in the section *An outline of the TPL establishment process* I have however assumed a purely descriptive stance, but the content is still based on the original authors' contributions.

Carlsson (2000) concludes that logistics researchers have identified critical success factors and barriers for change, and that these often are related to people. Therefore I have analysed the existence of prescriptions regarding such issues in the reviewed TPL establishment literature. All the reviewed pieces except Andersson & Norrman (2002) issue prescriptions about how to manage “people issues” in the shipper’s organisation during the TPL establishment process, see Table 3.

Table 3. Prescriptions regarding "people issues" in reviewed TPL establishment literature.

Paper	Prescriptions regarding "people issues"
Skjoett-Larsen (1995)	<ul style="list-style-type: none"> - Exchange staff temporarily / Provider should take over staff permanently / Combination of these - Education / training - Establish horizontal organisation forms on all levels; appoint contacts in both organisations - Establish cross-functional teams in which all affected functions are represented - Human resources and attitude towards cooperation decisive for success
Bagchi & Virum (1996)	<ul style="list-style-type: none"> - Ensure understanding and acceptance of objectives through disseminating objectives clearly and involving stakeholders early in process - Top management must signal importance of outsourcing in order to achieve commitment - Use cross-functional planning teams and reference groups - Ensure mutual understanding of processes, organisational structure, goals, strategy, and market situation on company-function- and individual level in both organisations. - Stimulate formation of inter-firm team - Develop a learning organisation; Install and maintain continuous improvement process - Communicate development frequently to all affected parties - Plan changes in working conditions, staffing, and training; Top management of both firms must agree on plan - Ensure that people are well-trained, motivated, dedicated to produce excellent service, and empowered to act - Monitor interorganisational relations - Train front-line employees in problem-solving techniques and empower them to identify and solve problems - Generate understanding of objectives and reasons for outsourcing by communication with all functions and individuals through entire outsourcing process

Table 3 continued.

Bagchi & Virum (1998)	<ul style="list-style-type: none"> - Ensure consensus and cooperation through letting every department that will be directly or indirectly involved with the third party take part in decision-making - Manage coordination between employees of alliance partners; Keep lines of communication open - Be sensitive to human and organisational issues - Have provider employees stationed full-time at shipper's facility, treat them as own employees - People are most important assets for success, make sure they are well-trained, motivated and empowered to act
Sink & Langley (1997)	<ul style="list-style-type: none"> - Form cross-functional buying team, which involves managers from several organisational levels - Communicate with line management regarding purpose and intentions of the third party logistics option - Include line management early in buying process - Solidify organisational commitment by obtaining executive approval of outsourcing as management alternative - Issue training to management at both sides of the TPL relationship

In this sense, i.e. the fact that they are normative regarding the process, they do not differ from Carlsson's writings. Looking at the table above, certain main themes can be identified:

- Responsible managers should *communicate* with, and *inform* employees to *ensure understanding* regarding rationale behind outsourcing. Communication across organisational borders in the shipper-provider dyad is also important.
- *Involve those that are affected* by outsourcing in the shipper's organisation early in the process.
- Shipper's *top management must commit* to outsourcing undertaking, and signal its importance.
- *Training and education* is important to ensure well-functioning processes and routines at both sides of arrangement.

At a glance, these seem quite reasonable from a common sense point of view, even though the guidelines are merely of "headline" character, i.e. there is no substantial support for how to achieve e.g. good communication and information spreading, how to achieve true employee involvement, or how to handle training and education. Looking at the first three of these themes, they display some of the features of the

processual model of change; ensuring understanding of rationale and early employee involvement are definitely not children of the linear model, but give away that organisational formation for change is required. Signalling importance is a means to induce an awareness in the organisation that change is necessary, i.e. yet another trait of the processual model. The last theme also tells us that issuing directives is not enough to make change happen; the actors who are to work in the new system must be given the support they need to develop the necessary skills. This theme thus acknowledges that there are learning requirements on the affected actors.

Similar patterns can be seen in the literature dealing with the process of establishing other outsourcing arrangements. But there is as mentioned previously an exception – Wasner (1999) – who in essence concludes that the linear model does not hold true for the outsourcing process. He instead depicts the process as continuous iterations of a cycle of make-or-buy decisions and transfer activities on both the strategic and the operational level. Wasner's writings differ from other outsourcing literature in acknowledging activities at the operational level, and he is clear on the iterative nature of the process, but there is still no guidance regarding the change process. To my mind there must be more to the outsourcing process than a cycle of decisions and transfer activities. In this sense, Wasner does in fact not really do away with the rational school as he claims, since the two activities *decision* and *transfer* are in fact the two that constitute the process view he himself criticises.

Wasner's thesis is in my opinion a good contribution to the body of knowledge on outsourcing in that it acknowledges some operational aspects of outsourcing, but I did not find the support I was looking for. Concluding that there are activities and decisions also on the operational level is a first step, but the *how* question still remains largely unresolved.

Thus far this comparison between the two bodies of literature has concerned *what* the respective pieces tell us regarding change processes, in this aspect there are both similarities and differences. The main theme in the literature that I have studied is that TPL establishment is an issue of deciding if TPL is the strategically wisest decision, and to decide with which provider to partner.

But obviously the authors of the above papers have seen something more than decision-making in their studies; after all, the papers are with the exception of Andersson & Norrman (2002) based on empirical findings. Yet, the prescriptions are shallow and of the normative imperative character Carlsson & Mårtensson (1994) discuss. I argue that the underlying reasons for this lie in the adopted theoretical foundations and research approaches, the *how* of these studies. In the following sections, these issues for each of the focal works of this comparison are presented in some detail, in order to present the basis of reasoning that underlies my own research.

Skjoett-Larsen's phases and activities in a third party-relationship

In Skjoett-Larsen's (1995) paper, the purpose is formulated as:

... give a brief account of the notion third party logistics and relate it to similar concepts ... bring in theoretical perspectives, which can be used for analysing form, content and dynamics in third party relationships ... present three cases of third party logistics ... establish guidelines for choice of third party provider and for implementing the relationship.

(Skjoett-Larsen, 1995, pp. 1-2, excerpt translated from Danish)

The purpose is obviously multi-faceted, but one part is concerned with what I define as the TPL establishment process. This part of the purpose is normative, but also conveys the message that the focal parts of the process are supplier selection and implementation.

Looking at the theoretical foundations, apart from some TPL literature, the author suggests that *transaction cost economics*¹³ and the *network perspective*¹⁴ are possible areas to draw upon in future TPL research. Neither of these is however used for developing the TPL establishment process model in the paper. Rather, this seems in its entirety to be a condensate of Skjoett-Larsen's findings among the studied cases. No guidance is however given regarding methodological considerations, eg how cases were selected, how data collection was carried out, etc.

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Bagchi & Virum's logistics alliance formation model

Moving on to the works of Bagchi & Virum, the 1996 paper is intended to:

... understand the motivation for logistics alliance formation, study the management process involved and identify the characteristics that are essential for a successful partnership. ... This research focuses on the "why and how" of logistics alliance formation and management.

(Bagchi & Virum, 1996, p. 94, excerpt)

The formulation in the 1998 article is quite similar:

¹³ Eg Williamson (1975)

¹⁴ By this the author denotes what is sometimes referred to as the "Uppsala School", eg Johanson & Mattsson (1987)

... investigates the process involved in forming logistics alliances ... understand the rationale, the steps involved, the obstacles faced, the effect of the alliance on the shipper and the provider, and what makes these alliances successful. ... capture the changes in logistics systems ... develop a framework for logistics alliance formation. We hope this model can be a guide for prospective alliance seekers.

(Bagchi & Virum, 1998, p. 193, excerpt)

A little later, the authors also write: *"We wanted to understand the process of selecting partners and administering the partnership"* (p. 194). The latter paper is of a more explicitly normative¹⁵ character than the former, as the authors want to, like Skjoett-Larsen, guide companies that are considering TPL. But this is not the only similarity between the two, as can be read above Bagchi & Virum put some emphasis on partner selection, which in the case of TPL and given the definition thereof is basically the same as selecting a supplier. Theoretically, the 1996 paper explicitly is founded in literature that deals with *"... generalized strategic alliance models looking at the process of alliance formation..."* (p. 94) as well as general TPL literature. Even though that is not stated explicitly, the literary foundation seems to be the same in the 1998 publication.

Methodologically, the two papers by Bagchi & Virum are based on what seems to be quite an extensive empirical material, the first covers some seven shippers and five providers, for a total of twelve cases, whilst the more recent piece contains data from ten cases; part of the cases seem to be shared between the two publications. Data has been collected by conducting interviews with *"... at least two senior logistics executives"* (1996, p. 94) and also on-site visits, and in some instances verifying the shippers' stories with their providers (1998). No detail is given on how analysis has been conducted, more than that *"... results were validated through discussions with half a dozen experts and professionals who have an intimate knowledge of the marketplace"* (1996, p. 95).

Sink & Langley's third-party logistics buying process

The next paper to undergo this examination is that of Sink & Langley (1997). These authors have strived to fulfil an overall purpose to *"... provide a managerial framework for the acquisition of third-party logistics"*. There are also five specific objectives of the paper listed, of which one is to *"... present a conceptual model of the*

¹⁵ In fact, the authors refer to the eight-step process as *"the process of **successful** logistics alliance formation"* (p. 208, emphasis added), why this is perhaps the most normative of all the reviewed papers.

third-party logistics buying process” (p. 164). Here is an example of the prescriptive-descriptive confusion I touched upon earlier; the overall purpose is normative and when looking at the process description that is offered there is a lot of prescriptions mixed with descriptions. The specific objective related to this process model, “*present a conceptual model*” is however descriptive as I interpret it.

Another specific objective of this paper is to: “*Discuss the goals and methods of an empirical study designed to gain insight into key issues relating to the acquisition of third-party logistics*” (p. 164). Similar to the works discussed above, Sink & Langley view the process as one of purchasing/procuring a set of services. Therefore, the chosen theoretical base, which is explicitly mentioned in the paper, is formed with literature from the areas of “*Strategic decision making ... Industrial buyer behavior ... Transportation purchasing ... Supplier selection ... Logistics relationships*” (pp. 167-169). In the presentation of the first four of these areas it is clear that these focus on decisions, whereas the last area is concerned with the whys and wherefores of TPL, thus being closely linked to decision-making in the sense that a main theme is the driving forces behind a decision to seek a TPL solution. Looking at Sink’s (1995) dissertation, which is the basis for the 1997 article, this interest in decision making appears even more clearly; in discussing the questions needed to fulfil the research objective related to the buying process, Sink writes: “... *provided a detailed explanation of the process used by firms to select a supplier and adopt contract logistics ... also allowed insight into two key areas; namely, ‘Who is involved in the decision process,’ and ‘How is a supplier selected.’*” (Sink, 1995, p. 128).

The research design these authors – or rather Sink (1995) – have adopted is one of extensive empirical investigation. A focus group interview with eleven logistics executives, a multiple-case study of some eight cases, and a mail survey with a total of 116 responses are combined to produce the results. In the article, no detail is given as to how the case studies were carried out, but in the dissertation (in which five cases are included) it is stated that only executives have been interviewed, and among these only those who have been directly involved in decision making and supplier selection. Analysis was conducted by condensing the material from the focus group interview, and with this as a foundation a number of initial propositions regarding the process were formulated. These were then pattern matched¹⁶ against the case study findings. The mail survey seems not to have been used to develop the process model.

¹⁶ Sink (1995) here refers to Yin (1989).

Andersson & Norrman's purchasing process for logistics services

The most recent piece that discusses the process aspect of TPL establishment is that of Andersson & Norrman (2002). This is an almost entirely conceptual piece in which the authors...

... describe and compare the purchasing process for logistics services for companies following either the trend towards outsourcing of more advanced logistics services, which will be emphasised here, or the trend towards leveraging the internet as a tool in their buying of basic services.

(Andersson & Norrman, 2002, p. 3)

The theoretical foundation is drawn from some general TPL literature, some of the pieces discussed above, and literature that deals with service procurement. Most notably concerning the purchasing process, the authors conclude that in general a purchasing process contains certain steps, and concludes that this is basically the same message that has been put forward by Skjoett-Larsen (1995) and Sink & Langley (1997). A general purchasing process outline is used to discuss differences between purchasing of basic and advanced services, and two cases are used to illustrate the length of the process. These cases are however only used as an illustration, which is why a discussion of the methodological aspects of this paper would be irrelevant.

Carlsson's approaches to logistics change

Switching focus to the works of Carlsson, the overall purpose of his dissertation is to “Develop knowledge about how logistics change can be made more effective” (Carlsson, 2000, p. 3). Effectiveness is here two-fold. It is a question of reaching the intended results of change, and being productive in the sense that the quota between the achieved results of change and consumed resources during the process is high.

The theoretical foundation is brought in from areas which Carlsson denote *Strategic change* and *Learning organisation*. From the former stems the basic three-dimensional meta-model which serves as a framework for the entire study; there is also a theoretical input to the formulation of the theory of change, i.e. the models of change. This input comes from both the two stated areas as well as the implicit theory of change that according to Carlsson underlies the vast majority of logistics research and the “rational school” of strategic change.

Carlsson's (2000) account of methodological considerations starts with a discussion of the overarching methodological approach, which is denoted, "*actors in a system context*" (p. 19-21). Logistics as a discipline has its roots in an analytical perspective, which gradually has evolved towards a systems perspective¹⁷. Carlsson deems it necessary to take a step away from tradition, as neither of these perspectives in the form they customarily are applied in logistics research acknowledges actors in the systems under examination. But since actors', i.e. individuals', willingness to partake in learning and change is of importance for the results thereof, the research is subsequently designed to acknowledge the actors in the system.

a question of perspective

Looking at Carlsson's works, he is very clear about the research approach, the assumptions of reality guiding the research. The phenomena under study are processes of change, and from the theoretical underpinnings Carlsson concludes that an approach that acknowledges actors is indispensable. The reasoning behind this is actually quite simple and logical: Change is about altering behaviour and actions, and individuals' actions and behaviour are inextricably linked to the operations and performance in the systems and organisations of which the actors are part. Thus an actor-oriented approach becomes necessary.

Given this approach, Carlsson is able to explore the mechanisms of the studied change processes, and conclude that any assessment of change must be undertaken from the perspective of the actor, as a certain change that for one actor is in line with this actor's mental models, might be a change that is totally opposite to what another actor might find rational or most effective, given that actor's mental models.

Looking at the pieces that deal with TPL establishment from this angle, in none of them do the actors of the studied systems ever really become issues. Well, the authors who have been explicit about data collection have in fact told us that they have interviewed executives, who of course are actors in the system under study, and they do issue prescriptions as for how companies ought to handle "people issues" when establishing TPL.

But when looking at the research objectives of these authors, they are primarily concerned with decision making; whether to outsource logistics or not, which services to include in the arrangement, and who to partner. The theoretical foundations of these studies are subsequently taken from literature that deals with decision-making, supplier selection and such, and research designs that are adapted to studies of decision-making are adopted. Therefore it is not surprising that the authors have

¹⁷ For a discussion of these perspectives, see eg Arbner & Bjerke (1997).

conducted their studies from the perspective of decision makers, and that the writings mostly display characteristics of the linear model of change.

And this goes also for most of the outsourcing literature I have studied. Most of it has, as concluded earlier, dealt with the decision to outsource as such, and the dominant theoretical foundations – resource-based and transaction cost theory – are areas that deal exclusively with *what*- and *why*-type questions. As this literature survey did not render the support I was looking for initially, the literature dealing with outsourcing will be disregarded throughout the remainder of this thesis.

To summarise, I claim there is a mismatch between *what* is written regarding the change process of TPL establishment in literature, and *how* these conclusions are drawn. This mismatch is illustrated in Figure 10:

		Decision	Process
How	Theoretical foundation & research design		
What	Conclusions & prescriptions		

Figure 10. There is a mismatch between foundations and conclusions in TPL literature.

TPL literature has mostly concerned issues regarding the decision to establish TPL, but there are also some writings regarding the process of establishing TPL arrangements. These writings are however not founded in studies of process, but of decision-making.

and now for something completely different?

Does this mean that I, informed primarily by the works of Carlsson, wish to reject the work that has been done on the TPL establishment process? No. What is needed is elaboration, a supplement to the current knowledge base, not altogether new knowledge. Given that logistics knowledge creation, manifested in literature, has during a couple of decades regarded change as directive-controlled implementation of rationally conceived designs – or in a sense has disregarded change altogether – it may very well be that corporate executives indeed have approached TPL establishment in this manner; the dependence might be bi-directional. TPL research has, as mentioned earlier, been very empirical in character, which indicates that managers indeed have may have approached the change to TPL linearly. But managerial action is also in part guided by prescriptions stemming from research findings, at least to some extent. Therefore the writings in TPL literature may very well have affected logistics

executives to approach TPL establishment according to a linear logic. Apart from logistics, there is also a multitude of concepts for organisational change that have received their share of popularity through the decades, e g BPR and TQM. These concepts are rooted in the linear model of change, and are more oriented around the content of change than its process (Aronsson & Carlsson, 1996; Carlsson, 2000).

A study of the TPL establishment process might accordingly find that this has in fact been the dominant approach to change. But Carlsson’s findings are founded in empirical findings as well, and other approaches than the linear are apparent in his material. Thus, my reasoning is that the TPL establishment process might consist of more than rational decision-making followed by issuing of directives, issues that the theoretical foundations and research designs of previous studies of this process have not been able to acknowledge. Some of the recommendations, e.g. “ensure understanding”, are not children of the linear approach to change; obviously the authors acknowledge that for change to happen something more than solely formulating directives might be necessary. My criticism, however, is that the studies upon which these statements rest do not support writing anything more substantial than such “headline” prescriptions. The theoretical foundations are concerned mainly with decision-making, and the empirical material is mainly accounts from people in decision-making positions; consequently, the change process has mostly been described from the decision-making perspective.

Informed by Carlsson’s work, I find this insufficient. There are definitely more people affected and involved in TPL establishment than merely the executives who have conceived the decision to outsource, and there is theoretical support to be found regarding issues along the process dimension. Therefore, any prescriptions for how to manage the change to TPL should reasonably be founded in an approach that acknowledges all affected and involved actors, and can support a study and analysis of process. A new perspective for studying the TPL establishment process is necessary to advance further along the process dimension:

		Decision	Process
How	Theoretical foundation & research design		
What	Conclusions & prescriptions		

Figure 11. This study is concerned with the process of establishing TPL.

Figure 11 illustrates the focus of this study. Whilst previous TPL literature has focused on decision-making, this thesis focuses on the process dimension, by applying a theoretical foundation and research design adapted to studies of process. These issues are described in more detail in the following chapter.

5 Blueprint of the study

So far it has been concluded through a literature study that there is a difference between the research that has been done regarding TPL establishment process, and that which is concerned with logistics change processes, in terms of theoretical underpinnings and intimately associated with that, research approach. A need to advance along the change process dimension of TPL establishment is also identified, and in this chapter an account is given of how this undertaking has been approached in this thesis.

choice of perspective

When embarking on this journey, the intention was to study the process from an inter-organisational perspective, as the establishment of TPL is a process in which two prime parties are involved, the shipper and the provider. At the outset I assumed that the change would be a much more complex and dramatic process from the shipper's perspective, than it is from the provider's. After all, acquiring new clients and incorporating them in operations ought to be part of the everyday life of third party logistics providers. For shippers, it is more likely to be a one-off event, of which they have no prior experience. A pragmatic delimitation also had to be made regarding how much would be encompassed within this thesis, and how much would have to wait for future publications.

During the course of this study it has come to light that apart from being an interorganisational process, the studied TPL establishment process to a quite large extent also displays characteristics of an intraorganisational process, at least within the shipper's organisation, which is focused in this thesis. Thus my initial assumption is on some sense correct.

But what I also have come to realise is that there is also a second interorganisational process within the provider's organisation and one within the provider's. I have come to understand that my initial assumption in the studied case is true in the sense that the provider has more or less worked according to a standard procedure for acquiring and integrating new clients. But I have also come to realise that much of the operative execution of adaptation and subsequent operations on the shipper's behalf have involved substantial change within the provider's organisation. Interesting as this is, I have however not had the resources to dig deeper into this aspect within the scope of this thesis. Nevertheless this is an interesting path to follow in the future.

Carlsson (2000) in fact identifies a need to develop theory on interorganisational change processes, why such a perspective of course would be interesting indeed; after all, which phenomenon or concept within the logistics realm is more inter-organisational than TPL? The purpose of my research is however not primarily to develop new knowledge regarding logistics change in general, but to add a change process dimension to TPL knowledge.

The choice to focus on the shipper's intraorganisational process does not imply that I claim the provider has no part in the change process; rather the message is that the interorganisational change process on the provider side is excluded from this particular study.

a study of change process

Starting with the basic approach, Pettigrew's analytical framework has proven useful for studying both strategic (through the works of Pettigrew and colleagues) and operational (Carlsson's works) change processes. Therefore I believe this approach would be fruitful also for the study of TPL establishment, which is a process that is affected by, and has extensive impact on both the strategic and operational level.

This choice is the first of three important aspects of researching strategy processes, according to Van de Ven (1992), who raises three interrelated suggestions for such an effort. The suggestions are those that influenced Carlsson to conclude that Pettigrew's (e.g. 1990) meta-model is not sufficient for a study of change process. The suggestions are:

1. *Define the meaning of process.*
2. *Clarify the theory of process.*
3. *Design research to observe process.*

(Van de Ven, 1992, p. 169)

Van de Ven (1992) concludes that in literature three different meanings of the term *process* are most commonly used. These are "... (1) a logic that explains a causal relationship between independent and dependent variables, (2) a category of concepts or variables that refers to actions of individuals or organisations, and (3) a sequence of events that describes how things change over time." (p. 169). This thesis is concerned with processes in the third meaning, which encompasses the definitions used by Pettigrew. In Pettigrew (1987) the definition is, as mentioned earlier "... the actions, reactions, and interactions from the various interested parties as they seek to move the firm from its present state to its future state." (pp.657-8), and a similar definition is offered in Pettigrew (1997):

... a sequence of individual and collective events, actions and activities unfolding over time in context.

(Pettigrew, 1997, p. 337)

These definitions display some important characteristics. First, there is the acknowledgement of actors, be they groups or individuals; actors are those that carry out the process and act, interact and react. Then there is the occurrence not only of conscious activities and actions, but also events, which opens up for an acknowledgement of activities and events external to the focal process, yet having a substantial influence on or being affected by the flow of events in the focal process, or certain points in time within the process that have an impact on the future course of events. There is also the contextual awareness, asserting that processes are not – and subsequently should not be studied as – something that lives a life of its own, detached from other processes and other aspects of the focal process' surroundings.

In the introduction, a definition of the TPL establishment process was given: “...*all those activities that are necessary for bringing the two parties from a state when the shipper provided the logistics services in-house, or procured them as single services from one or multiple providers but managed them in-house, to a state when these activities are transferred to, and provided and/or managed by one provider under a long-term, partnership-like arrangement*”. Only *activities* are mentioned in this definition, but this does not mean that *actions* or *events* are disregarded. I argue that this definition is not in conflict with the process view of Pettigrew, rather, it is offered to distinguish characteristics of the focal process under study.

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One must bear in mind here that the works of both Van de Ven and Pettigrew are concerned with strategic change processes, and the focal level of analysis is consequently that of entire firms and corporations. This line of process thinking is nevertheless applicable to the TPL establishment process, as it is a process that involves both strategic and operative issues, and Carlsson (2000) has proven the merit of this approach also on this latter level. Therefore I have chosen to use this approach for this study of process.

Pettigrew (e g 1990; 1997) is explicit that any effort to conduct research on processes of change must link process to outcome. In this thesis, outcome in terms of the content of change on an overall level is given: TPL establishment. Outcome in terms of how good the outcome is, i.e. linking process to the *success* of change is of course a tempting path to follow, but as implicitly stated in the introduction to the thesis, time is not ripe for such an endeavour. If the ultimate purpose is to produce normative writings on TPL establishment, studies that make it possible to establish this link must be conducted: This is however a task which Pettigrew himself in a recent article concludes is a very difficult task: “*Even the more confined area of evaluation the*

success of change initiatives is replete with practical difficulties. What is success in the management of change?” (Pettigrew *et al*, 2001, p. 701).

Regardless of success rate, the fact remains that the outcome in terms of *content* in the meta-model is known in this study, as is partly the *context* and *process*. I have attempted to illustrate this in Figure 12 by using the meta-model as a starting point.

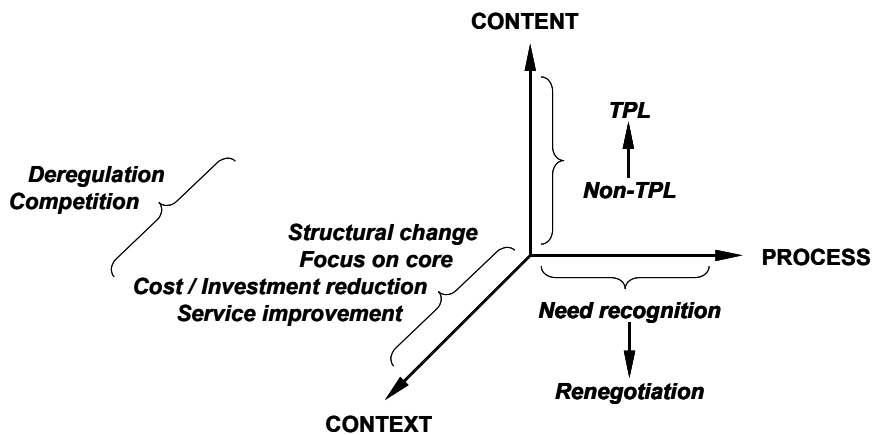


Figure 12. The TPL establishment process sketched in the basic meta-model of process.

This study is concerned with the change process of establishing TPL, the *how*-issue. Questions regarding *how* are in the meta-model encompassed by the *Process* dimension, which in TPL literature is described on a general level as a sequence of activities, and some vaguely formulated “headlines” for how to ensure organisational impact. The dominating view on change in this literature is that it is mostly concerned with decision-making and supplier selection, thus implicitly displaying the characteristics of the linear logic of change.

As stated earlier, I find current descriptions insufficient. Therefore I attempt in this study to go further than previous studies of this particular process by adopting a framework of change, which acknowledges not only a view of change as formulation followed by implementation, but also allows for other aspects, such as organisational formation and learning. The previous studies give a valuable starting point, as the suggested outline of phases offers temporal structure to descriptions and analysis, but the purpose of this study is to go deeper into the mechanisms of the change process that leads to an established TPL relationship.

Looking at the *Context* dimension, we know from literature that there are certain motives for seeking a TPL solution, of which some (adopted from Andersson, 1995) are displayed in Figure 12 above. These factors could be regarded as internal context in Pettigrew’s terms. There are also examples of external context in the figure, taken

from Bagchi & Virum (1996). Literature however offers no detail on context more than in the form of these background factors and driving forces. In order to conduct a study of TPL establishment process, one must also acknowledge how context interrelates with process.

This is not to imply that the background factors offered in literature are irrelevant. On the contrary, external context such as competition and deregulation might indeed play an important role during the course of events that lead to an established TPL arrangement, as might the internal factors. If for instance TPL is used as a means to carry out structural change, one must acknowledge that this change is also a process that might influence and be influenced by TPL establishment.

With regard to *Content* we know that on a simplified overall level the content of change is from “before to during TPL”. But there is more to content than this, establishing TPL quite reasonably must encompass a plenitude of major and minor changes of both strategic and operative character. This also means change content in the sense Carlsson discusses it, i.e. that the actors in the system undergoing the change from before to during TPL have to learn and develop new mental models of how the system of which they are part will work. Establishing a TPL arrangement involves numerous changes of varying dignity and character throughout the shipper’s organisation. Order processing routines, information systems, and organisational structure all have to be adjusted, to mention but a few of many possible changes. All these changes are also part of the *Content* of TPL establishment. Very little detail is however given on content in these terms in TPL literature.

One prominent feature of Carlsson’s (2000) findings is that the mechanisms of the change process, the *how* of change, relate to how extensive the change is content-wise, the *what* of change. This feature is related to from which perspective the extent of change is assessed. A certain change that from an objective, overall point of view is comprehensive, is perhaps not very extensive for some groups of actors; in fact, certain actors might not be affected or involved at all. Others may on the other hand be substantially affected, and have to adapt to completely new responsibilities, and learn new ways of carrying out their duties.

Applying this reasoning to the TPL establishment process, and what is done in contemporary literature, none of the works I have studied discuss the process from the perspective of organisational sub-units of the shipper organisation, not to mention from that of individual actors. The process descriptions are on a phase- or step-format from an overall, objective system perspective.

The purpose of this study is however not primarily to build further on Carlsson's findings by a deeper exploration of the interrelations between the dimensions of change, but to look into the actions, activities and events constituting the change process of TPL establishment, i.e. focus the process dimension. Therefore I have chosen not to go into any depth on the content of change in this thesis.

The issue is however highly relevant for the wider scope of my research, i.e. for the entire doctoral study. Therefore the interview guide used for data collection also contains issues relating to content, as this information might be used later in my doctoral studies. The other two dimensions are however analysed in this thesis, and are discussed more closely in the following sections.

the context dimension of TPL establishment

Based on the discussion about contextual factors above it is close at hand to assume that higher-level processes into which TPL establishment is embedded, and other contextual factors, have been important in the studied process and should be taken into account. The general activities that make up the TPL establishment process are already quite well known from literature, but it is possible to expand the outline so that the interrelationships between the TPL establishment process and its context are acknowledged. A suggested elaboration of the outline is offered in Figure 13. In this figure, I have chosen to add two contextual "layers" that have been identified from their portrayals in literature. It could of course be argued that there should be even more layers in the figure, I have however chosen to limit the figure to including these two for ease of presentation, however not implying that this is all there is to context.

As a consequence of the presumed embedment of TPL establishment, I also suggest that the TPL establishment process should not be as clearly demarcated as earlier. This is illustrated by drawing the process outlines dashed. From the scalability of the analytical framework, it is also reasonable to view the identified activities as embedded sub-processes. To define the start and end of any change process is difficult, if not impossible. This is acknowledged by Pettigrew, who concludes that when carrying out process research, pragmatic judgements have to be made (Pettigrew, 1990). I have here chosen to stretch out the *Recognition* sub-process through the logistics change layer to strategic change, so as to illustrate what other authors have expressed clearly, that there is something before TPL that leads to considering TPL as an option.

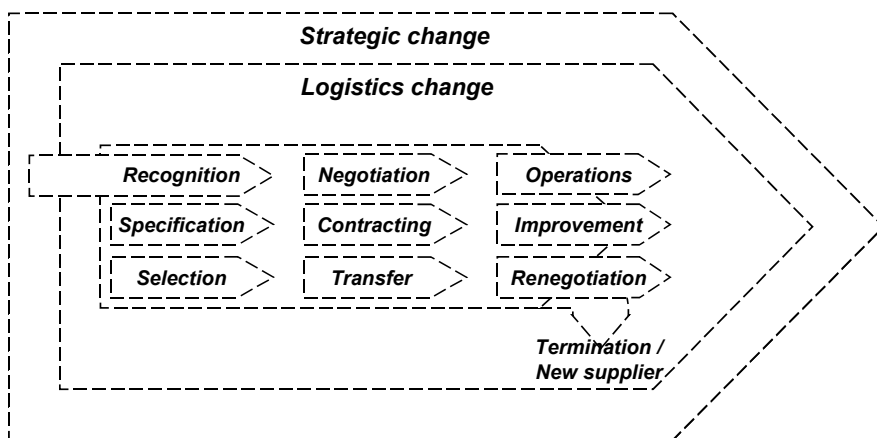


Figure 13. Suggested elaboration of the outline of the TPL establishment process.

Looking at centralisation of distribution for example, authors dealing with this subject have shown that the changeover of the distribution structure by no means is an easy process (Abrahamsson, 1992; Abrahamsson & Brege, 1995), and since TPL is commonly attributed to such restructuring efforts, it could be assumed that these two changes affect each other to a large extent. The contextual dependence of TPL establishment is not sufficiently understood in contemporary literature, why a first research objective is:

To explore the context within which the TPL establishment process unfolds and describe the contextual dependence of this process

This objective serves two purposes, one is that any study of process without acknowledging context is quite pointless, i.e. describing the process in the context within which it unfolds is a necessary prerequisite for any analysis of process. The second purpose is that the contextual description is an end in itself, in that such a description is not offered in contemporary TPL literature. The description of the studied process is presented in Chapter 6; this also forms a foundation for the analysis that is presented in Chapter 7.

Pettigrew (e.g. 1992) is clear that context is two-fold; there is both an internal and an external context that interplays with the focal process. In the case of TPL establishment, the context layers suggested in the illustration above are somewhere in between, e.g. changing the distribution structure is perhaps not a part of the TPL establishment process as such, but might very well be so closely linked that it in practice is hard to separate the two. There might also be a dependence on conditions that are clearly external, e.g. regulatory shifts that have played an important role as Bagchi & Virum (1996) point out.

But there is more to internal context than other contemporary change processes taking place in the company. Carlsson points out that the internal “climate” for change is also a decisive factor. Experiences from previous change processes and internal politics are examples of factors that can shape and be shaped by the process. My conclusion is that context is multifaceted, and as a researcher of process one must be open to the fact that process context is dependent on research context, i.e. that it is not possible to know beforehand the character of the studied context.

the process dimension of TPL establishment

As concluded earlier, the TPL literature does not offer much detail regarding how companies should manage the change to TPL, especially not from a perspective that acknowledges that different affected actors might experience radically different changes depending on their role in the system. The process is understood as an exercise in rational analysis and decision-making, but not as an exercise in social or political processes, or creating conditions for learning.

In order for any study of change process to be meaningful, the researcher should according to Van de Ven's (1992) three suggestions also be clear about the *theory of process* that is applied. The latter is exactly what Carlsson (2000) offers, and since the models of change he discusses have been developed for and tested in a logistics context, I will adopt it in this thesis. It could of course be argued that there is other literature dealing with change that would be suitable for this study, but since Carlsson's work is the only extensive investigation into change issues in a logistics setting that I have come across, I find this a reasonable choice. I find this quite appealing also since not one “grand theory of change” – which Pettigrew (1990) warns us to strive for – is put forth, but that it embraces and combines several views on what change is and how it comes about.

It is earlier in the thesis proposed that TPL establishment might involve extensive change for certain involved actors, and when combining this suggestion with Carlsson's finding that the underlying model of change at play and the extent of change interrelate, there is reason to believe that there is more to TPL establishment than formulation followed by implementation; other mechanisms than purely rational might be at play.

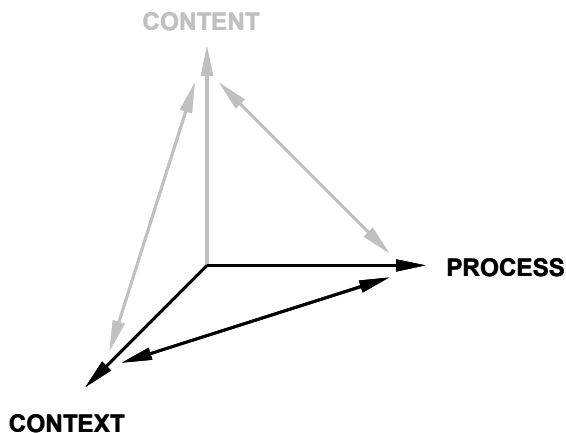
The underlying linear change logic of TPL literature might tell only part of the tale. Therefore, I have attempted to assess how well this model, and the other two, can reproduce the mechanisms of change in the studied process. The linear model might have some merit, but there is also reason to believe that the other two are at play as well. Therefore the main research objective of this thesis is:

To describe the change process of TPL establishment in terms of the linear, processual, and circular models of change

One must be clear here that Carlsson (2000) does not claim that if change is extensive, the processual or circular models *are* by default applied. Carlsson is normative, and tells us that if change is extensive, these models *should* be applied if change is to be successful. This means that it is possible that there has been a mismatch between the approach to change that is applied, and that which should have been, given Carlsson's recommendations. By mismatch I do not imply that the objective is to evaluate how good the approach to change has been in the studied process. Rather, this is stated to denote that although one can expect that for some actors TPL establishment brings extensive change, the model of change applied in the change approach must not have been processual or circular.

It is also possible that change has been approached differently in different episodes of the process, why this objective is not only concerned with describing the change process as a whole in terms of the three models, but also with studying the variations over time. The analysis underlying this description is presented in Chapter 7.

This is a starting point for my study of the change process aspects of TPL establishment, recognising that it is not a single phenomenon isolated from context. The focal study object is the change process of TPL establishment, which is embedded in context and leads to a certain outcome, which is an established TPL arrangement. This is illustrated in Figure 14 by using the basic meta-model:



*Figure 14. An illustration of the area of study in this thesis.
The parts depicted in black are focal.*

The main objective is to explore the mechanisms of the change process of TPL establishment. The content of change is not regarded apart from acknowledging the overall system change, i.e. that TPL is established. Everything that isn't part of the focal process is in this study regarded as context. The adaptation of the meta-model has consequences for how the study is designed. Knowing beforehand exactly where to draw the line between context and focal process was not possible without first having collected data and gotten to know the case.

Similar to the discussions of processes of change, there is a *why*, *what*, and *how*-issue of research. The *why* of this study is discussed in chapter 4, and so far this chapter has discussed the *what* of this thesis. In order to study this *what*, the *how* must be designed accordingly; this is to a large extent governed by the *what*. The remainder of this chapter goes into detail on the *how*-issue.

designing the research

The third and final point to consider when conducting change process research according to Van de Ven (1992) is to design a study that is capable of observing process. Part of this is already in by adopting the three-dimensional meta-model and drawing up an outline of the blueprint in the sections above.

The formulation “to observe process” is characteristic for the approach that both Van de Ven and Pettigrew argue for, i.e. real-time process studies. This issue is addressed below. But there is more to designing a study than deciding how to handle temporality. According to Arbnor & Bjerke (1997) there is an interdependence between the applied *methodological approach*, the nature of the problem, and the conclusions the researcher is able to draw from his or her study. The authors do not offer a distinctive definition of methodological approach, but the message is that it both encompasses basic assumptions of reality, as well as provides guidance for concrete methodological considerations.

As this research is founded in the meta-level framework for change process analysis as offered by Pettigrew, and the theory of change as offered by Carlsson, the methodological approach is to some extent given. The theoretical foundation regarding change process asserts that change is subjective, it is a matter of from which actor's point of view it is studied. Arbnor & Bjerke (1997) discuss three basic methodological approaches that, among other things, involve different views on actors. The three approaches are the *analytical approach*, the *systems approach*, and the *actors approach*, of which, in their archetypal forms, only the actors approach acknowledges actors.

Carlsson (2000) concludes that logistics as a discipline has its roots in an analytical approach, but gradually has come to be more concerned with systems thinking. Even though the systems approach in its purest form does not acknowledge actors; there are however forms in which certain notions from the actors approach are borrowed (Arbnor & Bjerke, 1997). One such form is what Carlsson (2000) coins “actors in a systems context”, which can be regarded as a hybrid between the systems and actors approaches.

The systems approach asserts that there is an objectively accessible reality, whereas the actors approach views reality as social constructions, which I interpret in the sense that reality exists in the social interaction between individuals. The “actors in a systems context” approach instead asserts that even though reality is socially constructed among the actors of a system, it is also possible to objectively access it. Actors, their behaviour and actions are ascribed more importance for the development of the system, but the researcher still views the system as such as real, and actors are part of that reality. Since this is the approach under which the adopted theory of change is developed, I have chosen to let this approach guide also my research.

An analogy I have heard and used myself many times is that of which eyeglasses one puts on when studying the world. My interpretation of objectively accessible versus socially constructed reality is that if one believes in the former, one believes that it is possible to put on a certain pair of glasses, and tell others what one has seen, under the condition that the attributes of the glasses are clearly described. If one describes these attributes, others can put on the same pair of glasses and see the same images when reality is studied. If one instead believes that reality is entirely a social construction, my interpretation is that the eyeglasses are individual, and no matter how thoroughly one tries to describe one’s own glasses, others will look at this description with their glasses. No single actor can put on an exact copy of another actors glasses, thus there is no such thing as an objective reality.

The “actors in a systems context” can be said to lie in the middle of these two, by asserting that reality is socially constructed among actors, but that it is also possible to objectively access this, and convey the image to others, by being explicit about one’s glasses. I adhere to this approach. I believe that it is possible to a certain extent to catch a picture of a reality that is socially constructed between other actors. I hope that I am explicit enough about my own pair of glasses so that the reader can put them on and regard the studied process in the same way as I have.

case study approach

This licentiate thesis is founded on one focal case, which is the TPL establishment process between a Swedish multinational company and a large international TPL service provider. This process commenced sometime during the middle of the nineties

and is still ongoing, as the partnership at the time of writing between the parties is still effective. This distinction – that it is the process that is the case, not any one of the two parties of the dyad – is important since cases in case studies in the logistics discipline commonly denote system entities such as companies or distribution systems, not change processes.

Pettigrew (1990) points out that longitudinal process case research tends to be at times untidy, iterative process of induction and deduction. This reasoning is further elaborated in Pettigrew (1997), in which the following example of how such a process could evolve:

The core questions of the study → related themes and questions → preliminary data collection → early pattern recognition → early writing → disconfirmation and verification → elaborated themes and questions → further data collection → additional pattern recognition across more case examples → comparative analysis → a more refined study vocabulary and research questions.

(Pettigrew, 1997, p. 344)

Intimately associated with the inductive-deductive cycles of research is the type and dignity of output the researcher is able to produce. Four levels of output are suggested: (1) the case as analytical chronology, (2) the diagnostic case, (3) the interpretative/theoretical case(s), and (4) meta level analysis across cases (Pettigrew, 1990). These levels are linked to how far the research process has evolved, and can be seen as cumulative; level $n+1$ is possible only if level n is fulfilled.

Pettigrew is very clear that there is more to the analytical chronology than presenting a case history. The analytical chronology not only presents process in a temporal manner, but also involves applying a set of analyses over several levels of analysis. Central to this are attempts to interpret and explain change as it unfolds over time, and raise initial theoretical propositions.

This is a classification that fits how I view my own research at this time quite well. I have raised some initial questions based on theoretical studies, and have concluded some data collection and subsequent analysis, and end this publication with raising questions for further research, thus reached somewhere close to the middle of the example sequence in the quotation above. The purpose of this thesis is not to generate robust theory, but to conduct an exploratory investigation that is the starting point of an ongoing research effort.

One commonly referred to author in the literature based on case study research is Yin (1994), who among other things writes that case studies are appropriate when the researcher wants to study a phenomenon embedded in its context. This is very much

the case in this thesis, as one of its foundations, the theory of process upon which this research rests, asserts that processes not only evolve in contexts, but are shaped by, and shape contexts, making a case study approach necessary (Pettigrew, 1997).

An important choice when adopting a case study approach is how many cases to study; should the research be based on a single or multiple case study? There are several possible instances, in which a single-case study might be preferred; amongst these is when the case study is intended to precede further research, e.g. for an exploratory purpose (Yin, 1994), which is the case in this thesis. I have also deemed this appropriate as a means of testing the applied methodology.

case selection

In order to find a suitable up-and-running partnership, several TPL service providers in the personal networks of colleagues at my department were approached, and asked for clients for whom they had provided an integrated set of services for some years. The reasoning behind this was to find a case in which the process already had reached a state of ongoing operations and improvement, and where access was facilitated through an established relationship between people at the department and at the service provider's. Approaching TPL providers instead of shippers directly was considered a wise option as providers obviously have a number of clients in their network, and they have a clear picture of the scope of their cooperation, making it easy for me and my advisors to assess the cases before approaching the shippers.

This rendered a few viable options. The case that was eventually selected was deemed highly suitable as the parties were approaching the first renegotiations of the service contract, and that a personal relationship was already established between one of my advisors and employees of the service provider, and also with other partners of the shipper. The TPL arrangement included warehousing and direct distribution for most of the European market, and distribution to international warehouses operated by the shipper. Included are also quality inspection, kit assembly, transportation, and returns handling, which made the case representative TPL-wise. Another important issue was the fact that the shipper had chosen the TPL option as a means to implement direct distribution on the European market, which is known from literature to be a common driving force, at least in the case of European TPL arrangements. Yet another issue was that the shipper in this case was a multinational company with headquarters and manufacturing in Sweden, which eased access and communication.

For the remainder of this thesis, the shipper will be referred to as *Shipper*, and the provider as *Provider*. The logistics consultant is named *Logistics Consultant*, in short *Logicon*. I have also named each interviewed individual with fictitious names, as I have agreed with the companies to present my material anonymously. The companies and actors are presented in more detail in a later chapter.

temporality

Carlsson (2000) argues that studies of change processes should be carried out in real-time, as opposed to in retrospect, since the latter would make the research dependent on actors' recollections of events that might have occurred a long time ago. This might render the information biased through the actors' own reflections and later events. According to Van de Ven (1992) retrospective studies of change invariably render biased results as the success or failure of the change effort is known prior to the study. These authors thus argue for the use of real-time studies of change, where the outcome is unknown when the study is initiated. I can agree to the possibility of bias, as e.g. the interviewees might emphasise their own beliefs concerning reasons for success or failure, but since assessing success or failure, or reasons thereto, is not the purpose in this study I do not find this an issue. There are plenty of reflections embedded in the empirical material, but I tend to see these as strength rather than weakness of my approach because some of the reflections offer rich detail to my analysis of the change process that has been retold to me.

In reply to this I argue that in this case, in which the main feature of change content to study is already decided, i.e. TPL establishment, real-time data collection poses the obvious threat of ending up with no data at all. The studied processes might take unexpected turns under the course of study, e.g. companies might decide along the way that TPL is no longer a viable alternative. That would have left me in quite an awkward situation, as the purpose of my research is to study the process of establishing TPL, not the process of *not* establishing TPL. Examining failure in TPL relationships would in itself be an interesting path to follow, but in another study.

In fact, what Van de Ven believes is a weakness of retrospective studies, i.e. knowing the outcome, is in my opinion a strength. It has rendered the possibility to choose among several potential cases based on process outcome, as discussed above, but only plunge into extensive data collection in one, an option that would not be possible, had I instead opted for a longitudinal real-time approach.

There is also one obvious advantage of retrospective studies that the above authors do not recognise. A retrospective study gives me the opportunity to do inquiry without the risk of affecting the course of events, as it has already taken place. In a real-time study, my inquiries might invoke thoughts and actions among the studied actors, which eventually might have an effect on the course of events, in a sense biasing my data. Since my intention has been to create an image of how the process unfolded without my intervention, this is a beneficial feature of the retrospective approach.

data collection

The underpinnings of this study have guided me to collect and present my empirical data on an actor level. The primary method for data collection I have applied is interviews with individuals within both *Shipper* and *Provider*, as well as one of the consultants of *Logicon*, who has played an important role in the process. The attentive reader will here note that I have collected data from the provider side as well, in spite of the fact that I have chosen to focus the process of the shipper. As I stated above, this choice of mine is one that has emerged gradually during the course of my study, and one I wouldn't have been able to make, had I not conducted the interviews on the provider side that I have.

The first interview was conducted with the person who according to my contact at *Provider* had main responsibility for the process in *Shipper's* organisation. By asking this person for others whom also have been affected by or involved in the process, new interviewees were identified. By consistently doing so, I have been able to identify a sample of individuals that has given me a number of accounts of the process from various perspectives. I have tried to reach a representative sample within the two prime organisations of the TPL arrangement, through a selection among the appointed individuals. In Figure 15 I have illustrated the position of each interviewee in their respective organisation. For a presentation of the actors, I refer to the introduction of the following chapter.

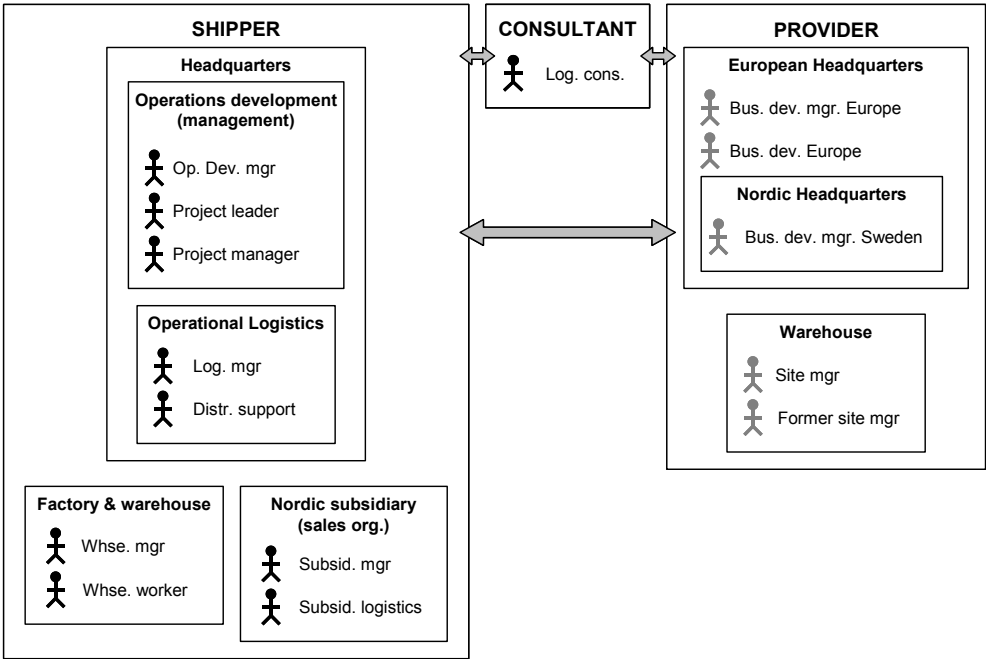


Figure 15. An illustration of the position of each of the interviewees in the study.

I have tried to apply a nomenclature that is illustrative of the position of each individual in his or her respective organisation. Certain individuals have under the course of the process under study joined or left the companies, or moved from one position to another. The static illustration fails to communicate such details; these are instead given in writing in the presentation of the empirical material later in the thesis.

choosing interviewees

Given that I have chosen a theoretical base, which asserts that the mechanisms of change cannot be studied without doing this from the perspective of the actor, the choice of interviewees becomes important. In a context where my time and endurance were unlimited, to mention only two of many prerequisites, I could of course had chosen to attempt interview each individual who had been involved in or affected by the process under study. Obviously this has not been feasible; instead a representative sample has been selected.

The choice of interviewees is, as stated above, informed by those already interviewed, a sort of “snowball sampling”. I have tried to choose actors that I believe are representative, in the sense that they individually, or as part of groups, have been involved in or affected by the process to a large extent, in various ways. The assessment of which actors to interview has evolved gradually as I have collected the data, but was also guided by some initial assumptions. When I first started this study, I was influenced by the TPL literature in believing that the decision to opt for TPL is commonly taken at a top management level; therefore I wanted to interview a top management representative, preferably the person who had been the champion of TPL if there had been one. This turned out to be the case quite early in my study. I also believed that those who worked with logistics on the operative level would have been affected, why I wanted to find some representatives from this group; however, I did not know how *Shipper* were organised prior to my first interview, so it was not possible to identify likely candidates any more specifically than this from the beginning. I also wanted to interview representatives from the internal warehouse that was closed down as an effect of the TPL arrangement, as these quite obviously were affected. Apart from these groups, I was not able to identify likely candidates without first getting to know the organisation better.

The first interviewee was, as stated above, the person who was identified by my contact at *Provider* as the one in charge of the process; this is *Operations Development Manager (ODM)*, who prior to this position was the logistics manager of *Shipper*. During this interview, it came to my knowledge that one other actor, *Project Leader (PL)* had played an important role close to *ODM*. *PL* quit the position within *Shipper* some years before my data collection took place, but through *ODM* I could establish contact and arrange an interview. *PL* was succeeded by another project leader, who in turn was succeeded by another; these two have however left *Shipper* and it has not

been possible to reach these for an interview. The person who was the last to hold this position, *Project Manager (PM)* was however still with the company when I carried out my study, and played an important role in the upcoming renegotiations with *Provider*, and was subsequently chosen for an interview.

When interviewing these actors, I understood that the operational logistics part of the organisation – which is separated organisationally from the group of actors discussed above – had played a role and that some of the actors there had been involved in the process. This confirmed my prior assumptions. Operational logistics here denotes those who administer and manage the flows; this department does not include any employees who physically handle the products in any way. The *Logistics Manager*¹⁸ (*LM*) was chosen for an interview, as this actor is the head responsible for operational logistics. This person has however not been in this position during the entirety of the studied process, but started his position in late 1998. *PL*, *LM* and later *Logistics Consultant (LC)* all identified *Distribution Support (DS)* as a person who had worked with operational logistics issues for a long time, and had played an important role in the process.

As I assumed prior to data collection that the staff of the internal warehouse that was closed down as an effect of the TPL arrangement would have been affected, I wanted to interview some of these actors as well. As several TPL publications also point at exchange of personnel and on-the-site training as means for easing the transition, I wanted to know if *Shipper* and *Provider* had employed any such activities. When interviewing *ODM* and *PL* my assumptions were confirmed; the *Warehouse Manager (WM)* had in fact played an important role by, for instance, having followed the goods to the new warehouse and worked alongside *Providers* staff for almost a year. I also wanted to interview at least one of the warehouse workers to pick up the perspective of those who I suspected were very much affected but perhaps least involved. Therefore I conducted an interview with *Warehouse Worker (WW)* as well.

What I did not know prior to commencing data collection was exactly how *Shipper* had gone about establishing TPL as a means to make it possible to shift from a traditional decentralised distribution structure, to a centralised structure with direct distribution to customers. This is, as referred to earlier, a common reason for shippers to seek TPL arrangements. I got to know that this meant closing down a number of sales company-operated national warehouses. These organisational units – subsidiaries in *Shipper*'s terminology – were also involved in the process. To represent this group, I chose to interview the manager of the Nordic subsidiary (*Subsidiary Manager, SM*), partly because this was the easiest subsidiary to access, partly because this manager was claimed by other interviewees to have been much involved in discussions during the change process. From my earlier interviews with those belonging to the

¹⁸ Please note that this is not exactly the same position that *ODM* held; this is a more operative responsibility. More on this in the presentation of the empirical material.

management level of *Shippers* headquarters I understood that also those responsible for logistics in the subsidiaries were involved, which is why I chose to conduct an interview with the person holding this position at the same subsidiary, *Subsidiary Logistics* (SL).

Since *Shipper* had employed a logistics consultancy firm, *Logicon*, to conduct the pre-study for direct distribution – in which using TPL was a clear recommendation to *Shipper* – I also conducted an interview with one of the two consultants who carried out the assignment for *Shipper*. Since this is the only person I have interviewed from this company, I have chosen to use the name *Logistics Consultant* (LC).

With these interviews, I believe I have managed to acquire quite a good sample of the *Shipper* side of the dyad. There are three interviews with individuals representing the management level of the corporation who have played different roles, two representing different positions from operational logistics within *Shipper*'s central organisation, two who belonged to *Shipper*'s old warehouse of which one was actively involved in the transfer to *Provider*, and two representing different roles of a regional subsidiary, i.e. sales company. I have also interviewed the consultant who was employed during parts of the process.

There is one potential interviewee whom I have not been able to reach for an interview, this is the person who during the most part of this process was the vice president of operations of *Shipper*, whom I have understood played a central role in promoting the decision to centralise, and subsequently to seek a TPL arrangement. This person left the position at *Shipper* in the same period as my data collection commenced, and it has not been possible to find a suitable time for an interview.

I do not think there are important groups not represented in the sample. I know from my interviews that *Shipper*'s customers have been affected, but with my focus on the internal change process of *Shipper*, I have not deemed it important to include any customer representative in my sample. The same goes for suppliers.

There is of course the issue where to draw the line; should I do one more interview or should I be satisfied? I have of course had to keep the sample down to a manageable size, especially as the technique applied for data collection and analysis has proven very time consuming. I could of course have attempted to crosscheck the stories told by various actors, but since the purpose has been to obtain *several different* perspectives, not *all*, I have not deemed this necessary at this stage. In some instances it would not have been possible, as certain actors have alone represented a certain position in the company. In others it would be possible, but I have for practical reasons had to limit my sample.

On the *Provider* side, the sample of interviewees is smaller. I have learned from interviewing these actors that *Provider* has in this process more or less worked according to their standard modus operandi. The initial phases were on their behalf managed by a number of individuals belonging to *Provider's* business development organisation, i.e. those who are responsible for seeking and acquiring new customers; from this group I have interviewed those three who were most deeply involved in the process with *Shipper*. As *Provider's* procedure involves handing over responsibility from sales to the operations side once a given status in the transfer has been reached, I have also tried to interview those who have been involved from this part of the organisation. This has however proven difficult, probably because of the way *Provider* handles integration of new accounts. One of the two site managers I spoke to in fact said, when asked for other individuals to interview: *"That won't be necessary. If you have spoken to those in the business development group, myself and the other site manager, you have spoken to all that have been involved."* This perhaps is an interesting finding in itself, well worth a deeper investigation in another study. Nevertheless, I have gone through the stories told by these actors, and these together convey quite a unanimous picture. Standard procedure was more or less followed by the book to integrate *Shipper* into *Provider's* operations. But, as mentioned previously, from the stories told by actors in *Shipper's* organisation it comes to light that there might very well be more to the change process within the provider's organisation than can be retold by responsible managers.

Due to the chosen perspective, these interviews will not be used in this thesis. In Figure 15 above the actors whose interviews will be included in this thesis are depicted in black, while those whose will not are depicted in grey.

There are of course other actors that have been affected or involved in some way, *Shipper's* customers for instance. Regarding the customers, it would be very valuable to collect some data on their behalf in the case I would choose to attempt linking my process findings to the success rate of the TPL arrangement, but since this is not an objective of the current study, I have chosen not to seek any customer perspectives. When it comes to functions such as manufacturing and purchasing, these too most probably are affected, but I believe in a way that has not been influential on the process I am studying.

carrying out interviews

In order to orientate the interviewee on which issues my research is concerned with, an interview guide was sent to them by e-mail prior to the interview. This guide begins with a very short presentation of the basic model of change, and the accompanying definition of process. The main contents are brief questions and bullet points, categorised under either one of the three dimensions of change. There is also a category labelled "unsorted". The interview guide was developed primarily on the

basis of the TPL literature I had studied at that point, and by discussions with my advisors. The items are those that were deemed important, but it was also pointed out to the interviewees at the time of delivery that these were only the issues I had been able to think of; there were probably a lot of items missing on the list or items that were on it perhaps were irrelevant in that particular case. The interviewees were encouraged not to prepare structured answers to each point, as if it were a strict interview question, but to regard the guide as a starting point for discussions. The interview guide is presented in Appendix 5.

As touched upon in the previous paragraph, rather than conducting structured interviews, I asked each interviewee to tell their own story with their own words. I asked them to describe the TPL establishment process from their own point of view, and to try to cover it in its entirety; from when they first got to know that a TPL arrangement had been brought up as an option for *Shipper* until where the process was at the day of the interview.

This technique can seem rather haphazard in a tradition where mail surveys and quantitative analysis are the methods applied in many of the acknowledged publications. I chose this approach however, because I found it very difficult to design structured interview questions, which would allow for enough freedom for the interviewee to report on all those activities, actions and events the character of which I could hardly foresee prior to the interview. I wanted to avoid having my preconceptions influence the interviewee to focus the replies in such a way that by me unforeseen details were lost. I believe this was the best option I had to reproduce what had been possible to do, had I instead chosen real-time data collection. Since I could not observe the process as it unfolded over time I could at least attempt to have the interviewees retell it that way.

In the case of *Shipper*, I started by interviewing *ODM*. This interview was actually conducted over two sessions. The first was an introductory meeting in which, apart from *ODM* and myself, five other persons from *Shipper* took part. Among these were some of my future interviewees, namely *LM*, *DS*, and *PM*. The purpose of this meeting was to introduce myself and my research project to some of the employees of *Shipper*, and to get a brief introduction to the process they had gone through. After I had introduced myself and briefly informed about the objectives of my study, and how I had planned to conduct data collection, *ODM* gave a verbal presentation of *Shipper's* TPL process. After that, I held a personal interview with *ODM*, which lasted for about two and a half hours. I concluded the interview by asking for other individuals who had been involved in the process, and might be valuable as interviewees. I concluded every subsequent interview in this manner.

During the introductory meeting, I took notes, which I later put down in what is now the first of the documents containing my empirical material that are presented in this

thesis. The first interviews were conducted through personal meetings at a site chosen by the interviewee, whereas later I switched to conducting the interviews by telephone. All the interviews with one exception (see below) were recorded on tape, and lasted two hours, give or take half an hour. During the interviews I also took notes, in order to help myself keep track of the unfolding story. Back home, I transcribed every story in its entirety, and translated those that were in Swedish, which was the case for the majority. When translating the stories, I have been very careful not to distort what I have interpreted as the original meaning of what was said; for instance, in the case the interviewee used idioms I have tried to find the corresponding English idiom. I believe I have succeeded quite well in keeping the stories intact, as the interviewees have had little or nothing to comment on after having read the completed stories.

These transcripts I have then edited somewhat, in order to get a better internal coherence in the stories. I noticed during the course of my interviews that the interviewees tended to go back and forth chronologically and episodically in their story-telling, as telling about one episode seemed to invoke more recollection of something that had been mentioned earlier. I have also deleted minor parts here and there, which was of a nature that could reveal the identity of the companies, or that was of an otherwise sensitive nature. When the translated and edited versions of the stories were finished, I sent them by e-mail to the interviewees and asked them to read and comment on their own story. In most of the cases the interviewee has accepted the story in its entirety and accepted that I publish it in that form. In some cases, the interviewee has pointed out details that he or she wanted me to adjust, but these remarks have exclusively concerned minor issues. After these adjustments I have regarded the stories ready for inclusion in the thesis. These stories constitute the empirical material that is presented in the following chapter.

The story told by *SM* differs from the others in that it became very short and rather unprepared, as this interviewee did not have the time to fit in a full-length interview into his agenda. Therefore it wasn't possible to prepare the interview by sending the interview guide in advance, nor was the interview taped since I did not get the time to rig the loudspeaker telephone and tape recorder.

other empirical material

Some secondary material, such as project documentation, request for proposals, internal presentation material etc, has also been collected. I have also had the opportunity to study some of Logicon's documentation. None of this material will however be presented due to the promised anonymity. Certain facts have however been used to support my writing of the introduction to the empirical material, which opens the following chapter. Some facts regarding *Shipper's* organisational structure have also been gathered through specific questions regarding such issues.

analysis

When having conducted the interviews, transcribed, translated and had the stories approved by the interviewees, and finally proofread them, I have acquired a fair insight into the process as it has been retold. With this “empirical evidence” collected, I have analysed the material in order to fulfil the research objectives formulated earlier in this chapter. This has involved a search for patterns; some of which I did not know the exact character of before commencing analysis. Pettigrew (1997, p. 346) wrote: *“Process research is a craft activity full of intuition, judgement and tacit knowledge.”* After the fact I can indeed agree to this, I have in the empirical material searched for something of which I at times only had a vague conceptual notion, yet feeling rather secure in what I was doing. Be this intuition or something else, I have in this section made an attempt at describing what I have done.

The two research objectives are closely interrelated, as they are derived from applying the basic three-dimensional meta-model. The purpose of a process analysis is not to study any one of the three dimensions in isolation, as the fundamental logic of the framework is that they are intimately entangled and inseparable. But this thesis is the first writing of a larger research effort, in which the process that is in focus. In order to bring some kind of structure into analysis, I have chosen to conduct analysis for one research objective at a time, however aware that these are not separate dimensions, but rather facets of the same study object.

I have chosen to present and analyse the empirical material on an actor level, since the interviewed actors are representatives of the various affected organisational units. As I have found very little theoretical guidance to what I was likely to find in these stories, with regard to the context, content, and process dimensions, the interview guide used is loosely formulated and the interviewees were encouraged not to feel bound by the issues mentioned there. This has rendered a rich empirical material, but at the same time does not offer the structure that is common when applied to more distinctive interview techniques.

This approach was deemed necessary because of the uncertainty about what would turn out to be relevant, and subsequently much of the initial analysis has been a “naïve” search for patterns and relations between activities, events and actions. This technique of searching for patterns is what Pettigrew (e.g. 1990; 1997) proposes, it is also an analytical logic put forward by Yin (1994).

Regarding the objective related to context, the initial literature studies have offered some guidelines in revealing that context has played a role for TPL emerging as a viable option, but only as a background for decisions. Therefore I have searched for both the emergence of reasoning eventually leading to seeking a TPL arrangement, as well as how the TPL establishment process has interplayed with context over time.

Guided by Carlsson's writings, I have looked for outside events having an effect on the process, and internal context. This internal aspect of context encompasses e.g. the actors' subjective awareness of necessity of change, and how other change projects have affected the climate for change. Carlsson (2000) points at crises and arisen problems as possible inducers of a need for change, but also chance and new organisational conditions. I have also looked for how the focal process has shaped its context. Pettigrew is explicit about this bi-directional dependence between the dimensions, and Carlsson has in his studies identified patterns in which the process at a certain point in time affects context in a way which in turn affects the process at a later occasion.

For the main objective I have been able to apply a somewhat more detailed theoretical frame of reference in the form of the theory of change as presented by Carlsson (2000). Therefore, the pattern matching logic (Yin, 1994) has here been more powerful. The underlying patterns I have searched for are the three models of change, as I have suggested earlier that the linear logic that underlies much of what is written to date on TPL might not tell the whole story. The models of change are manifested in the approach to change applied in the system undergoing change, these approaches are described in a previous chapter. The patterns I have searched for in the empirical material are presented in the following paragraphs.

A change approach involving the linear logic of change will display characteristics of top-down induced change and an underlying assumption that the most important issue is to conceive the strategically most wise decisions, i.e. design the best change content on a system level. Another characteristic is that the responsible actors, assumedly actors in high managerial positions in the system undergoing change, will have thought of the change process in terms of a number of phases or steps to follow, and assumed rationality among the affected actors; argumentation is likely to be rational, and the actors assuming the expert role will most likely assume that their own rational analysis can be understood by other system actors, since these are also rational. This assumption will supposedly have guided behaviour and actions, as a belief in rationality will probably lead the actors in change leader positions to trust in communicating the rationale behind the decisions to the affected actors. Carlsson (2000) also points out that change according to the linear logic often is non-contingent, i.e. that the techniques and activities involved are not adjusted to suit the specific context in which change is to take place, but rather follow a series of steps or phases that are regarded "the way to carry out change".

A processual approach will display slightly different characteristics. Carlsson (2000) is clear that such a change process will involve much organisational formation and include political elements. This will probably be manifested in responsible actors trying to evoke recognition of the need to change among affected and involved actors, and also recognition that rationally wise decisions are not sufficient to produce

substantial change results. The actors will also have tried to induce those that have the power to affect the flow of events, and this interaction might not involve any rationality at all. Focus will not be on designing solutions, but attempting to create organisational conditions for change.

Lastly, a circular approach will display yet other characteristics. A central notion is that it the affected actors' change ability that is important, and also the systems knowledge of all actors, i.e. the actors awareness of their own relation to and responsibility for the overall system of which they are part. Therefore a pattern to search for is when responsible actors instead of attempting to affect solutions have attempted to affect involved actors' conditions for developing system knowledge and testing new ideas for how to carry out work. Another central notion is that what is rational for one actor might seem totally irrational to another, because of different mental models, i.e. fundamental assumptions of the mechanisms in the system of which they are part. Therefore a circular approach will display patterns of responsible actors acknowledging that conflicting rationalities might stem from diverse mental models regarding the system undergoing change, and subsequently attempts to create conditions for development of shared mental models among all affected actors.

One difficulty of this approach to study change is that the patterns I have been looking for not always are not always clearly outspoken, at least not in the theoretically induced vocabulary I have employed here. This search has been one of trying to see which logic that has affected certain actions and behaviour, a search that at times has been quite difficult, since the theoretical patterns are generalised, but I have studied one specific change process in it's specific context, retold in the vocabulary of ten different actors who have been involved in different parts of the process at different times.

6 The case

In this chapter the studied case, i.e. *Shipper's* TPL establishment process, is presented. This is, as concluded in the previous chapter, a necessary prerequisite for the analysis that is carried out in Chapter 7, but also a result in itself as this is a secondary purpose of the first research objective.

The empirical material is in this thesis presented on two levels of aggregation. One level is the process description given in this chapter, the other is the actors' stories of the process as they have been retold to me. The stories, which together with the secondary material form the basis of the process description given here, are presented in their entirety in the appendix entitled "The stories".

In order to introduce the case to the reader, a brief introduction to the companies involved in the studied process is given first, along with a presentation of the actors. Since *Shipper* has requested that the material should be presented anonymously, the presentations offer very little detail in order to avoid revealing the identity of the companies.

the companies

Shipper is the focal organisation in this study, i.e. the company that has turned over part of their logistics needs in the hands of a third party. *Shipper* is a company with its head office in Sweden, which produces and sells small, technologically complex products to small and medium sized enterprises around the world. The main markets are Europe and the US, which accounted for roughly one third each of total sales in 2002. *Shipper's* sales organisation consists of a number of wholly owned national sales companies; these are throughout this thesis referred to as *subsidiaries* as this is the terminology used by the interviewed actors. The products are of two main families, one of which is entirely customer specific and made to order (MTO), the other is a range of standardised products made to stock (MTS). A large portion of manufacturing is contracted out to various suppliers. The in-house share of MTS manufacturing takes place in *Swedetown* in Sweden, and in a facility in the US. This American facility was included when *Shipper* in 1998 acquired *Competitor*. It is the European distribution of this latter product category that is involved in the TPL arrangement *Shipper* has with *Provider*. The first contract between the parties was signed in 1997 and ended mid 2002.

Provider is a large international third party logistics provider based in the US, with the majority of operations in North America and in Europe. *Provider* offers clients a range of services, from basic warehousing and transportation, to more advanced solutions. Transportation is to a large extent provided through sub-tier international freight carrier **Carrier**. *Provider* has a facility in *Dutchtown* in the Netherlands, from which *Shipper's* central warehouse is operated today. This facility existed before *Shipper* and *Provider* signed the contract, and operates as central warehouse for a few clients.

Logicon is a small logistics consultancy company that *Shipper* employed for an investigation of their distribution structure in 1996. This investigation among other things rendered a recommendation to *Shipper* to outsource distribution in order to make direct distribution in Europe possible.

Apart from these companies, two other third party logistics providers are mentioned in the stories; **TPL-A**, and **TPL-B**. These are both large actors, but will not be presented in any more detail here.

the actors

Vice President Operations is the highest ranking actor who is mentioned in the stories to have been involved in the studied process. *VPO* left the company shortly after I had commenced data collection, and is unfortunately not represented with a story of his own in the empirical material.

Operations Development Manager is the actor who has played one of the most central roles in *Shipper's* TPL establishment process. He joined the company as a quality engineer in 1993, and was appointed logistics manager in 1995, when *Shipper* reorganised part of their operations. Later, *Shipper* has reorganised again; in 1997 the scope of functions included in the logistics department was widened, and in 2000 the function called *Logistics Development* within the logistics department was separated from logistics and became a new department called *Operations Development*. The remaining parts of the logistics department were named *Operational Logistics*. With this last reorganisation, *ODM* also assumed a position as manager of operations for the MTO business, which is not part of this study. *ODM* left the company during the second half of 2002.

Project Leader was another actor who played a central role in the studied process, in that she assumed project leader responsibility for the direct distribution project of which TPL was an essential part. *PL* joined *Shipper's* quality department when *ODM* worked there, and later joined the *Logistics Development* group to work with the DD project. *PL* left the company in late 1998.

Project Manager is the third actor belonging to the *Logistics Development* group in *Shipper*. *PM* has worked on various assignments within the company, but the main tasks during the studied process have been to integrate *Competitor* into *Shipper*'s system after the acquisition in 1998, and to prepare for the contract renegotiations with *Provider* in 2002. *PM* left the company during the second half of 2002.

Logistics Consultant is one of the two consultants at *Logicon* who carried out the pre-study for direct distribution on *Shipper*'s behalf.

Logistics Manager is since late 1998 the manager of *Operational Logistics* in *Shipper*. It is important to note that this position is not the same as the logistics manager position *ODM* held between 1995 and 2000; there was another person who held the operational logistics manager position at that time, who reported to *ODM*. Before assuming this position, *LM* worked with the purchasing function in the company.

Distribution Support has been with the company for a long time, and has always worked in what is today called *Operational Logistics*. *DS* has previously worked with shipping issues, but has recently assumed responsibility for the operational parts of *Shipper*'s direct distribution system.

Subsidiary Manager (SM) is the manager of *Shipper*'s subsidiary on the Nordic market. This subsidiary is responsible for sales in Sweden, Denmark, Norway, and Finland.

Subsidiary Logistics (SL) is an actor who has been responsible for logistics in the Nordic subsidiary during the studied process.

Warehouse Manager was the manager of *Shipper*'s warehouse in *Swedetown* before this was closed and moved to *Provider* in *Dutchtown*. *WM* took part in the process by going to *Dutchtown* for almost a year to assist *Provider* during start-up.

Warehouse Worker worked in the warehouse in *Swedetown* before it was closed down. *WW* belongs to the group of employees who were laid off due to the closure, but now works in production in *Swedetown*.

Business Development Manager Europe is an actor belonging to *Provider*'s central organisation in Europe. *BDM-E* was the person who was responsible for closing the deal with *Shipper*.

the process

In order to bring structure to the analysis, I started by charting the timeline of the studied TPL establishment process as far as was possible from the empirical material. This timeline is an objectification of what has been told in the stories, created by puzzling together bits and pieces of information from the different documents. The backbone has been the timeline presented by *Operations Development Manager (ODM)* at the introductory meeting (Story 0), this I have then checked against the stories and the secondary material. The detail with regard to the timing of activities and events varies, mostly due to the level of recollection of the interviewees. In Table 4 the timeline for the TPL establishment process is presented.

Table 4. Timeline of Shipper's TPL establishment process.

	LOGISTICS CHANGE	TPL ESTABLISHMENT	TIME	PHASE / EVENT
1	▶		October 1996	DD pre-study conclusions
2		▼	Late 1996/1997	TPL provider evaluation
3		▶	October 1997	<i>Provider</i> chosen
4		▼	Late 1997	Preparations and negotiations
5		▶	November 1997	Contract with <i>Provider</i>
6		▼	Early 1998	TPL preparations
7		▶	April 1998	Warehouse moved to <i>Dutchtown</i>
8		▼	1998	Start-up, early operations & problem solving
9		▼	1998-2002	Operations and improvement
10		▶	Mid 2002	Contract period ends

In the two leftmost columns are the interlinked processes *Logistics change* and *TPL establishment*. The reason for including logistics change is that it is evident in the empirical material that TPL emerged as an option when evaluating whether or not *Shipper* should centralise distribution. A horizontal arrow denotes an event or milestone of some sort, whilst a vertical arrow denotes an ongoing activity or process.

When comparing this timeline to the outline of the TPL establishment process offered in chapter 2, it comes to light that all the activities except *Specification* and *Renegotiation* are included. Service specification was however part of the DD pre-study, which in turn laid the foundation for the request for proposals used in the search for a suitable provider. Renegotiation is however not included, as the collected data does not cover this activity. In the remainder of this thesis, whenever *Shipper's* TPL establishment process is referred to, this denotes the span from *Need recognition*, which in this case ends with the DD pre-study, to just before *Renegotiation*. In Figure 16, the generic outline has been adapted to describe the studied process.

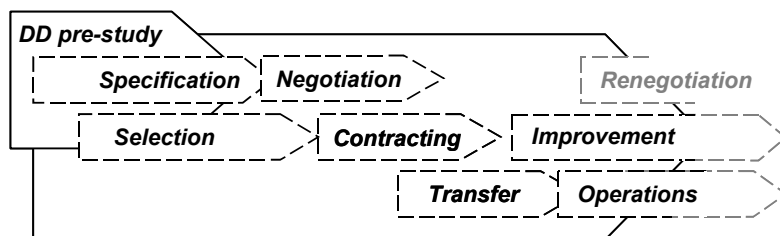


Figure 16. The outline of *Shipper's* TPL establishment process.

It is important to note here that the use of a phase-terminology should not be interpreted as the main mode of describing of the studied process, which in fact would be to do exactly what is criticised earlier in the thesis. This way of looking at the process is indeed useful in the sense that it offers structure to the description, and to subsequent analysis, but it is not sufficient to describe the *change process*.

In the outline the *Recognition* activity of the original generic outline has been replaced with the DD pre-study carried out by *Logicon* on *Shipper's* behalf, since it is in the final report of that study it is recommended that *Shipper* should seek a third party solution to go ahead with direct distribution. The *Specification* activity has been included in this pre-study, as much of the service specification eventually included in the RFP and in the final agreement with *Provider* actually was decided by the DD plans. But specification did also continue after the pre-study and selection, which is reflected in the outline. *Selection* is partly embedded in the pre-study since *Logicon* clearly recommends *Provider* in the pre-study final report. At the top right corner *Renegotiation* is shaded in grey since this study does not encompass that activity, but this was underway when the data was collected, thus demarcating the end of the studied process.

There are four main identifiable episodes in this process; the period leading to *Shipper* deciding to seek a TPL solution [before and including row 1 in Table 4 above], the

period during which providers are sought and eventually *Provider* chosen [2-5], the period of preparations, transfer and start up [6-8], and a period of operations and improvement eventually reaching the end of the first contract period [8-10]. These phases are presented in chronological order in Figure 17 and named according to their main characteristic.

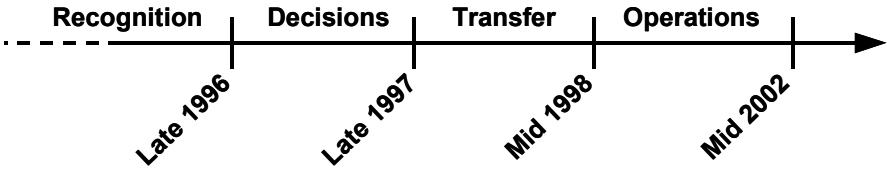


Figure 17. An illustration of the four main episodes of Shipper's TPL establishment process, in chronological order.

The main characteristics of the first episode is that certain activities take place during which TPL emerges as an option for how to arrange the company's distribution logistics. This is followed by a period in which designs gradually grow clearer and eventually *Shipper* decides to go for TPL and to choose *Provider* as their partner; in conjunction it is also decided that direct distribution should be implemented. The third episode is the first in which these decisions are manifested in operations, in that the central warehouse operations are transferred from *Logicon* to *Dutchtown*, and early operations commence. The fourth and last episode is the one that lead sup to the point in time when data collection commenced, the main character of which is operations and improvement. As will become evident later, there is also an ongoing step-wise transfer of distribution, since direct distribution is implemented one market at a time, and each time a certain local warehouse is closed down this means that a new market is supplied directly by *Provider*.

This episodic illustration will serve as a backbone throughout the remainder of my analysis, which is conducted in turn on each of the four phases. Similar to e.g. Sink & Langley (1997) I wish to point out that the strict division between episodes that is conveyed by Figure 17 and the text above is only an effect of paper being two-dimensional and the researcher wanting to bring some sort of structure into a complex picture. But this is only a first non-contextual charting of the focal process. In the following section, the scope is widened to acknowledge also context.

a contextual description of the process

When applying the meta-model to the literary based outline, it was concluded in Chapter 5 that the outline ought to be expanded in order to take context into account. With this expanded outline as a guideline, the timeline above has been elaborated with the interrelated changes and other contextual events and activities that are possible to identify from the stories.

Three columns in the leftmost part of the table have thus been added. The column *Strategic* is identified in the previously elaborated process outline. The other two additions are not included in the figure of that outline, but it should be remembered here that the outline was presented as a starting point and nothing more. The other two columns that have been added are there as an effect of the patterns observed in the empirical material. It is clear from these documents that the starting point for TPL was the DD analysis, but that this in turn stemmed from and interrelated with other shifts in the company; therefore the column *Other change* is included. Some external factors have also had a somewhat significant impact, which is why a column labelled *External* also has been added.

In the timeline in Table 5 the interconnectedness between some of the elements are visible in the empirical material are also included. Apart from the interrelations illustrated by the arrows, there are also dependencies between the elements following each other in the same column. With the exception of the upward arrow from contract end to evaluation in the bottom, these dependencies are for readability's sake however not illustrated.

Table 5. Elaborated timeline of Shipper's TPL establishment process, embedded in context.

	EXTERNAL	STRATEGIC	OTHER CHANGE	LOGISTICS CHANGE	TPL ESTABLISHMENT	TIME	PHASE / EVENT	EPISODE
1		◀				-1994	History	Recognition
2		▶				1994	New CEO & top management	
3		◀				1994/95	New strategy	
4			▶			1995	Reorganisation of logistics	
5	▶					1995/96	<i>Logicon</i> / TPLP seminar	
6			▶			1995-98	ERP system project	
7			▶			May 1996	<i>ERPs</i> ys chosen	
8				▶		1996	DD pre-study	
9				▶		Oct 1996	DD pre-study conclusions	
10			◀			1997	<i>ERPs</i> ys Implementation	
11				▶		Late 1996-97	TPL provider evaluation	Decisions
12				▶		Oct 1997	Letter of intent with <i>Provider</i>	
13				◀		Late 1997	Preparations and negotiations	
14	▶					Late 1997	Company moving to <i>Swedetown</i>	
15				▶		Nov 1997	Contract with <i>Provider</i>	
16				▶		Nov 1997	Start DD project, Information meetings	Transfer
17				◀		Early 1998	TPL preparations	
18				▶		April 1998	Warehouse moved to <i>Dutchtown</i>	
19				◀		1998	Early operations & problem solving	
20	▶					1998	<i>Provider</i> reorganises in <i>Dutchtown</i>	
21				▶		1998	DD preparation	Operations
22		▶		▶		Sept 1998	Acquisition of <i>Competitor</i>	
23				▶		Oct 1998	First subsidiary to enter DD	
24		◀				1998-1999	<i>Competitor</i> integration	
25				◀		1998-2002	Operations and improvement; DD	
26			▶	▶		2000	Reorganisation; also of logistics	
27	▶					2001	<i>Provider</i> reorganises in <i>Dutchtown</i>	
28				▶	▶	Spring 2002	DD & TPL evaluation	
29				▶	▶	Mid 2002	Contract period ends	

recognition: TPL emerges as an option

The first phase in the timeline in Table 5 is labelled *History* [row 1], this denotes everything before the large management shift [2] in 1994 that *ODM* spoke about at both the introductory meeting and in his own story (Story 1). Towards the end of this period *Shipper*'s European distribution system is laden with problems with backorders.

The management shift, in which a new CEO and a large portion of top management were exchanged, was identified by *ODM* as a turning point for *Shipper*. The new executive group had a different mindset than the former and started a substantial overhaul of the company's strategy [3].

This resulted in the strategy outline presented by *ODM* at the introductory meeting, which consisted of three main phases: *Platform*, *BPR*, and *Business development*. In conjunction *Shipper* also reorganised logistics [4], and *ODM* transferred from his position in quality management to logistics manager, a reorganisation that also meant that the logistics department's – at the time referred to as “shipping” or “distribution” – role shifted from one of carrying out operational duties, to also including development of operations. A separate subunit of logistics is formed which is named *Logistics Development*. Some time during this period *Logistics Consultant (LC)* arranged a seminar together with a TPL provider [5], which *ODM* according to *LC* attended. This was the first contact between *Shipper* and *Logicon*, and was according to *LC* the starting point of their later collaboration.

This was all part of the episode labelled *Recognition*. Within the three phases of the overall strategy a number of changes were planned and actually took place during the time span covered in this study. The first of these changes was the implementation of *ERP System (ERPsys)* [6], which was chosen after screening the systems market [7]. The responsible executives deem that a common IT-structure throughout the company is necessary before doing anything about distribution. Therefore the first major change that was initiated was the implementation of *ERPsys*. While this was commencing in 1996, *Logicon* were hired for a pre-study for direct distribution.

The implementation of *ERPsys* took place during a substantial part of the beginning of the studied time span; the market screening and choice was carried out in 1996, and implementation [10] took place during the entire 1997 and it was not until some time into 1998 it was operational throughout the whole company.

The solution that emerges as the path to follow regarding distribution is direct distribution, with stock-keeping centralised somewhere in central Europe. At this moment in time it was DD that was the point, not TPL.

All these discussions with *Carrier* and all that we were thinking of, it was never really an issue about outsourcing; what we wanted to do was some kind of direct distribution.

DS – S6:3

Distribution Support, part of the central operative logistics organisation of Shipper

My starting point was not outsourcing, but centralised distribution. Outsourcing was in fact not an option at all to start with, rather something that gradually emerged along the way, when we got to know their structure.

LC – S4:1

Logistics Consultant, one of the two consultants of Logicon who were employed by Shipper.

decisions: Shipper decides on TPL and chooses provider

Logicon conduct the pre-study for centralisation [8], which in *Shipper*'s terms is named *Direct Distribution (DD)*. The pre-study is finished in October 1996 [9] and contains two main recommendations from *Logicon* to *Shipper*:

We recommended that they should centralise distribution and we also pointed at outsourcing as means to do this, and we also pointed at pros and cons with outsourcing.

LC – S4:2

Logicon also recommends *Shipper* to consider *Provider*, as these are deemed as one of few high quality providers on the European market; in *LC*'s story (Story 4) it is said that *Logicon* had positive prior experiences of *Provider* from working for another client. *LC* states that TPL as such wasn't the main point, but emerged as the suitable solution as the pre-study was underway. This emergence is clear also in *ODM*'s story:

The decision to implement direct distribution was taken quite early, and also that, based on centre-of-gravity analyses of in- and out-going material flows, a suitable warehouse location would be somewhere in the Netherlands. ... Based on this analysis, we sent out a request for proposals to a number of third-party logistics companies.

ODM – S1:5

Operations Development Manager, part of the executive group of Shipper

It is noteworthy that *ODM* in fact doesn't even reflect over the emergence of TPL; once the executives are convinced that DD should be implemented, the search for a suitable partner starts. TPL in parallel to DD seems to be the natural path.

The process has now entered the second episode, *Decisions*. *LC* tells us that from his perspective there was a pause in the project, that after having given *Shipper* the recommendations, nothing happens:

As I mentioned, nothing much happened after the pre-study presentation. I stayed in touch with *DS* and I learned that discussions were underway, but no decisions were made. ... Then one day *DS* told me he had been given the assignment to develop a demand specification to use when speaking to potential partners, and he wanted me to help him with that.

LC – S4:4

But this is not how *ODM* puts it above, and from *LC*'s reference to *DS* we can see that discussions are underway within *Shipper*. One reason for this pause is perhaps the *ERPs* implementation:

Initially, the plan was to follow up the *ERPs* installation with a roll-out of direct distribution (*DD*) shortly after the system was installed. We had to revise this plan however, as the heavy workload during installations, and some initial problems with *ERPs*, consumed all the resources that would have been needed for *DD* start-up.

ODM – S1:4

Eventually the search for a suitable service provider commences, and once again *Logicon* are hired to help out. Following the *DD* pre-study, with some delay according to *LC*, *Shipper* moves on to sending out RFPs to a number of potential TPL providers [11]. After having boiled these down to a shortlist three actors remain, and of these three are considered more closely.

Eventually in October 1997 a letter of intent is signed with *Provider* [12], and closer analysis and negotiations commence [13]. Sometime in this same period of time an outside company decides to move a warehouse to *Swedetown* [14], and are in need of staff that can handle *ERPs*.

As we made our analyses, we found out about a company that was planning to move their warehouse to *Swedetown*. They were also planning to implement *ERPs*, so they actually were in need of warehouse employees who were familiar with that system.

ODM – S1:9

... if we hadn't been able to arrange new jobs for everybody, it would have been a lot more difficult; after all we're talking about some thirty people here. *Swedetown* is a small town, and it's really hard to find a new job there.

PL – S2:5

Project Leader, part of the executive group of Shipper

There was a company that was going to move a large warehouse to *Swedetown*, and they needed staff. This was very convenient, because that made it possible to offer our people new jobs.

WM – S9:3

Warehouse Manager, the manager of Shipper's warehouse in Swedetown.

Eventually an agreement is reached between *Shipper* and this company that all *Shipper*'s warehouse employees should be offered jobs at this new warehouse. A contract is signed between *Shipper* and *Provider* in November 1997 [15], and soon after *VPO* travels to *Swedetown* to inform the staff there about the outsourcing decision [16].

transfer: central warehouse transferred to TPL provider

At the same time information is given to the subsidiaries, which also meant that *Shipper* officially launched the DD project.

As soon as we had decided to close the warehouse in *Swedetown*, we held an information meeting with all the personnel there, in November 1997. ... We also informed all subsidiaries as they also had employees that would be affected by the implementation of DD. In fact, this was how we launched the DD project in the group, by informing about our deal with *Provider*.
ODM – S1:10

This denotes the shift into the third episode, *Transfer*. After a period of preparations [17], the central warehouse is moved to *Dutchtown* in April 1998 [18], and after a two-week stop in deliveries the new warehouse goes operational. At the beginning this new warehouse merely replaces the one in *Swedetown*, i.e. DD has not yet started. This is illustrated in Figure 18:

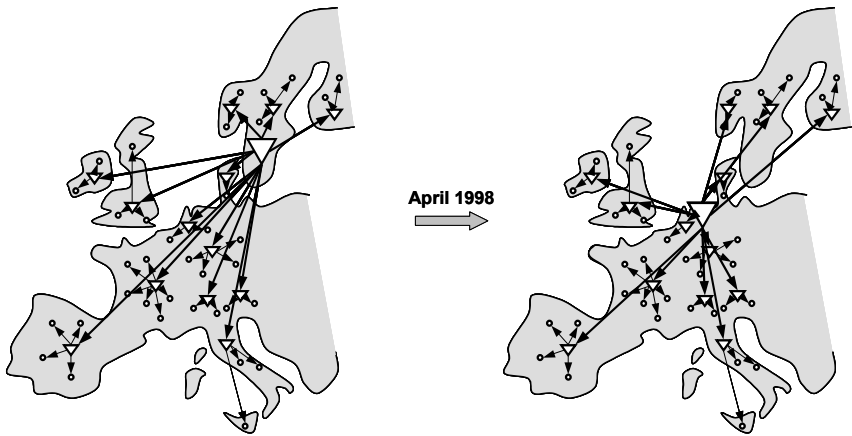


Figure 18. An illustration of the difference in *Shipper*'s European distribution system after moving the warehouse from *Swedetown* to *Dutchtown*. The placement of the warehouses and customers is merely for illustration purposes and does not represent their exact locations.

This means that in the beginning operations in *Dutchtown* [19] are quite simple, according to *ODM*. Yet certain problems emerge that cause *Shipper* to postpone

initiation of DD, which originally was intended to commence as soon as the new warehouse was operational.

Our original plan was to start rolling out DD directly after operations in *Dutchtown* were running, and to ship the first direct deliveries in August, but because of the problems with export documentation, we had to delay the start. ... Another reason for this delay was that we experienced back-order problems again.

ODM – S1:13

The two-week delivery stop had been decided on to offer enough time to move and set up the new warehouse, and to make this possible HQ had urged the subsidiaries to stockpile products in advance, so that the customers wouldn't suffer shortages. This caused imbalances in the system with backorders as a consequence. There were also problems with the documentation for exports to countries outside the EU. Put together these issues made it necessary to postpone start-up DD.

operations: TPL operations and gradual transfer of distribution

According to *ODM* there is also a reorganisation of *Provider's* operations in *Dutchtown* in this period of time [20]. *Warehouse Manager (WM)*, who went to *Dutchtown* to help out during start-up however points out other problems:

The biggest problem was with *ERP System (ERPsys)*, to get communication between *ERPsys* and *Carrier's* system to work. Every order generates many *Carrier*-documents, and that caused some trouble. ... it was working with *ERPsys* that was the biggest problem, it was new to them. *ERPsys* is no easy system to work with. In the other warehouse they operate down there, they have their own tailor-made system, but for us they had to support their operations with a standard system.

WM – S9:5

Sometime during this period the third episode gradually turns into the fourth and last, *Operations*. Preparations for starting up DD go on after the *Dutchtown* warehouse has started operations [21], and eventually in October 1998 the first subsidiary closes down the local warehouse and supplies customers directly from *Dutchtown* [23]. But one month earlier *Shipper* announced the acquisition of a competitor [22], *Competitor*, which according to *ODM* was part of the third phase of the overall strategy drafted in 1994/95.

Thus the third phase of the strategy started earlier than was originally intended, when a lot of work still remained before the second phase was completed.

Intro meeting notes – S0:4

This causes *PL* to resign and a new project leader is assigned to the DD project.

We received a lot of criticism for doing so much change at the same time, and that was also part of the reason why *Project Leader (PL)* quit; she thought it was crazy to do it all at once.

PM – S3:2

Project manager, part of the executive group of Shipper.

Project Manager (PM) assumes responsibility for integrating *Competitor* in *ERPsys* and *Shipper's* distribution [24]; this is done in parallel with expansion of the scope of DD.

We had to synchronise this with in which phase the DD-project was. This meant that in some instances we first had to bring in the goods to the central warehouse, only to have them shipped out to the regional warehouses that were still in operation. When we did this, we also had to take into consideration whether the regional warehouse would be closed down in a near future or not.

PM – S3:1

During the years that follow, more subsidiaries are gradually included in DD and operations in *Dutchtown* continue, and some improvement efforts are undertaken [25]. During this period *Shipper* reorganises, and again the logistics department is affected [26]. The subunit named *Logistics Development* becomes *Operations Development* and assumes responsibility to handle development projects of various kinds regarding *Shipper's* operations. The logistics department is turned into *Operational Logistics*, a unit with pure operational responsibility, and *Logistics Manager (LM)*, who was appointed operational logistics manager in late 1998 reports to *VPO* instead of to *ODM* as before.

By 2001 performance is so low that *Shipper* puts some pressure on *Provider*, and according to several interviewees this eventually leads to *Provider* reorganising *Dutchtown* operations again [27]. From then on, performance improves. During 2001 UK, Ireland and Norway are included in the DD system; these were the last countries to enter the system before data was collected in 2002. By then *Shipper's* distribution had changed according to the illustration in Figure 19 below.

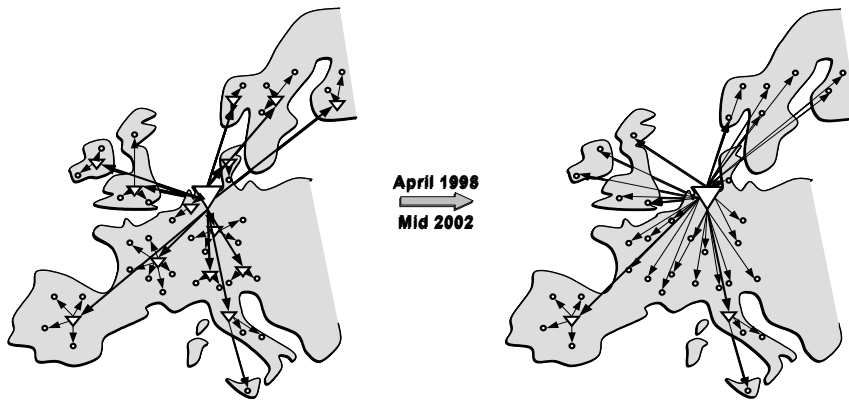


Figure 19. The change in Shipper's European distribution system from April 1998 to mid 2002.

By the end of June 2002 the first contract period comes to an end [29] and the parties are approaching renegotiations. As a preparation for this *PM* has been responsible for carrying out an internal survey to find out opinions about *DD* and *Provider* [28]. The timeline ends with renegotiations, but as stated above, this is not part of the studied process. Going back to the generic proposed outline from chapter 5, *Shipper's* TPL establishment process illustrated by means of this outline is presented in Figure 20:

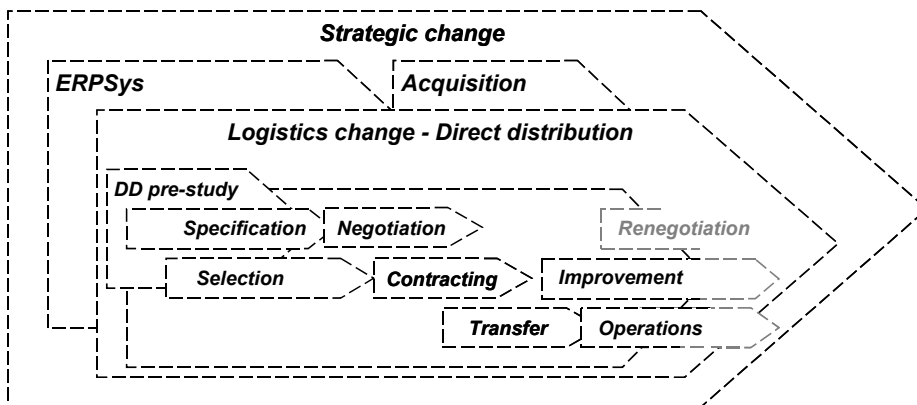


Figure 20. The outline of Shipper's TPL establishment process, embedded in context.

With this initial contextualisation of the studied process, and the identified four main phases, I will in the next chapter go deeper into an analysis of the change process of TPL establishment.

7 Analysis

In the previous chapter two descriptions of the focal process are given; one that describes the TPL establishment process in isolation, one in which also context is visible. The first description is quite similar to those process models of TPL literature discussed earlier. The overall sequence of phases is visible in the empirical material, and a somewhat clear chronological order can be discerned. But when widening the scope to also include context, a different picture appears, of which the most prominent feature is the dependence between the TPL establishment process and the simultaneous process of establishing direct distribution. This contextual description is the first result produced in this thesis. In the following sections, the analysis that is carried out to fulfil the two research objectives is presented. The first section concerns the context dependence of TPL establishment, the remainder goes into detail on the mechanisms of the change process in terms of the three models of change presented in Chapter 3.

contextual dependence

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During the *Recognition* episode TPL is not the primary sought after solution, *Shipper's* executives are striving for a restructuring of the European distribution; this however gradually evolves in a direction in which eventually TPL emerges as the desired option for how to handle logistics operations. As the process evolves, *Shipper* decides in a rather short time span during the *Decisions* episode to centralise distribution and to choose *Provider* as their partner for operating the central warehouse and European distribution. It is clear in the description of this episode how tightly the two changes – TPL and DD – are linked; e.g. with regard to the specification of operations that *Provider* assumes on *Shipper's* behalf, this is a direct consequence of the distribution system design. It is also evident that DD, and thus TPL, are affected by the implementation of *ERP*sys. An external event – the company deciding to move its warehouse to *Swedetown* – also plays an important role.

Later, during the *Transfer* episode there is evidence again of the interdependence between the two processes. During the start of *Dutchtown* operations problems emerge with exports documentation, documentation that is necessary for shipping goods from the *Dutchtown* warehouse to customers in countries outside the EU. It is required that *Provider* holds these documents, which is why a period of problem solving within the TPL arrangement starts in order to get going with DD. The delay in DD start-up is also

due to the back-orders that have emerged as a consequence of the two-week stop in deliveries, which was decided on to give time for the warehouse move.

Shortly after the *Dutchtown* warehouse has become operational and the process has entered its fourth episode, *Operations*, *Shipper* acquires *Competitor*, an event external to the studied process, yet having an impact on both TPL and DD. One of the central actors decides to leave the company, and a new project leader has to be appointed. It is also visible that as DD evolves, i.e. more countries are included, operations in *Dutchtown* are affected accordingly, gradually shifting from a warehouse replenishing local warehouses, to a warehouse shipping directly to customers all over Europe.

It is clear in the studied case that the TPL establishment process is indeed highly contextually dependent, both being affected by and affecting its context. As the process evolves, there are several instances in which a certain activity or event in the one change (e.g. DD) has an effect on the other (e.g. TPL), and there are also chronological dependencies, i.e. instances when something that has occurred earlier has an impact on later events. Therefore the analysis of the change process in the remainder of this chapter will encompass both these changes.

the change process

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It has earlier been concluded that the studied process can be chronologically divided into four main episodes, but this is not the only division that is possible to identify. There is also a strategic/operative dimension of change, as discussed by Carlsson (2000). These two levels can be viewed as “arenas”; arenas where certain activities, actions and events take place which move the change process forward. An important issue is the access that different actors have to these arenas.

Another important issue is that regarding *formation*, *formulation*, and *implementation*. The last of these is somewhat self-explanatory; it concerns the actual manifestation of change in operations; the former two are perhaps not as easily grasped. The conceptions *arenas*, *formation*, *formulation*, and *implementation* are discussed in Chapter 3.

The main part of the empirical material in this thesis consists of a total of eleven stories, ten told by different actors belonging to *Shipper's* organisation. There are also the notes from the introductory meeting (Story 0), which more or less are an introduction to *ODM's* story (Story 1). These actors have had responsibilities and access to the two arenas to varying extent during the course of the studied process; partly by virtue of their positions and the time during which they have worked within the organisation and held these positions, partly by other means.

Apart from *LC* (Story 4) who is an external expert, the actors belong to four different organisational units. One of these units is the *Logistics/Operations Development*¹⁹ group in *Shipper's* central organisation²⁰. *ODM*, *PL* (Story 2), and *PM* (Story 3) have all belonged to this group. Closely affiliated to this group was also *VPO* who is mentioned frequently by several interviewees, but is not represented with a story of his own. Given *VPO's* high managerial rank in the company and this group's central position, they are also referred to as the executive group.

A second group is *Operational Logistics*²¹, to which *LM* (Story 5) and *DS* (Story 6) belong; this is the administrative part of *Shipper's* central operative logistics organisation. There was also a physical part in the form of the warehouse in *Swedetown* that was closed down in 1998 as an effect of TPL establishment. This part is represented by a third group to which *WM* (Story 9) and *WW* (Story 10) belonged.

The fourth group are the subsidiary representatives, *SM* (Story 7) and *SL* (Story 8). The subsidiaries constitute the main part of *Shipper's* worldwide sales organisation, and have had been part of non-central²² logistics organisation, both administrative and physical.

Going back to the arenas discussed above, certain arenas can be distinguished in *Shipper's* organisation. The most conspicuous is the overall strategic arena on which the issues regarding *Shipper's* European distribution system as a whole have been handled. Parallel to this arena there is an operative logistics arena, where much of the operational realisation of the decisions made at strategic level has taken place, but also decisions on a purely operational level. This strategic/operative division is possible to discern also within these two non-central units when looking at them in isolation.

There is also an issue of central or overall versus local. The strategic and operative logistics arenas discussed above concern *Shipper's* logistics system as a whole, thus is an overall arena; this is where most of the activities, actions, and events that have moved the overall TPL and DD establishment process forward have taken place. By this distinction the subsidiary and *Swedetown* arenas are local. Figure 21 below illustrates the four groups and their relationships:

¹⁹ In a reorganisation in 2000 this unit of the logistics department became a unit of its own and was renamed to *Operations Development*. The two names are used interchangeably throughout the thesis, since the composition of the group was not affected by the reorganisation.

²⁰ Also referred to as HQ; these two denotations are used interchangeably.

²¹ Before the reorganisation in 1995 this was a department called "shipping" or "distribution". This department was in this reorganisation included in the logistics department, of which *Logistics Development* also became part when it was formed at this time.

²² In the meaning not belonging to *Shipper's* central organisation.

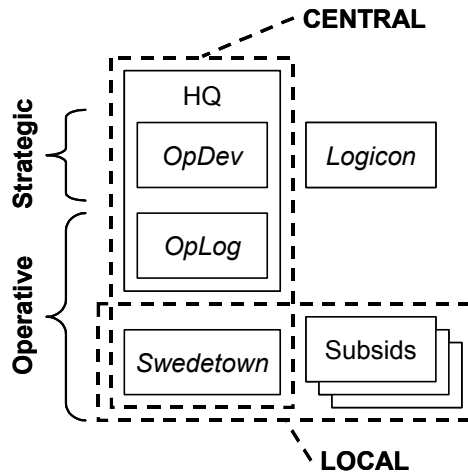


Figure 21. The four groups of actors and their relations regarding strategic/operative, and central/local, from an overall systems perspective.

Looking at the change content, on the strategic level there is the change from a decentralised in-house distribution, to a centralised structure in which a TPL arrangement is at the heart. But this strategic change is manifested in the operational reality of the affected and involved actors. This thesis focuses the mechanisms of the change process and will therefore not offer any more detail on the change content, but to acknowledge that DD and TPL are interlinked changes that have involved change at both levels. It is however inevitable that certain aspects of the content of change are mentioned.

In the following sections, quotations taken from the stories are used frequently to underline or point out certain issues. It is however important to note that the analysis is built not only on these quotations, but also on the entire material. Therefore the reader is encouraged to read through the stories in order to set these quotations into their correct context. Please note also that although the stories are edited somewhat with the purpose of creating more chronological coherence than what the original verbal story by the interviewee had, none of the stories does in its entirety follow one strict chronological path from past to present.

recognition: TPL emerges as an option

The studied change process has its roots in *Shipper's* distribution situation in the early 1990's. Several of the interviewed actors have pointed at a situation in which stock levels on an overall level were high, but that back-orders were quite common. At this

time *ODM* joins the company as a quality engineer. He tells us that he looked at *Shipper's* situation and saw a need for change:

I knew about the large inventories within *Shipper's* distribution and I felt that something ought to be done about it. I knew from the quality world that large inventories serve only as protection against bad processes.

ODM – SI:1

Operations Development Manager, part of the executive group of Shipper

What happens exactly from 1993 to 1995 is not clear from the stories, but an important turning point is identified in the management shift in 1994. *ODM* tells us:

I also felt a desire to work with business process development to - among other things - increase the inventory turnover rate. ... I was extremely lucky, because this is exactly what I got to do. ... It is sometimes hard to separate my own strategies from those of top management, since I got the responsibility to do exactly what I had thought about myself. Of course, sometimes I influenced management, but in some instances they had already made up their mind about what to do. Sometimes it is difficult to see who came up with the idea in the first place.

ODM – SI:1

It comes to light here that the management shift created the conditions that were necessary for *ODM's* ideas about the distribution. The problems in the distribution situation seems to have been visible to many actors in different positions in the company, and with the management shift and the subsequent reorganisation in which *ODM* is appointed logistics manager, there is suddenly room on the strategic arena for taking the ideas one step further. The conditions in the company change in favour of a new mindset, one in which the ideas that later drive the process are accepted. Thus *ODM* gains access to the strategic arena, an arena to which he has not had access earlier.

But there is also a learning component here, *ODM* has theoretical knowledge of logistics and business processes, and sees that in the system these would perhaps work to solve some of the distribution problems; his mental models of the system of which he is part develop. In the first quotation above, it is hinted that the thoughts are rather vaguely formulated at that time, but in the latter – which also represents a later point in time – *ODM* reflects that he got to do what he had thought of doing; it seems that these ideas have become more articulated over time.

At this time it is only a group of top executives and *ODM* who are involved in the reasoning around the future distribution system that eventually leads to initiating the restructuring effort, of which TPL establishment becomes an essential part. A small group of actors have analysed the situation, formulated a three-phase strategy, and within this decided that a common information system, and that something must be done about the European distribution, are the first two steps to take; this has in all

taken place on the strategic arena. At this point in time this “something” that must be done about distribution is not yet clearly articulated.

But these decisions are made in a specific context. *ODM* states that there was a lot of irritation among the subsidiaries regarding the distribution situation, but that this was regarded as a matter of bad management from HQ’s side:

The subsidiary managers were in general very annoyed with HQ’s poor performance.

ODM – S1:2

It is clear also from *DS*’ story that those who worked with operational logistics issues also experienced a lot of problems, and that the subsidiaries blamed HQ:

... there were a lot of comments like “How can this happen? This is unacceptable!” and so on.

DS – S6:1

Distribution Support, part of the central operative logistics organisation of Shipper

Unfortunately there is no substantial account on how the subsidiary managers experienced the situation at this time, apart from what *SM* states in the beginning of his story. It is not clear when in time this actor came to look upon *Shipper*’s distribution in this way, but according to *ODM* this was not the case in the early phases of the process:

This subsidiary was also the strongest opponent of DD, many harsh words were uttered during our discussions.

ODM – S1:13

This is also supported by the fact that *SL* states that from the Nordic subsidiary’s perspective distribution worked well:

We thought things worked fine in those days, we had full control over our products; we knew what we had in stock and we very seldom had any backorders. The distribution to our customers worked fine, we used postal services. There were rarely any delays, we had things under control.

SL – S8:1

Subsidiary Logistics, responsible for operative logistics of Shipper’s Nordic subsidiary

This actor does not state anything regarding product availability as *SM* does, but points at a number of problems with transportation that have emerged as an effect of DD. Mirrored against *SM*’s statement a discrepancy in views comes to light, between an actor on the strategic arena of this particular subsidiary and one on the operative. There seems to have been different beliefs on what the causes of the distribution problems were, and in fact of whether there were any problems at all, both between the

actors on the two overall arenas, and between the arenas within the subsidiary. There also seems to have been different views on what ought to be done about them. *PL* gives some more detail on this, and tells us what she believes was the situation:

The common view within the company was in fact that one should build large inventories. I've seen one of the earliest vision statements from that time, in which it was written "we should hold large inventories in order to ensure good customer service". So the common idea was that customer service is built on large inventories. ... When I made my trips I noticed that the subsidiary people had quite an old-fashioned way of looking at logistics. They seemed to think that if we just allowed them to build up some more stock they would get rid of their problems. They never said that explicitly, but it was quite clear from many of the responses we got and the statements they made.

PL – S2:2

Project Leader, part of the executive group of Shipper

The impression that comes from looking at the stories is that during this period a group of actors with strategic responsibility belonging to the central organisation of the company have a shared view on the situation, but that among the subsidiaries – *Shipper's* sales organisation – the view differs from that of the HQ actors. There is somewhat of an "us against them" situation:

In 1995, I started a new position as logistics manager. At that time, logistics was a low-prioritised area in the company. The company had a great overweight on R&D. We fought from an inferior position.

ODM – S1:1

As mentioned previously, the empirical material offers little detail on the reasoning among the subsidiary managers, who according to several interviewees had a strong position in the company, i.e. had access to and influence on the strategic arena. But from the stories told by the actors belonging to the *Operations Development* group it seems that there were two different mindsets – two sets of shared mental models, one in each group – that were not in consent. It seems that the solution design gradually grows clearer among the members of the HQ executive group. That it is among the actors on executive level of the central organisation that formulation takes place is supported by the fact that among the interviewed actors, it is only *ODM*, and partly *PL*, who have given detailed accounts regarding how the reasoning behind the decided solutions went during this period of time.

But apart from formulation there is also an ongoing formation process. Some time during this episode *ODM* confronts the subsidiary managers about the distribution situation. He is by now appointed logistics manager, and the *Logistics Development* group has been formed.

At the time, we had subsidiary manager meetings twice a year. At one such meeting, I challenged the subsidiary managers by showing them that in the total distribution system, there was more than enough stock to meet the total demand, but that some subsidiaries held too much and others got too little. This was the starting point for the entire logistics improvement process at *Shipper*. ... I confronted them and asked "Why are you holding five months of stock, when your neighbour suffers from backorders?". They soon realised that product supply not only is a matter of manufacturing and purchasing, but that it also requires a large amount of co-ordination and co-operation. ... Already during the first meeting, some awareness awoke among them, some realised that they also were part of the problem, that backorders weren't entirely HQ's fault.

ODM – S1:2

This is perhaps the first instance in which the subsidiaries become involved in any discussions regarding what to do about the distribution situation. *ODM* uses rational argumentation to affect the subsidiary managers to look upon the situation in the same way he himself does, and reflects that this worked well. But, as will become evident later, this might not have worked all the way; a somewhat different picture emerges when studying the account of the interaction between the subsidiaries and HQ during later phases of the process.

When the overall strategy has been formulated, the first step that is taken is to implement *ERPsys*. Although there is some detail on this change in the stories it will not be analysed in any detail here, as it is not considered part of the focal process, but forms part of its context. In parallel to the *ERPsys* implementation a pre-study for DD is conducted; at this time *Logicon* become active part of the process. *ODM* is clear that by now the path is laid out for *Shipper's* European distribution:

In 1997, when *ERPsys* was implemented in most of the European subsidiaries, we initiated a pre-study for direct distribution. We hired the consultants *Logicon* for this study, although I and my colleagues at HQ were convinced that direct distribution would be the right path even before the pre-study. ... I believed strongly in the theories about direct distribution.

ODM – S1:5

At this time it is still mostly the HQ actors who are involved in analysis, but since the consultants and some HQ representatives visit some of the subsidiaries and a questionnaire is sent out, also these actors are becoming involved, however passively.

Distribution Support (DS) – and I think *ODM* too – were here and discussed things with us, how things would be in the future, and gathered some information. They wanted to know what kind of transportation we used in different countries, what kind of delivery times our customers were used to, and such. There were never any real discussions about whether or not this should be done...

SL – S8:2

Also *DS*, who works operatively with *Shipper's* distribution, is involved as a link between the consultants and the subsidiaries:

When *Logicon* started the pre-study I was the one who helped them out with gathering information, booking their visits and so.

DS – S6:4

DS is no stranger to the thoughts about *DD*, he points at the distribution situation and the tremendous problems this caused for those whose operational reality this was:

But, as I said, we had a very traditional structure with a large portion of problems with back-orders. We had for many, many years constant back-orders. We at distribution had to roll back-orders in front of us all the time, we had to handle the same order many, many times. And when we looked at the total situation, we saw that there were enough goods, but in the wrong corner of the world.

DS – S6:1

In fact, *DS* and the manager of the operational logistics department – called “shipping” at that time – had been thinking along the same tracks before:

I think my manager at the time met *Carrier* at some kind of seminar or so, and they started some loose discussions; that’s how it all started. Eventually we made a visit to one of their clients, for whom they had arranged direct distribution; we also went to visit one of their Swedish facilities, and a central European hub. It was I, my boss at the time, and the IT manager who did these visits. This was some time during the early nineties, but I can’t remember exactly. ... All these discussions with *Carrier* and all that we were thinking of, it was never really an issue about outsourcing; what we wanted to do was some kind of direct distribution. We also had a very clear goal to reduce fixed costs and turn them into variable, and to improve service. We thought that by having a central warehouse we would be able to get the goods to where they were needed.

DS – S6:2-3

It is mentioned previously that the mental models among subsidiary managers differed from those of the executives in the central organisation. The opposite is visible regarding the relation between the latter and those actors who belong to the central operative logistics organisation. Separate from the formulation process among the executive actors there has been a similar development on the operative level, so the designed solution – direct distribution – is accepted in this group. One actor belonging to this group is also involved in gathering information for the analysis that leads to the decision, and thus has a chance to develop mental models in parity with those of the executives. But what it seems from the stories this is a passive participation with regard to solution design and decision-making.

The analysis phase leading to design and decisions bears resemblance to the solution-driven approach as put forth by Carlsson (2000). The leaders hold key roles as experts who are deemed best suited for designing solutions; other actors are passive givers of information on the strategic arena. But *DS* tells us that together with his manager at the time he also was thinking about centralising distribution, i.e. there was a formation-

and formulation process taking place in the operative arena, which was aligned to that on the strategic.

In a sense the decision to go ahead with DD already seems to be made informally among the executive actors at this point in time. But, as mentioned above, there is also an ongoing formation process in the organisation. Apart from *ODM's* initial attempt to start to get some approval among the subsidiary managers, there is also the issue of why the DD pre-study was carried out:

We needed the consultants' help to have valid, external proof of the motives for closing down the warehouse in *Swedetown*. Of course, we realised that *Swedetown* isn't the logistical centre of Europe, and with the demands for short lead-times that our customers have, direct distribution from *Swedetown* was never an alternative. Also, I believe that the turnover from having been a factory warehouse shipping weekly replenishment orders, to shipping some 6-700 deliveries a day isn't an easy task. ... *Logicon's* task was mainly to gather facts, a task they fulfilled very well. We wanted them to prepare an analysis that supported closing down the *Swedetown* warehouse.

ODM – SI:5

This confirms that the future design was conceived well before it was formally decided and announced. The motives stated above show that the executive group found it necessary to gain approval for their plans. In this sense there are characteristics of the processual model in that the executives strive for creating conditions for acceptance of the planned change. But the fundamental logic for how to achieve this among affected actors is mainly founded in an assumption of rationality, that acceptance would come from having had an external party do analysis and reach the same conclusions, i.e. the domination logic is linear in character.

During this episode no change of the distribution system has actually taken place, and the TPL establishment process is yet in its earliest phase. This means that no actual operationalisations of the conceived solutions and plans has yet begun; these have been developed on a strategic level, i.e. they concern how the system as a whole is intended to change.

To summarise, the change process is during this episode driven by the *Operations Development* group; these have come to see certain advantages for the system as a whole of centralising distribution. In the beginning there are indications that one of these actors has developed mental models regarding what could be done about the distribution system. One actor belonging to *Operational Logistics* has taken part in the activities in the strategic arena, but the executives conceive the solution designs. There has however been a separate formation process on the central operative arena, which has led these actors to think along the same lines as the executives regarding the future distribution system. The subsidiaries have been involved in a formation process initiated by the executive group, in which the main mode of formation employed by these is rational argumentation.

decisions: Shipper decides on TPL and chooses provider

In the beginning of what is labelled the *Decisions* episode *Shipper* has started to seek for a suitable TPL provider, a task that *DS* initially is involved in, together with *LC*. This means that thus far actors of both strategic and operative level have been involved in the process. The operative actor has for a while been invited to the strategic arena, perhaps not to influence decisions, but given an opportunity to develop mental models that are aligned with those of the executives regarding the desired future state of distribution. There is evidence that the HQ actors at both levels find the path towards DD the right way to follow.

As mentioned previously the focal process is paused for some time, probably due to the *ERP*sys implementation. *LC* however tries to encourage *Shipper* to carry on.

... but after the presentation we heard nothing for quite some time. But I stayed in touch with *Distribution Support (DS)* whom I had established good contact with ... So one day I suggested to *VPO* that he should appoint *DS* as project leader for a centralisation project. I really believed he would do a great job, and I thought he needed some encouragement in the organisation.

LC – S4:3

Logistics Consultant, one of the two consultants of Logicon who were employed by Shipper.

But after some time it resumes, and now *Shipper* launches a formal DD project. *PL* now joins the *Logistics Development* group and assumes an informal position as project leader. When the DD project is initiated, there is a shift in approach regarding participation from the operational logistics group:

When the proposals started dropping in I wasn't really involved any more. I took part in the pre-study and in sending out the RFP, but no more than that. It wasn't until when we were about to get started with *Provider*, in the beginning of 1998, that I started having any more contact with them. ... I saw the proposals we received of course, but I wasn't involved in any evaluation. As far as I can remember they never asked for my opinion. I guess *Project leader (PL)* had started by then, and assumed the project leader role. But when they started reaching a conclusion to do business with *Provider*, then they asked some questions and so, but not very much.

DS – S6:5-6

PL confirms that it is a group from the executive level that carries out the project work from this point in time:

When the project started, it was *ODM* who was formally appointed project leader and I was the assistant, or operative, project leader. When I joined the project, some work had already been done. ... But we had sent out the request for proposals to potential suppliers. I believe also that the first screening was already done, so only *Provider* and *TPL-B* remained. At this time it was *ODM, Vice President Operations (VPO)*, and myself who worked the most with the project. So it was already decided that we should outsource the distribution when I joined the project.

PL – S2:1

But there was some involvement of the operative actors:

We tried to get them involved in the project, we wanted them to help out in evaluation tenders from potential suppliers. We went to ask them things if we wanted to know something, but we didn't invite them to project meetings. The logistics organisation was quite new, and there had been none within the company before. Then all of a sudden an entire group of people turns up: it was *ODM* – who was logistics manager at the time – myself, and a few more. Suddenly there was this new logistics organisation that worked in totally new ways, and of course that was a tough change for some. But they were really good at the operative stuff, all the little practical details I knew nothing about, I mean, I had only read about those things when I was at the university. All those things they knew, everything.

PL – S2:9

This confirms that the operative actors took part as passive information givers, but did not take part in formulation, i.e. were not active on the strategic arena.

The process now enters a phase of much formation of political character. As is stated above it is already decided that DD should be implemented and that a TPL arrangement is necessary. But the group running the project has to cope with two separate groups within the company who are not convinced that these are the best solutions. One of these groups is the employees of the *Swedetown* facility:

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We were then in a very delicate situation, as the plant manager in *Swedetown* wasn't at all convinced that outsourcing and moving to central Europe would be the best alternative. We had to take them seriously, and thus *Swedetown* was also one of the alternatives we evaluated. However, I felt quite early that *Swedetown* wasn't a feasible alternative, but I realised that we had to take them seriously, or else we wouldn't be able to move on. If the resistance would become too strong there, it would have been very hard to carry on. But I can understand them as well, I mean, *Swedetown* is a small town and the manager wanted to try to save the jobs.

PL – S2:1

I remember that my boss at that time, sometime during the spring of 1997, spoke about some kind of investigation that was under way; it was about where to localise the central warehouse. We reacted according to our own interest of course. After all, we were 23 people working in the warehouse and goods reception by then. We tried to develop a competitive alternative of our own, but we realised where things were headed after a while. We could read between the lines that we wouldn't make it.

WM – S9:1

Warehouse Manager, the manager of Shipper's warehouse in Swedetown.

But there is also an ongoing process with the subsidiaries:

We carried out the pre-study in parallel with discussions in a reference group, consisting of nearly all the subsidiary managers. The purpose of these discussions was mainly to "get them aboard the train". During the first few meetings, subsidiary managers were in general reluctant to let go of their own stocks, but the HQ representatives succeeded quite well in convincing the subsidiaries that direct distribution would work out fine.

ODM – S1:6

... so the analyses we made were intended to convince not only management in *Swedetown*, but also the subsidiary managers, who had a very strong position in the company. ... We also had a reference group with which we discussed things before the decisions were made. The group consisted of the managers of our three most important subsidiaries. It was Shipper's top management who had chosen them. We knew that these three subsidiaries had a very strong position politically, so to speak, so it was very important to get them on board. The reference group was involved in evaluating the options, and without their support I think we hadn't been able to pull this through.

PL – S2:2-3

Similar to the *Swedetown* group the Nordic subsidiary displays scepticism towards the change and conducts analysis of their own:

The decision to centralise and outsource was taken at HQ. There were never any real discussions about whether or not we should do this; it was rather that they informed us that this would happen. But I got to do an evaluation of how things worked here in the Nordic countries before that. We looked at our shipments; did we have any delays, what kind of transportation did we use... This was something we wanted to do ourselves. We felt that if they were to go through with this central warehouse, they would have to show us that it would really be better than what we had. So we wanted to show them how things worked. It was *Subsidiary Manager (SM)* who pushed for that; that we should evaluate closely what we had and if things really got better afterwards. But this was after they had decided on centralisation, I think.

SL – S8:2

These quotations clearly display characteristics of political elements in the process, and political elements are characteristics of the processual model, but does this mean that change is approached according to a processual logic? There is the reference group of subsidiary managers who are deemed important to get along due to their strong positions, and there is also the mention that the *Swedetown* group had to be taken seriously in order to avoid too much resistance. *ODM* states:

We spent a lot of time on selling in the project, partly through having such a heavyweight steering group as we had, partly through inviting the subsidiary managers into the process early, before the decisions were made. Quite simply, they were involved in the decision-making.

ODM – S1:7

Involving affected actors early and in decision-making is a feature of the processual model, and as will become evident the subsidiary managers did exert some influence over the decisions, but it is clear from the stories that the overall distribution system design was conceived by the executive group; *SM* says quite clearly that decisions were made by the HQ actors:

There were never any discussions about whether or not this should be done; it was rather that they informed us that so would it be.

SM – S7:1

Subsidiary Manager, the manager of Shipper's Nordic subsidiary

It comes to light here that during this episode both the local groups – subsidiaries and the *Swedetown* actors – have access to the strategic arena, and strive to influence the future course of events. The actors with operative responsibilities of these groups are also –through the actions of their respective managers – involved for a brief period of time, by conducting analyses of their own.

In the case with the *Swedetown* group, context becomes a decisive factor when an external company decides to move a warehouse to *Swedetown*; according to several actors this pretty much changes the attitude towards the change. But in the discussions with the subsidiaries the HQ people strive to convince them that DD will in fact make things better for all:

So another important issue was to find arguments to use with the subsidiaries, to be able to show them what they could gain from direct distribution. ... So, in parallel to negotiating with *Provider* we developed examples to show the subsidiaries. We took large volume products from our standard assortment, products they all were familiar with, and showed that we would be able to maintain a good service level with lower inventories if we gathered all products in one spot. We showed that, since sales varied over time on different markets, maintaining a high service level with local stock would require quite large inventories, but that on the whole, sales in Europe didn't vary as much over time. This was a schoolbook example, the results were exactly what we had expected.

PL – S2:2-3

This is in one sense a linear approach, as it builds on an assumption that rational arguments will lead to a rationally founded acceptance of a certain decision, but the use of everyday examples of which the subsidiary actors are familiar is a way of adapting the rationally founded argumentation in the mental models of the actors who are to be convinced. The arguments however concern the system as a whole, there is no explicit mention of any local concerns.

But rational arguments are not the only means employed to gain approval:

Some arguments were raised against direct distribution, for instance that the subsidiaries needed the flexibility local stock keeping offered. ... This argument led to an initial compromise, we agreed to allow the subsidiaries to keep small emergency stocks of one day's consumption of certain articles. This compromise was very important for "selling in" the direct distribution concept. ... Another important part of the "sell-in" was analysing how much time and money the subsidiaries spent on purchasing and inventory management, and how much this would cost in a centralised structure. Our results showed that total costs also would decrease, by some 10-12 MSEK group-wide. It was very hard for the subsidiary managers to oppose such savings for the company.

ODM – S1:6-7

This quotation tells us that there was some giving and taking, in that the executive group seems to have reasoned that if the subsidiaries are allowed to keep a little part of their stock they will be more willing to let go of the main part. In this sense the subsidiaries did have a say on decisions, and the conclusion that this was necessary emerged in the interaction between the HQ executives and the subsidiary managers; the processual model was at play here.

There is also the use of power, which is indeed a political element. *ODM* quite clearly tells us that he exerted some pressure by showing the economic benefits for the group as a whole, and relying that none of these managers would want to be regarded as not working for the good of the whole.

As for the previous episode, no operationalisations of change have yet taken place; the process is still at a planning and design stage. Much of what is written so far regarding this episode concerns activities that are mostly related to the DD change. In parallel to this formation process there was however the process of selecting a partner and specifying the scope of the TPL arrangement.

As mentioned above, *DS* took part in the preparations for this activity, with the help of *LC*, but the executive group carried out the main part of this work:

It was myself, *Vice President Operations (VPO)*, and *LC* who evaluated the three prospective suppliers. *PL* also helped out, mainly as back-office support with cost-analysis and such.

ODM – S1:9

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There is an initial screening of the first group of provider candidates, which renders three for closer evaluation. *LC* is still involved for external support:

Later on, in springtime 1997, I had developed a plan for action and we had candidates that we found interesting; *Provider*, *TPL-A* and *TPL-B*. By this time *DS* was out of the picture, it was *ODM*, *VPO*, and I who should do a tour around Europe and visit the candidates.

LC – S4:5

After these visits two candidates remain, which are invited to visit the *Swedetown* facility in order to get to know *Shipper's* operations before giving a full quotation for the services. *LC* reflects over the involvement of actors from *Swedetown*:

WM wasn't much involved in this project, nor was anybody else from *Swedetown*. I had some contact with *WM* during the pre-study, but over all this was like everything else they did; this was *ODM's* and *VPO's* show. I think they missed some important issues there, to inform employees about what was going on.

LC – S4:5

As mentioned previously, *LC* has prior experience of *Provider* and is already quite convinced that this is a good alternative for *Shipper*. The other actors also seem to take a liking to *Provider* early during the evaluation:

So, why did we choose *Provider*? Everything worked fine with them from the beginning. They had a very professional attitude, and answered our questions in just the way we wanted them to, costs were quoted in the format we requested.

ODM – SI:8

LC then recommends *Shipper* to go ahead with *Provider*, and that is accepted. In October 1997 a letter of intent is signed between the parties, and closer analysis and negotiations commence. Some *Provider* employees visit *Swedetown* for a longer period to gather facts as a basis for the contract. It is during this period that *Shipper* comes into contact with the company moving their warehouse to *Swedetown*. A contract is signed in November 1997, and shortly after *VPO* travels to *Swedetown* to announce the deal between the parties. According to *ODM*, also the subsidiaries were informed and this was how the DD project was launched officially in the company. The process now enters the third episode.

To summarise the second episode, it is clear that analysis and overall solution design was in the hands of the *Operations Development* group. Other actors were involved to give information input to the analysis, but not in designing the future distribution system; the dominating model of change during this episode is linear. There is also a formation process of political character, involving both the subsidiaries and the *Swedetown* group. An external event is decisive for gaining acceptance in *Swedetown*, but between the executive group and the subsidiaries the argumentation is mostly concerned with rational considerations of the distribution system as whole.

transfer: central warehouse transferred to TPL provider

The beginning of the *Transfer* episode is a period of preparations for the warehouse move. *ODM* tells us what this part of the process was concerned with:

So, our main task between contract signing and physical move of the warehouse was planning the move and designing the new warehouse. A lot of our people were involved in this phase, even people who weren't involved in the project otherwise. There were people from HQ who went to *Swedetown* to help out with packing the goods.

ODM – SI:11

From the stories it seems that this phase of the process is focused not only on the TPL component, but also on preparing for DD; this latter part is described later. Regarding the TPL component much effort is directed towards preparing for closing down the

Swedish warehouse and starting up the new warehouse operations in *Dutchtown*. *PL* is in charge of the warehouse move, and also *ODM* and *WM* are engaged in preparations. *WM* is the link between the HQ actors and the preparations in *Swedetown*. For a brief period, several actors are involved in the operative preparations for the transfer:

A lot of our people were involved in this phase, even people who weren't involved in the project otherwise. There were people from HQ who went to *Swedetown* to help out with packing the goods.

ODM – S1:11

Some time during this period it is decided that some of the *Swedetown* employees will travel to *Dutchtown* when the warehouse is moved and help out during start-up. This means that not only the executive actors are engaged, but also some of the operative actors from *Swedetown*, of which *WM* is one. But the actors belonging to the central operative logistics organisation seem not to be involved in the same extent:

But I wasn't part of starting up operations down there. When there have been any issues regarding formalities surrounding exports and imports I have been involved all the time though, I have tried to settle things when something has gone wrong.

DS – S6:5

DS was thus involved as a trouble-shooter for certain issues, but was not involved actively planning and preparations:

I knew that when they started charting our flows and so, I felt that there were certain things that I had to make sure would work out, for instance all things regarding customs and so. So I sent that to *PL*, after all she was the one who had the project leader role and handled all such issues with *Provider*.

DS – S6:6

This specific issue regarding customs documentation later becomes an obstacle for *Shipper* when exports to non-EU markets commences, i.e. the contextual dependence of TPL establishment becomes visible here. *ODM* tells us:

What turned out to be a problem quite early was export shipments, especially regarding customs. This was an issue that had been totally neglected in negotiations and planning. I think *Provider* had taken for granted that we held certain documents that customs required for exports, and we thought that, since *Provider* never asked for any such documents, they wouldn't be necessary.

ODM – S1:12

PL on the other hand thinks this had nothing to do with *Provider*, but that it had to do with the carriers, that these actors overestimated the capabilities of their own systems.

DS also goes into detail on these activities and how he was engaged to sort things out. This event gives rise to a question regarding the link between the *Operations Development* group and *Operational Logistics*. In an earlier quotation *PL* tells us that the actors in charge of the change tried to involve the operative actors since these held knowledge she herself did not possess, yet we see that an issue that *DS* tried to point out is not brought up in the preparations between *Shipper* and *Provider*. Unfortunately it is not possible to give a complete answer to thesis question, but there are indications that communication between the two central HQ groups was not fully functional.

Several of the interviewed actors point at export shipments as a problem, it is also clear from the stories told by the subsidiary representatives that this has caused a lot of trouble regarding shipments to Norway, which is a non-EU country. Also when looking at *DS*' story it is clear that this has been an important issue. What also comes to light is that this not only affected DD by delaying the start of local warehouse closures, but also that a planned revamping of the operational logistics organisation in fact never was carried out:

We had a plan originally to cut down on staff, from four to two, in our distribution department, since their workload should diminish as *Provider* took responsibility for some of their work. This didn't happen, but it is hard to point at the exact reason. Partly it is because *Provider* didn't meet our expectations, since they didn't take the responsibility they should regarding exports handling...

ODM – S1:16

With regard to this part of the two parallel activities in this period of time it is clear that most of the planning and design work is carried out by the executive group. One actor with operative responsibilities – *WM* – is engaged as a link to the operative preparations, but the *Operational Logistics* are not actively involved. What also is interesting to note is that *DS* states that he tried to point out certain issues regarding customs for *PL*, but *ODM* says this was totally neglected in negotiations and planning.

The other parallel process is the preparations for the roll-out of DD, this is a task that was mainly carried out by *PL*. Much of the preparations consisted of visiting the different national subsidiaries to gather information that was necessary for designing the new distribution structure:

While we were preparing the warehouse move we also visited all the subsidiaries to gather information and to inform about Direct Distribution (DD). We tried to map how they worked in the subsidiaries, because none of us really knew anything about that, we knew nothing about all their special solutions.

PL – S2:5

Chronologically this takes place shortly after *ODM* had worked on convincing the subsidiaries that DD will be better for all involved parties. But as *PL* travels around

Europe and meet with different subsidiary representatives to chart their local processes and service offerings, a different picture appears:

When we did these visits everyone already knew that we had decided to move the warehouse. We didn't exactly meet any excitement; on the contrary, all were quite worried about letting go of their stuff. Some sales companies contacted the group's marketing manager about their misgivings, but the management group had talked things over quite thoroughly so we could handle that well.

PL – S2:5-6

This shows that formation was not yet over in the organisation; all affected parties were not yet willing to accept that DD would in fact improve the overall distribution situation for all. This gives rise to a question that remains unanswered, and that is how formation on the local subsidiary arenas worked. The HQ executives discussed with subsidiary managers, but *PL* tells us that she met with employees with a variety of different responsibilities in the subsidiaries. A reflection, however, is that if formation had come a long way in all instances this scepticism towards DD would perhaps not have been so obvious once the detailed planning commenced; it seems that formation was still ongoing on the subsidiary arenas. There is more support to be found for this conclusion:

Our original plan was to implement DD quite rapidly in the subsidiaries, but we had to revise that plan, we realised that we couldn't move forward as quickly as planned. With the exception of the Netherlands, where they saw an advantage of getting the central warehouse so close by, none of the subsidiaries actually pushed the project forward. Nothing really happened if we didn't push things, they did absolutely nothing on their own. We needed a lot of support from management.

PL – S2:12-13

But as mentioned previously, there was some giving and taking during this phase. When the HQ group started to get a clear picture of the local conditions at each respective subsidiary, some adjustments had to be made to the original designs. There was some giving...

Some subsidiaries, I believe it was Italy and Spain, showed proof that DD wouldn't be the best alternative. They showed us that, by calculating the costs for maintaining the required service levels, costs would increase. This was quite what we had suspected, we had a gut feeling that implementing DD in for instance Spain would be a lot more difficult than in many other European countries.

ODM – S1:8

... and some taking:

For all those things we couldn't handle with the new central warehouse, we told the subsidiaries to quit doing it, or find other ways to supply that service or product. Consequently, there were many products that were eliminated. We said "we won't do that, you'll have to find another way". Of course, a certain process was necessary to pull this through, so to speak. We simply had to run it in the form of a project.

ODM – S1:14

What we see here is that as the planning phase evolved, the responsible HQ actors gradually came to see that some local adaptations were necessary; the initial plan was to centralise the entire European distribution, but when confronted with the situation locally in some countries they realised that it would not be possible to centralise and meet the local requirements at the same time. In this sense the subsidiaries had a say in decisions; the process displays processual characteristics. The local specialities regarding assortment and such is not accepted in the central warehouse, but the HQ representatives leave it up to the local subsidiaries to take care of these issues as they find fit.

But the rationally founded argumentation to convince the subsidiary managers that had foregone this phase, which is characteristic for the linear model of change, seems not to have worked as well as for instance *ODM* reflects that it did. The quotation by *PL* above clearly shows that the overall idea of centralising distribution is not yet fully accepted; formation is still ongoing.

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In April 1998 the warehouse move commences. During a short period of time deliveries to subsidiary warehouses are stopped to offer time for moving to and setting up the new warehouse in *Dutchtown*. This is the first activity in which the distribution system part of the initial strategy drafting in 1995 is carried out. The change that has been planned and decided on the strategic arena is now starting to take form in operations.

As mentioned earlier, it has been decided that some employees from the *Swedetown* warehouse operations should travel to *Dutchtown* to help out during the start-up of operations. These are *WM*, the supervisor of goods reception, and one person from production staff, who originally did not work in the warehouse but is of Dutch origin and thus was deemed a valuable resource for communicating with *Provider's* staff in *Dutchtown*. After the effort to get the warehouse operational, deliveries to subsidiary warehouses start as planned, at the planned date.

From the stories told by those who were involved during this phase – *ODM*, *PL*, and *WM* – it is clear that much of the operational change is now within the *Dutchtown* operations, i.e. outside the scope of this thesis. *WM* gives some detail on the work he and his colleagues from *Swedetown* carried out together with *Provider's* staff, but

there is no exact account on how change within *Shipper's* parts of operational logistics evolves, apart from what *DS* and the others state regarding export documentation. These problems turn out to cause delays for shipments to countries outside the EU, and it is clear that it took quite some time to get things sorted out properly, work which mainly was carried out by *DS* on *Shipper's* side of the shipper-provider dyad.

After the warehouse has been set up and is operational, the process enters the fourth and last episode that is covered in this thesis. When summarising thesis third episode, the picture that it is the *Operations Development* group that dominates analysis, planning and design remains, but that the subsidiaries have gained more influence over some decisions; regarding the overall system design it is still in the hands of the executives, but for some subsidiaries these listen to the argumentation of the local actors and agree to local adaptations; the processual model is also at play regarding the DD system. *Operations Logistics* are not involved, but affected in that the changes are now being implemented in the distributions system. There are some actors from the former warehouse in *Swedetown* on site in *Dutchtown* to help out during start up and operations, these are in regular contact with *Operations Development*. This involvement however has much more bearing on the process on *Provider's* side of the dyad than what it has on *Shipper's*.

operations: TPL operations and gradual transfer of distribution

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The executive group now focuses on starting up DD. As discussed previously this did not happen as quickly as originally planned, since certain issues had to be resolved before taking DD further. The first subsidiary to be included is the Dutch one; this is done in October 1998, and the HQ group had their reasons for choosing this specific subsidiary to be the first one out:

We realised quite early that we needed to make DD work on one market before we went ahead on another one. We thought that would be the best marketing we could have, I mean, if one subsidiary says "this works fine, our customers are really satisfied", then that's worth a thousand times more than if ten of our people from HQ would say it. It was important for us to have a good example to point at, and we got such an example with the Dutch subsidiary.

PL – S2:13

The DD project is during this episode concerned with enrolling more subsidiaries in the DD ranks, and making DD work for those who are included. But apart from this, in the beginning of this episode *Shipper* acquires *Competitor*. This causes, according to some other actors, *PL* to leave the company and a new project leader is appointed. *PM* assumes responsibility for integrating *Competitor* in *Shipper's* distribution and in *ERPsys*:

In 1998 we acquired *Competitor* and it was my job to integrate their distribution with ours. What I did was basically visiting distributors and close down their warehouses, both physically and systemwise; I was out there and helped them pack the goods before it was sent to *Dutchtown*, and I also worked to integrate *Competitor* into *ERPsys*. ... We had to synchronise this with in which phase the DD-project was. This meant that in some instances we first had to bring in the goods to the central warehouse, only to have them shipped out to the regional warehouses that were still in operation. When we did this, we also had to take into consideration whether the regional warehouse would be closed down in a near future or not.

PM – S3:1

Project manager, part of the executive group of Shipper

The acquisition is thus a change external to the focal process, which however interacts with it. According to PM this however does not affect the focal process at all:

Bringing in *Competitor's* assortment in our system didn't affect our DD-plans the least bit, which is quite astonishing. Of course, things got quite strained, there was a lot happening all at once, especially for our subsidiaries.

PM – S3:2

But, as mentioned, focus is on getting DD going. The stories offer little detail with regard to the project for each specific subsidiary, more than that they were included in sequence over a time period of a couple of years. In 2001 Norway, UK and Ireland were integrated into the DD-system; these were the last countries to be included before the empirical data was collected.

ODM talks about how the process of integrating more subsidiaries into DD was carried out; this is discussed earlier in this chapter. What comes to light is that the detailed designs of the system regarding transportation emerge gradually as the scope of DD is expanded. There are local variations between the subsidiaries, which makes it difficult for the central actors to stick to the original plans; some subsidiaries actually convinced the HQ representatives that DD would not be a good solution for their respective markets. This is interpreted as a sign that, with regard to local adjustments, also the processual model has been at play.

When it comes to change in operations in *Dutchtown* this is as mentioned not within the scope of this thesis. What is within the scope, however, is how the process evolved within *Shipper's* organisation. WM, who was the operative link to HQ in *Dutchtown* tells us:

I had to write weekly reports to *ODM* ... *ODM* wanted the weekly reports because he thought the information he got from *Provider* wasn't always correct. He could see for himself what happened in *ERPsys*, so he wanted my view on things too. I guess that it differed a little from the information he got from *Provider*, who mostly spoke to the managers and never really got to talk to the people on the warehouse floor. ... HQ demanded a lot from me, but they listened too. *ODM* is a person who is good at listening; he could really pick out the important parts of the message I tried to put forth. *ODM* was the one I spoke to the most, *VPO* was involved too, but one could say that *ODM* was my boss when I was down in *Dutchtown*.

WM – S9:8

This shows that the link from what happened in *Dutchtown* operations to HQ went to the central actor in the executive group. *WM* also states later in his story that after coming home from *Dutchtown* he is still in contact with *Dutchtown* employees at times, since a relationship between him and the actors in the new warehouse has developed; he has even been on visits to *Dutchtown* to help out with certain issues regarding *ERPsys*. It seems almost that an informal operative logistics organisation has developed parallel to the formal one.

The operational logistics group was not involved in the start-up of operations. This is confirmed in *DS'* story, it is also said that responsibility for DD laid in the *Operations Development* group until late 2001, when it was transferred to *Operational Logistics* and *DS* took over. In one sense the TPL arrangement was also part of *Operations Developments* responsibility, since this is an essential part of DD, but it is clear from *ODM's* story that the process from late 1998 mostly concerned strictly DD issues.

When reading *LM's* story – *LM* who was appointed operational logistics manager in late 1998/early 1999 – this division of responsibilities is confirmed:

Direct distribution was run as a separate project in which I was not involved, other than as manager for the operational parts of logistics, I was only indirectly involved. For instance, when certain markets were included in DD it was my job to find out the consequences for other parts of our everyday business; what would happen with materials control, what about the subsidiary, all kinds of practical things. But I wasn't involved in rolling out the project.

LM – S5:8

Logistics Manager, since late 1998 manager of Shipper's operational logistics group.

But it comes to light that there has been a lot of improvement efforts and problem solving in operations from 1999 and onwards, and that DD has affected the *Operational Logistics* department:

The way we are organised is a direct consequence of DD. Nowadays each individual is responsible for one specific market, but before DD we had a group of people working with distribution, who took care of what had to be done, and there were no specific responsibilities within the group. So in that sense we have reorganised. We have become more specialised, especially because we have wanted to build up the personal relations between people, something we find very important.

LM – S5:2

One aspect of the stories that is interesting to note is not only what is mentioned, but also what is *not* mentioned. In the major part of this chapter, a picture of the main design of the new distribution system – including TPL – as being conceived and decided by the executive group has emerged. It has also been concluded that with regard to the implementation of DD, this has overall been an issue of these executives deciding on the design, but in interaction with the national subsidiaries some local adjustments have also been decided. Much of the stories told by these executives deal more with the DD process than with TPL establishment.

This is where that which is not mentioned comes in. One can of course argue that there is a lot that is not mentioned and that it is not possible to draw any conclusion from that. But when studying the stories, it is apparent that very little detail is given in the stories of the *Operations Development* group how the concrete designs of the TPL arrangement were conceived, and this stands in contrast to the detail that is given regarding DD. It seems from this that the contextual dependence concluded earlier indeed has affected the change process; that since there was a lot of work to do to get DD operational on all European markets, the parts regarding setting up *Shipper's* interfaces and procedures for working in the TPL arrangement have received less attention. One of *PM's* statements gives some support for this reasoning:

Much of the problems we've experienced stems from not having clear processes internally, there's many of us who have said that. And if we aren't clear internally, how can we expect clarity towards *Provider*? If we start by getting more clarity internally, to sort out who's responsible for what, I think things will be much easier for *Provider* too. We've started in small scale, we've drawn organisation chart with appointed contacts on them. It's gotten a little better, but there's still lots more we could do.

PM – S3:7

There is however more on the TPL part of the process during the *Operations* episode in the stories of the operative actors, but these stories convey a somewhat ambiguous image. On the one hand there are some accounts stating that the concrete designs were decided by the executives and implemented through an installation logic:

But development, new processes, running projects... that's mainly the responsibility of *Operations Development*. Of course we are responsible for adjusting and trimming day-to-day routines, but if there's something more extensive, then it is run as a project and isn't our responsibility. ... So any such a change is run as a mini-project, and when the Operations Development people see that it works, then we take over and establish it as a system routine. Then it's up to us to keep the routine fit and trim.

LM – S5:2-3

This quotation is in fact quite interesting, since it together with other aspects that are mentioned in LM's story tells us that *Shipper* has been organised according to a linear logic of change. Anything that involves changing a business process is handled through a specific project, and that is the responsibility of the *Operations Development* department. This was in fact confirmed in a response to a question about this:

Operations Development was created for two reasons. I wanted new challenges, and got the responsibility for our *MTO Operations*, but kept the responsibility for logistics for the entire company. We also saw an advantage in separating the daily logistics, securing deliveries in and out, from development since development tends to be more interesting and thus would take focus away from daily operations.

ODM – Not in story.

But this is not the entire picture. When looking at LM's story it also comes to light that *Operational Logistics* are involved in many project reference groups, and have some influence since they are active in suggesting changes. They have also worked with development of working procedures regarding TPL without the intervention of the *Operations Development* group. An example of this from LM's story:

... we invited them to a telephone conference about a year ago. There were people from our distribution and those who work with exports on their side. That conference also concerned communication issues, we tried to find out why there was so much communication back and forth regarding issues that there really was no need for communicating; things we shouldn't have to phone and e-mail that much about. ... We agreed that if a question of some sort arrives, we should not answer the question as such, but point out where the requested information can be found in the system. We did this in order to force everybody to start looking for information in the system and not just toss away a question as soon as some issue emerges. ... So we tried this and soon we realised that in some instances the information that was needed to run operations in fact wasn't available in the system where it was supposed to be, and in other instances we found that it indeed was there. So after a month or so things worked quite well, we had reduced communication to about a third. ... You could say that we based this on an assumption that if all necessary information is there in the system we shouldn't have to communicate at all; all necessary information should be there in the order. Then we asked ourselves the question "If that is true, why do we communicate at all?"

LM – S5:5

The development work discussed in this quotation concerns very concrete, operative issues in the day-to-day work between *Shipper's* and *Provider's* operative staff, and is

an example of learning by doing. It involves systems knowledge and is a conscious experiment, the outcome of which raises the systems knowledge of involved actors and also leads to a finding that certain information that was taken for granted in fact did not exist where it was supposed, thus leading to corrective action. The starting point is an assumption that it ought to be possible to find a more efficient way to carry out the daily tasks. These are all characteristics of the learning approach, so in this specific instance the circular model has been in effect.

This fourth and last episode is one in which the two changes – DD and TPL – seem to evolve more separated from each other than in the previous three episodes. The DD process is mostly concerned with expanding the scope of DD, i.e. including more countries in the system, and this was a process between *Operations Development* and the subsidiaries, in which the linear model of change dominated regarding the overall design of the distribution system, but the processual was at play with regard to local adjustments on individual markets. Regarding the TPL part, the exact character of the interaction between *Operations Development* and *Operational Logistics* is not fully clear, but it is clear that *Shipper* – regarding logistics development – has been organised according to a linear logic, but that there also has been some change efforts on the operative arena that displays characteristics of the circular model. This demarcates the end of the studied process; there are however some interesting aspects of the reflections of the interviewed actors regarding the period in time during which data collection took place, i.e. mainly in mid 2002.

before renegotiations

The last point in time of the studied process that the empirical material covers is the middle of 2002, i.e. just before the first contract period was coming to an end. As can be seen in the stories, some of what is said regards the actors' opinions about the changes they have experienced. Whilst the purpose of this thesis is not to evaluate the success of the changes and link this to the change process, the material still offers some interesting points.

As is concluded earlier, the focal process has consisted of two parallel and intertwined changes, TPL establishment and centralisation of the European distribution system, two changes that *PM* was charged with evaluating by finding out the subsidiaries' opinions as a preparation for renegotiations with *Provider*.

It's really interesting to see the responses, because in general the logistics people are more enthusiastic about DD than the subsidiary managers themselves. I guess we logisticians see more advantages with direct distribution than what a salesman does. But despite that, the overall judgement is very positive, and when I showed the results to *VPO* he was quite surprised so this really feels good.

PM – S3:3

There is also *SM*'s statement that product availability has increased due to DD in the beginning of his story. There is also *SL*'s statement:

I think I would keep the central warehouse if it was my decision to make

SL – S8:4

There are indications that the subsidiaries have come to accept DD over the years; especially *SM*'s positive opinion regarding product availability stands in contrast to what *ODM* says regarding the tough resistance from this particular subsidiary in the beginning of the DD project. It seems that there has been a slow and gradual formation process during and after the fact that DD was being implemented:

For starters I experienced that the subsidiaries were a bit reluctant to let go of their own stock. But there was a political dimension to it as well; we felt that if we could show one subsidiary for which things had turned out very well, it would be a lot easier for us to sell in the project at the next one. They monitored us very closely, and as soon as something went wrong they informed us about it immediately, which in a sense was good for us. But as more and more subsidiaries were included I experienced that things turned out quite well for those who had been included for a while.

LM – S5:8-9

What about the TPL part of the change then? *LM* seems satisfied with the situation at the day of the interview, and in states that if only the numbers are right in the upcoming proposal he wouldn't mind to keep doing business with *Provider*. But *DS* is still not convinced:

When I first heard mention of outsourcing I was quite doubtful. I mean, if you want to produce and sell products, why then should you not be able to take care of warehousing and distribution yourself? ... storing and distributing your own products, that's something you should know how to do yourself. And I haven't changed my opinion on that point; I think that your distribution, that's something you should be able to handle internally.

DS – S6:3

It is clear from *DS* story that there are things that have not worked out as well as he would have wanted them to, perhaps this is the reason that this actor does not think TPL is the best solution for the company.

There is also an aspect of affected actors knowledge of the outcome:

But there hasn't been any follow-up of savings that's been distributed to us who've been involved or affected. We've never been able to see anything like "the goal was to save so and so many millions and this is what we reached"; nothing of the sorts has ever been presented to us. I've asked both *LM* and *ODM* several times if we've really saved any money on this, and they've replied "yes", but I've never heard if we've done more or less than the target, or exactly what was expected.

DS – S6:14

I have no idea how we're doing cost-wise because that's not my job, but service-wise I think Denmark is better, and Sweden and Finland are at the same level as we were before.

SL – S8:3

The reasons they told us was that they wanted to place the warehouse centrally in Europe, they wanted to be able to ship quickly to all customers. There was a cost issue too; they said it would be a lot cheaper this way. But nobody has said anything about how cheap it really turned out... Someone from *Swedetown* asked the people at HQ at some meeting, but got no answer, they hushed that down. So I guess it hasn't turned out all that cheap after all, in that case they would have told us for sure.

WW – S10:2

Three actors belonging to different parts of operations, who all have been affected by the DD and TPL change all reflect that they do not know what the outcome is, especially regarding cost. This is despite the fact that *ODM* in his story tells us:

When it comes to the success rate, it is hard to separate one thing from the other. ... staff reduction goals haven't been met at HQ, the number of employees are the same as they were when the project started. On the other hand we would perhaps have had even more people here if we hadn't started the project, so relatively speaking we have reduced headcount. ... We did however meet the headcount reduction targets among the subsidiaries. ... Customer service has improved dramatically, especially in terms of product availability, which nowadays is extremely good. Cost reduction has also come a long way, but we haven't really been able to meet the original target. Of the expected savings of 12 million SEK, we have reached 8, roughly. Even if this doesn't fully meet original expectations, we are still pleased with the savings.

ODM – S1:16

summary

Thus far in this chapter an attempt has been made at bringing out the main characteristics of the interlinked change process of TPL establishment and DD implementation. It is clear that these two changes have been intimately linked during the time span that this study covers. But another image that appears is that with regard to the strategic and operative arenas, these two changes have not fully involved and affected the same actors during the entire process. *Operations Development* has however been at the centre of the change process during all four episodes.

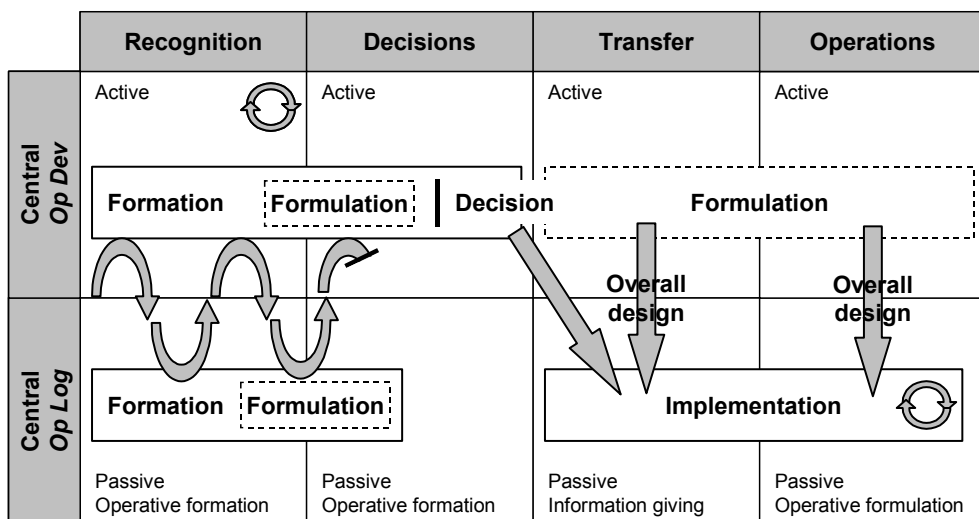


Figure 22. The change process and the interaction between Operations Development and Operational Logistics actors.

In Figure 22 an illustration is given of the interaction between *Operations Development* and *Operational Logistics* during the studied process. The text “Active” or “Passive” in the eight boxes represents the group’s participation on the strategic arena, where the most influential decisions have been made. The other text in the bottom row of boxes denotes the function this group has fulfilled for the activities in the strategic and/or operative arenas.

Before the launch of the DD project in conjunction with contract signature in 1997, the most involved actors belong to the central organisation of *Shipper*. Up until the point in time when *Shipper* starts seeking for a suitable TPL provider, one actor from the operational logistics organisation is involved in gathering data, and works closely with *Logicon* when they conduct the DD pre-study; this is illustrated in Figure 22 by the wave-shape between the two groups. This actor and his manager are also thinking along the lines of centralised distribution, but are not taking part in the formulation on the strategic arena. This formulation is founded in recognition of that applying a known concept – centralised distribution – can improve the distribution situation. This recognition is initially *ODM*’s own, but when the new top management group joins the company these ideas are allowed more room on the strategic arena.

From some time during the turn of the year between 1996 and 97, *Operational Logistics* is no longer taking part in the process, it is now completely in the hands of the *Operations Development* group and the responsible executive, *VPO*. These actors continue the analysis and eventually decide that distribution should be centralised and that this is to be made effective by the help of *Provider*. These decisions are formally announced at information meetings in *Swedetown* and with the subsidiaries, and

shortly after implementation commences. This affects *Operational Logistics* daily operations, i.e. they become active in the operative implementation. During the last and longest episode change in this groups operations either takes place through overall system design, which is formulated and decided by *Operations Development*, or through changes within the frames that these designs set. Some learning by active experimentation is takes place with regard to these purely operative changes.

If we look at the interaction between *Operations Development* and the national subsidiaries instead, a somewhat different image appears, see Figure 23:

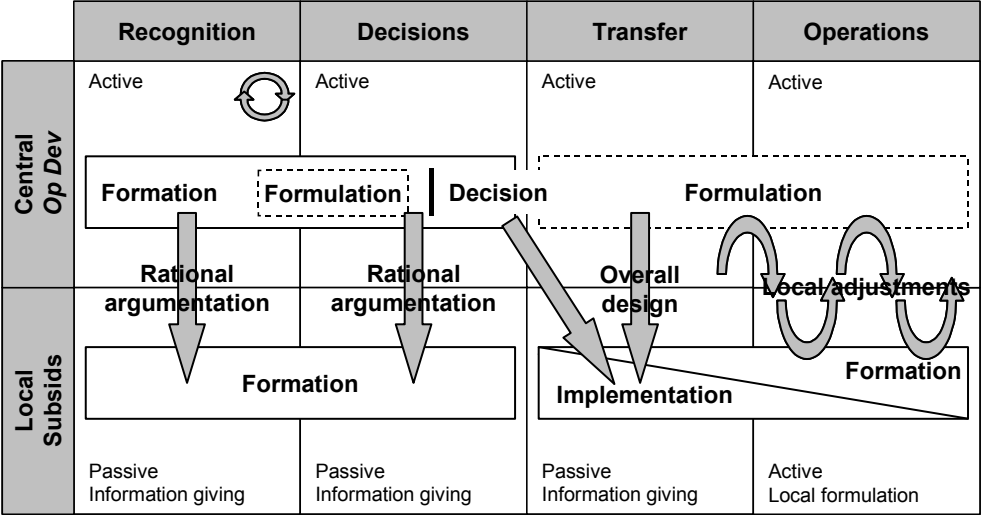


Figure 23. The change process and the interaction between *Operations Development* and the subsidiary actors.

In this interaction, it is visible that there is an ongoing formation in between the local and central actors from the beginning. In this case, however, there is a difference towards what was presented above regarding *Operational Logistics*, in that the subsidiaries do not share the mental models regarding centralising distribution, on the contrary. There is much argumentation for a long period of time, and this mainly involves the *Operations Development* group trying to convince the subsidiary managers through rational arguments.

The executives belonging to the central organisation conceive the decisions regarding overall system design, but as the process reaches the gradual implementation of DD on more markets, the subsidiaries become active on the strategic arena, at least regarding some local adjustments. When the subsidiaries that are included in DD have been in the system for some time, acceptance and recognition that it has improved the distribution situation gradually emerges; it is not until now formation among these actors actually is reaching acceptance of the new system.

When it comes to the interaction between *Operations Development* and the *Swedetown* actors, yet another image appears, this is illustrated in Figure 24 below.

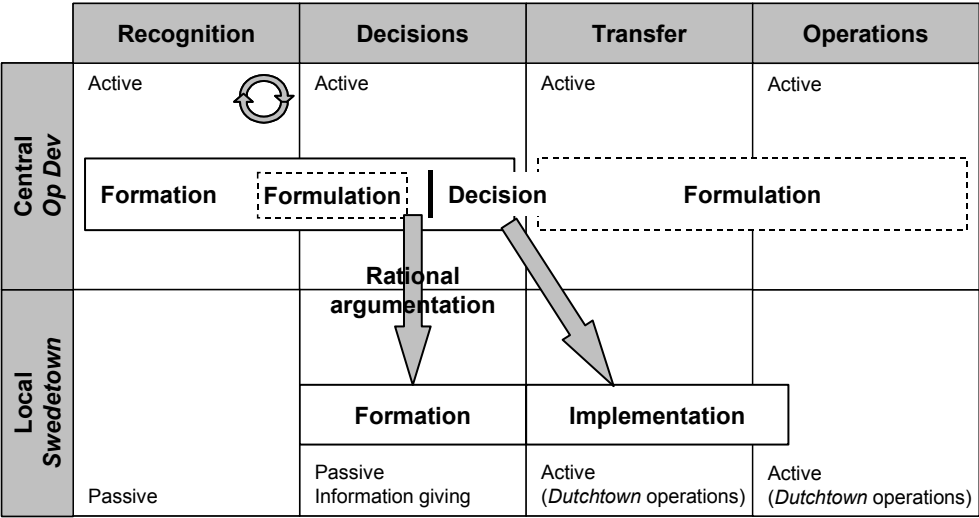


Figure 24. The change process and the interaction between *Operations Development* and the *Swedetown* actors.

During the first episode there is no interaction at all regarding the future changes in the distribution system; this does not commence until the second episode. In the beginning of this episode, the local actors make an attempt to compete with a central European warehouse, but this does not have much effect. An external event becomes crucial in this process, since the opportunity to offer new jobs to all employees in the warehouse that will be closed makes the local decision makers accept the change; instead of opposing it, *Operations Development* now experiences that the cooperation with these actors works fine. Some of the operative actors partake in the transfer and early operations period, mostly by supporting the start-up and operations in the *Dutchtown* facility. During the period there are *Shipper* actors on site in *Dutchtown*, there is regular communication between *ODM* and these actors, and after these actors came back home there have been sporadic informal contacts between *Dutchtown* staff and *WM*.

8 Conclusions

The overarching purpose of this research is to explore the change process of third party logistics establishment. As a first step of this endeavour, this thesis focuses on the intraorganisational change process on the shipper side of the shipper-provider dyad of TPL arrangements, and on the two research objectives:

- ▷ To explore the context within which the TPL establishment process unfolds and describe the contextual dependence of this process.
- ▷ To describe the change process of TPL establishment in terms of the linear, processual, and circular models of change.

In Chapter 6 two descriptions of the process are given, the latter of which is with context taken into account. This description is the first outcome of the study that is presented in this thesis, one that is a result of the first of the two objectives above.

The contextual process description is brought into Chapter 7, in which analysis is conducted. The first part of this regards the contextual dependence of TPL establishment; this is discussed in the following section. Thereafter the remainder of Chapter 7 contains an analysis of the change process, which is the main concern of this thesis and of this chapter.

contextual dependence

In Chapter 6, the case is first described on an overall level, in isolation from context. It is concluded that the phase- or step-models put forward in the TPL literature at this level of description (e.g. Bagchi & Virum, 1996, 1998; Sink & Langley, 1997) quite well reproduce the overall sequence of activities and events that constitute the studied process. The main driving forces behind seeking a TPL arrangement – what can be regarded as *decision context* – are in this case a combination of a distribution restructuring effort, which was intended to increase customer service levels and reduce overall distribution costs, and also desire to shift fixed costs into variable, i.e. motives that fit the picture from the TPL literature quite well (e.g. van Laarhoven & Sharman, 1994; Andersson, 1995).

The second process description goes one step further and also acknowledges the *process context* and by doing this a different picture appears. It is clear from this description that in the studied case several other changes and events that are not directly linked to TPL establishment have an impact on the TPL establishment process, and that there also is a dependence in the other direction, i.e. that the TPL establishment process affects these other changes.

The most conspicuous dependency is the combined change consisting of distribution restructuring and TPL establishment. As was concluded already in the non-contextual description of the process, also this contextual description acknowledges that TPL emerged as the desired means to arrange logistics operations in a future restructured distribution system, a picture that fits well into literature in which European TPL arrangements are studied (Apart from Andersson 1995 mentioned above also e.g. Skjoett-Larsen, 2000 and Halldórsson, 2002). It is also concluded that these two changes have interacted closely during the entire duration of the studied process. Events related to the one change have affected the other. This becomes especially visible in the analysis related to the second research objective, in that the change process has not only encompassed TPL establishment, but also to a major restructuring of the entire European distribution system of the shipper in the studied case, thus involving a number of actors that perhaps would not have been involved, should TPL establishment have been carried out as a stand-alone change.

By this description of the process within its context, and the interdependence between the two changes, the first research objective is fulfilled. It is concluded that the studied TPL establishment process was highly context-dependent, and that the contextual versus non-contextual descriptions differ substantially. This has some important implications both for future research, and for industry. These implications are discussed in a later section.

the change process

The second and main research objective is the main concern of the analysis carried out in Chapter 7. In this chapter, the empirical material is analysed in order to explore how well the three models of change describe the mechanisms of the change process. Pettigrew (1997) wrote: *“Processes are embedded in context and can only be studied as such.”* (p. 340), and this statement is indeed valid for this case. By acknowledging process context, it is clear that in the studied case it is neither possible, nor would it be meaningful, to study any one of the two changes – to centralised distribution or to TPL – in isolation. Therefore the analysis is carried out on the process of establishing direct distribution in conjunction with TPL.

One important aspect of change processes is the distinction between the strategic and operative *arenas* (Carlsson, 2000), which are a figurative representation of the constellations in which decisions on change, and the implementation thereof, take place. Designs and decisions conceived in the strategic arena are manifested in operations, i.e. there is a link between the two arenas. There might also be activities in the one arena that take place without link to the other, but from an overall systems perspective the design of the distribution system in the studied case – which was establishment of TPL and centralisation of distribution – was conceived on the strategic level and manifested on the operative.

There is also the distinction between *formation* and *implementation* (Carlsson, 2000). Depending on the models of change that are at play in a change process, these two process constituents are of different character, but both exist to some extent in any given process. In the description of the process offered in Chapter 6, it is concluded that it can be divided into four main chronological episodes. The first two of these – *Recognition* and *Decisions* – involve no operational manifestation of change; this takes place during the third and fourth episodes, *Transfer* and *Operations*. Therefore the process can on an overall level be seen as having involved two main phases, the first being *Formation* during which activities, actions and events aimed at formulation solutions and gaining acceptance of the planned change are carried out, and *Implementation*, during which most of the operational manifestation of change takes place. The concepts *arenas*, *formation*, *formulation*, and *implementation* are discussed in Chapter 3; please refer to that chapter for a more comprehensive discussion.

In the studied case, four groups of actors that have been involved or affected in varying ways during the duration of the process are identified. There is one group of actors belonging to the central organisation of the shipper, with responsibility for the overall design of the distribution system. Also belonging to the central organisation are two other groups whose responsibilities concern the operative side of the company's logistics, one whose responsibilities are in the administrative parts, one who carried out the physical part of warehousing and shipping. The fourth group are the national sales companies – subsidiaries – who are the interface between the shipper and the customers, who also were part of the operative side of logistics in the distribution structure that was changed during the studied process.

Of the identified groups of actors, there is one that clearly has played the part that Carlsson (2000) denotes as *change leaders*, i.e. actors in charge of the change process; this is the first of the four groups discussed above. These actors have been responsible for conceiving the overall system design and charging the other actors to implement this in operations; that is the single most conspicuous pattern in the empirical material. In this sense, the studied process displays clearly the characteristics of the linear model of change. On the strategic arena there was a formation process within one group of actors that mainly was concerned with formulation, i.e. designing solutions that from

an overall perspective were deemed best for the system as a whole. The decisions were then communicated to affected actors in the operative arena – which from this overall systems perspective were the three other groups – who then were charged to implement this in operations. The actors on the strategic arena employed rational argumentation as their prime means to gain approval for the decided changes, trusting that other actors also would be able to see this rationality from the overall perspective, and thus be willing to change according to the designs. In the studied case, the designs were implemented, i.e. manifested in operations. At the time of data collection the TPL arrangement had been effective for almost four years and apart from two, all of the 13 national markets originally intended for supply by direct distribution were included. Therefore, the illustration of a change process according to a linear logic as offered by Carlsson (2000) is applicable in this case. In Figure 25 the original illustration is adapted to the studied case.

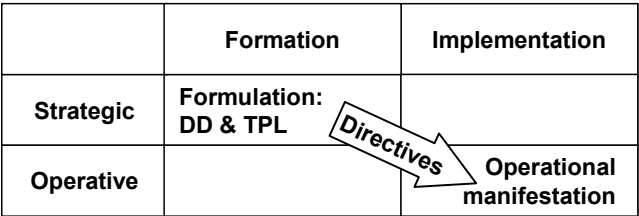


Figure 25. The linear model of change reproduces the mechanisms of change from an overall perspective.

But this illustration is from an overall systems perspective, in which the three groups of actors on the operative level are not visible by themselves. From the analysis in Chapter 7, it is also clear that other mechanisms than purely linear have been at play when looking at the process from the perspective of interaction between the change leaders and the three other groups, and also within the individual groups. Seen from this perspective, the process has not only concerned formulations followed by implementation in the overall system, i.e. it is not only the linear model of change that is visible; Figure 26 illustrates. It should be noted here that the distinction between *strategic* and *operative* here denotes the level with regard to the overall distribution system. As discussed previously there are strategic-operative distinctions within the respective groups as well, but these are not acknowledged here, since the change process is studied with the overall distribution system change as starting point.

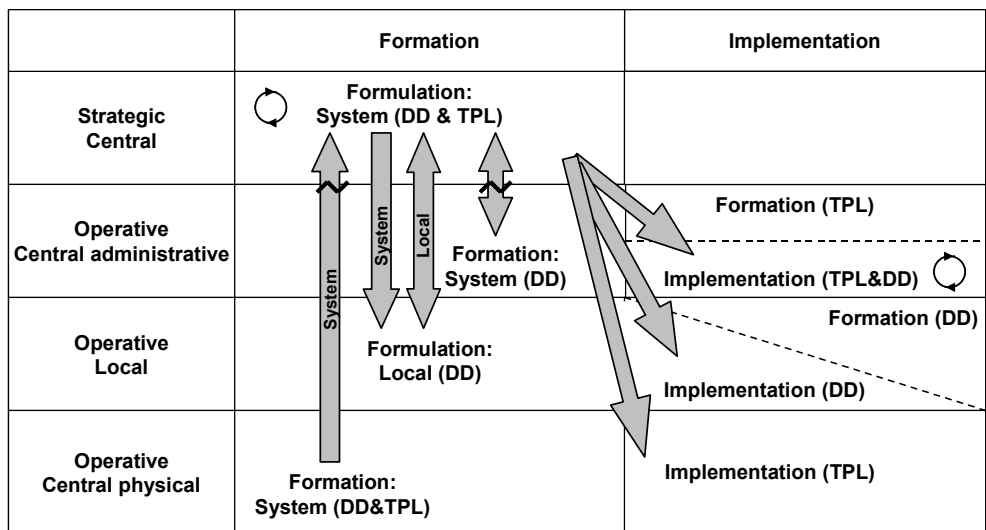


Figure 26. From a perspective of interaction between groups of actors the linear model dominates, but other models become visible as well.

The overall system design was conceived and decided on by the change leaders, this however stemmed from internal recognition that a centralisation of distribution could improve the overall distribution situation; this recognition displayed traces of the circular model. But in parallel to their internal formation, the leading group also interacted with the other three groups, within which there was also formation.

In the group responsible for the administrative parts of the overall logistics system there was internal formation in which direct distribution emerged as a desired solution; this was however a formation process that was separated from that of the leading group. But there was also some interaction, in that one actor belonging to this group initially was invited to take passive part in the strategic arena, an invitation that ended abruptly. This interruption meant that this interaction, which initially bore some marks of the processual model, turned linear; the process was now entirely in the hands of the change leaders. Later, when the overall system design was decided and centralised distribution and TPL were being implemented, this was done through issuing of directives from the change leaders to this operative group. There was however some change within this group that took place within the frames set by the overall system design, change efforts that displayed some circular characteristics.

Looking at the interaction between the change leaders and the subsidiary group, i.e. the local actors from an overall system perspective, the interaction was two-fold. Regarding the overall system design the process was linear; it was the change leaders who formulated and decided on the design. But there were also processual elements in that some local adaptation was included in the overall system, and actors belonging to

the local group had an influence over formulation of these adaptations. Within this local group, formation was not completed when implementation of the system design commenced, but gradually evolved as the designs were implemented and the effects of the changes became known.

The interaction between the change leaders and the third group – those with responsibility for the physical part of the central logistics system – was mainly linear. The local actors tried to influence the change leaders; these in turn saw that they had to cope with a group that would possibly pose tough resistance towards the change. An external event becomes decisive in this case, and after that implementation was carried out through directives. This shows the importance of external context in that this event solved the formation issue almost overnight.

Apart from this interaction regarding formation and formulation on the strategic and operative arenas, there have also been interdependencies during implementation. Looking at the operative actors belonging to the central administrative parts of the logistics system, formation regarding centralised distribution has not been problematic, but regarding TPL it was still ongoing at the time of data collection; the manager of this department found TPL a good solution, but the other actor belonging to this group was not convinced that TPL is the best option. This was in part influenced by the interdependence between implementation of direct distribution and of TPL. When a national warehouse was closed down and the customers previously supplied from this warehouse instead were supplied from the central warehouse, this also meant that distribution to these customers was transferred from in-house to the TPL provider. Since the implementation of direct distribution did not take place in one quantum leap, but gradually and market-by-market during the course of a couple of years, TPL establishment was also affected gradually. In some instances the local conditions on the market that was being implemented had a substantial effect on the TPL arrangement, e.g. when distribution to a non-EU market was centralised.

With this also the second research objective is fulfilled. It is concluded that the linear model of change (Carlsson, 2000) reproduces the mechanisms of change when looking at the process from an overall systems perspective. Other models however become visible when looking at the interaction between the involved groups of actors, and the processes within these groups. Regarding the overall system change the linear model is also from this latter perspective dominant in reproducing the mechanisms of change, but when looking at the interaction between the change leaders and the local actors, the processual model is better at describing the mechanisms of the process that leads to local adaptations within the overall design. The circular model is visible internally within some of the groups, but not in the interaction in between groups. Also these findings have implications for future research and practice; this is discussed in the following section.

important findings and implications for research and industry

By fulfilling the two research objectives derived from the overall purpose, it is possible to point at some important findings, and which implications these have for future research and for industry.

acknowledging actors

The single most important finding of this thesis is that when studying the change process of TPL establishment from an actor-oriented perspective, the linear model is not sufficient to describe all the mechanisms of the process. The studied case shows that not only purely rational analysis, argumentation and decision-making from an overall system perspective are necessary for describing the change process of establishing TPL, at least not in such a contextually dependent case as the one studied in this thesis.

The linear model of change sufficiently reproduces the mechanisms of change from an overall systems perspective in which change leaders are the only visible actors, but that the other two models also become visible when studying the interaction between change leaders and affected groups of actors. This confirms the merit of the approach upon which this research is built, which was decided on as a consequence of the literature analysis carried out in Chapter 4.

Regardless of at which level the process is studied, TPL was established and distribution was centralised in the studied case. In a sense this would imply that a linear approach to TPL establishment would be sufficient.

When comparing this finding to Carlsson's (2000) prescription that the approach to change should be adapted to the extent of change in terms of learning requirements on affected actors, some questions can be raised. One of these concerns the learning requirements as such, which are not studied in this thesis, since the content dimension is excluded. An important aspect for further research on TPL establishment will be to assess change content and the learning requirements on affected actors, and to link these to the mechanisms of the change process. If the purpose of such an endeavour is to produce normative writings, it will also have to assess the success rate of the change process. As was mentioned in the previous paragraph, success in terms of actually having established TPL is a fact in the studied case, but this is far from all dimensions of success that most likely will have to be included. The time it takes to reach an operational TPL arrangement is one such dimension, another is to which extent the parties reach their intended goals and also any secondary effects the TPL arrangement

might have on competitiveness and profitability. This is but to mention a few that are easily identifiable without having actually delved in the difficult question about what actually constitutes success.

The finding that the linear approach is not the sole visible mechanism when assessing the change process from the perspective of involved actors also has other implications. One is that in conjunction with the necessity of taking context into account in future studies, the research must also be capable of assessing change from the perspective of affected actors, and to acknowledge the mechanisms of the change process.

This finding is important also for industry practitioners undertaking TPL establishment. Although it is not possible to offer any prescriptions at this stage, it is possible to conclude that the normative writings in contemporary TPL literature are not capable of capturing all aspects of the indeed complex and time-consuming process associated with such an undertaking. Whilst the support that is given regarding decision-making and supplier selection might indeed be good – with reservation for what is written below – the support regarding how to approach the change process in the form of the “headlines” identified in Chapter 4 is not sufficient. Although these seem reasonable enough from a common sense point-of-view, a more thorough investigation into the learning requirements for involved and affected actors is necessary before going any further in producing support of more substance.

It is however possible to point out that in the studied case formation played an important part, and that fit is important to be aware that formation regarding the decision to establish TPL is not over until acceptance thereof has been reached among all important actors, and that important are not only those who are active only on the strategic arena, but also those on the operative. Not only researchers should acknowledge actors in studies of TPL establishment; change leaders should be aware that there are actors in the systems they redesign.

process context & decision context

The contextual approach adopted in this study reveals that the depiction of the TPL establishment process in the TPL literature (Skjoett-Larsen, 1995; Bagchi & Virum, 1996, 1998; Sink & Langley, 1997; Andersson & Norrman, 2002) does not give the entire picture. In the studied case it is evident that other changes, external events, &c. play such an important role that an isolated study of only the TPL establishment process would probably have rendered a different picture. This implies that future research on the TPL establishment process should be designed in a way that is able to acknowledge process context, since the process as it unfolds over time cannot, and should not, be isolated from context.

The contextual dependence of the process also ought to have implications for the decision to establish TPL. In the studied case it is clear that several changes have been carried out in parallel, not only TPL establishment in conjunction with centralisation of distribution. These changes are also effects of decisions conceived by actors on the strategic arena. Looking at Carlsson's (2000) findings, he concludes that the stability in internal context has implications for the change process. If this reasoning is applied to TPL establishment, it implies that decisions to establish TPL should be made not only on the basis of what the shipper wants to achieve by TPL, but also how it is to be implemented, and in what context. Other changes – be they separate from or linked to TPL establishment – might render conditions that have implications for the establishment process that follows the decision, and thus the formation – including formulation – leading to the decision.

Contemporary TPL literature discusses context in terms of external factors and driving forces behind the decision to establish TPL (see e.g. van Laarhoven & Sharman, 1994; Andersson, 1995). The contextual dependence identified in this thesis implies that the driving forces behind seeking a TPL arrangement are important not only for the decisions, but also for the establishment process. Posted against the finding above, this has implications for both research and industry; the latter is discussed in the section above.

For research, this finding implies that not only background factors when the decision is made come into play, but also the future establishment process. This raises the question of whether the theoretical foundations adopted in contemporary literature that is decision-focused (see Chapter 4 for a discussion about this) are sufficient. Perhaps a process-acknowledging approach will be necessary to go further in prescriptive writings regarding TPL decision-making.

Another implication is that the findings in this thesis ought to be relevant not only for researchers and industrial practitioners interested in TPL establishment, but also in distribution restructuring, since the studied case display several of the characteristics of the cases discussed in e.g. Abrahamsson & Brege (1995), in which it is concluded that *“The change processes have been of a clear top-down character... Many companies fail in the implementation phase, often due to internal resistance, which hasn't been overcome. Resistance has come primarily from sales companies, which is natural since both responsibilities for certain tasks and working capital is moved from the sales company to the distribution centre”* (p. 163, translation from Swedish). The body of literature dealing with structural change is – apart from a limited number of publications – however not studied in this thesis, why it is not possible to state more than that the findings in this thesis *might* be interesting. Given the close interaction between the establishment of TL and direct distribution in the studied case, it would

perhaps be valuable to include also this body of literature in future studies of similar character.

Another important finding is that implementation is not necessarily over after the initial transition of responsibility for operations from the shipper to the provider. The studied case clearly shows that the implementation aspect of TPL establishment has been an ongoing activity; this is a direct consequence of the context in which TPL was established, i.e. the implementation of centralised distribution.

concluding remarks

In the literature analysis that was conducted in Chapter 4, it was concluded that the literature in which the TPL establishment process is dealt with contained prescriptions regarding process that were founded in theory and research designs concerned with decisions. This conclusion is the starting point of this thesis, and to take a first step towards filling the gap, a theoretical foundation and a research design adapted to process studies are adopted in this thesis.

		Decision	Process
How	Theoretical foundation & research design		Meta-model of process Models of change Actor-oriented approach
What	Conclusions & prescriptions		TPL establishment is context dependent Not only rational mechanisms Actors important, not only systems Process important, not only decision

Figure 27. The how and what of this thesis.

In Figure 27, the original illustration given in the concluding section of Chapter 4 is used to illustrate the first attempt to fill the “process gap”. The decision-making as such is not focused in this thesis, nor is the purpose to produce any normative writings; therefore parts of the original figure are not applicable.

The main constituents of *how* of this thesis are the meta-model of process, which has guided the research, the models of change derived from the adopted theory of change, which also guided the choice of an actor-oriented perspective. With this foundation, it has been possible to conclude that TPL establishment is context dependent, and that not only rational mechanisms guide the actions, activities and events that constitute the change process. It is also concluded that not only the system undergoing change is important, but also the actors therein. Together, these conclusions give that not only

the systems designs and decisions are important, but also the process through which these are conceived, accepted, and implemented.

Going back to the cyclic nature of process research, as discussed by Pettigrew (1997), the conclusions in this thesis are based on an analytical chronology of one focal case. It is thus a first step on a longer journey at the end of which it will hopefully be possible to issue sound prescriptions regarding how the parties involved in establishing TPL arrangements should approach the change process associated with such an undertaking.

other issues for future research

It is concluded that a research approach that is capable of acknowledging actors is necessary in any attempt to study the change process of establishing TPL. One aspect of that has in this thesis been to collect data from individuals who have been involved in or affected by the TPL establishment process in various ways. Since it was difficult prior to data collection to decide exactly which aspects of the process that would be relevant other than on a generalised level derived from applying the meta-model of process, data was collected by asking interviewees to tell their story of the process.

This unstructured approach has rendered a material that is both vast and rich, and in which details that would perhaps not have been discovered had a more structured approach been adopted, are included. In this sense the chosen approach has proven very fruitful. But it has also proven quite cumbersome, in that the process of gathering, writing, translating, editing and then reading these stories has indeed been very time-consuming. It has also taken quite some time to digest the material and to gain a sufficient knowledge of the material to commence analysis. After all, the material covers a process that has unfolded during almost a decade, and has historical roots dating even further back in time, retold from the perspectives of ten individuals.

If future research along this stream is intended to produce normative results regarding how the change process of TPL establishment should be approached in order to shorten the time it takes to reach desired service levels and costs, to mention but a few possible dimensions to success, it will perhaps be necessary to adopt a research design involving multiple cases in order to make cross-wise comparison possible. If such an approach is adopted, data collection and subsequent analysis that is more efficient and precise must be adopted. The research in this thesis will hopefully serve as a valuable basis for designing more structured future studies of the same fascinating and complex business phenomenon, TPL establishment.

a multi-faceted process

This thesis only regards the interorganisational change process within the shipper side of the shipper-supplier dyad. But a TPL arrangement is not a one-sided establishment process. The provider most likely also goes through some kind of adaptation process in order to include the new client in operations, and this has to be done in a way that not only makes sure that the client's customers – in the outbound logistics case – as quickly as possible experience the service levels that are demanded, but also that the provider's own profitability and competitiveness can be maintained and perhaps even enhanced.

There is also an interorganisational dimension to the TPL establishment process, in that there are two organisations together working to establish ways of co-operating, to accomplish mutual benefits and a lasting good working relationship.

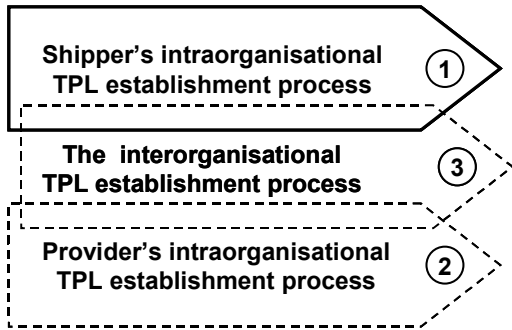


Figure 28. Three interrelated processes of TPL establishment.

In Figure 28, the three interrelated processes are illustrated schematically. Of these, this thesis has focused on the topmost one ①, which is the intraorganisational process of the shipper. For future research, a proposed path to follow is to conduct a similar study on the provider side of the dyad ②, followed by an integrative approach in which the interorganisational process is also acknowledged ③.

change content

One of the three dimensions of the meta-model of process – *Content* – is excluded from study in this thesis. In future studies of the change process of TPL establishment it will however be necessary to include also this dimension. Different actors who are affected or involved will experience different learning requirements depending on their role both in the process and in the system undergoing change; change content from the

perspective of change leaders will probably differ substantially from that of e.g. actors responsible for day-to-day order processing.

Also the interorganisational dimension of the process is important to acknowledge when discussing change content. Since it lies at the heart of the TPL concept that actors on the one side of the dyad leave or take over responsibilities from or to actors on the other side, there is a knowledge transfer dimension to this issue. This might call for adopting a theoretical base apart from that which is adopted in this thesis. The change theory applied so far concerns intraorganisational change processes, but when studying the interorganisational process over both sides of the dyad, theory capable of acknowledging the interaction across organisational borders must be adopted.

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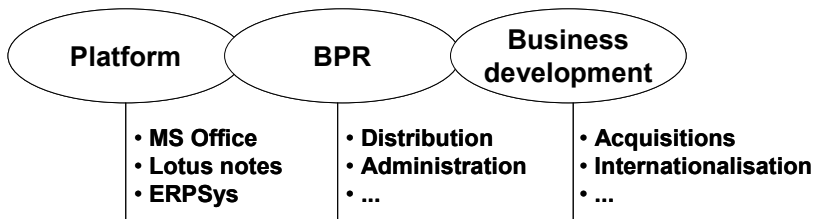
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STORIES

Story 0 Notes from introduction meeting

In 1995, several top managers leave their positions. A new CEO is appointed. He launches an IT driven operations strategy for the company. The strategy is concerned with three major areas, which were to be undertaken consecutively. *Operations Development Manager (ODM)* used the following figure on the whiteboard to illustrate:



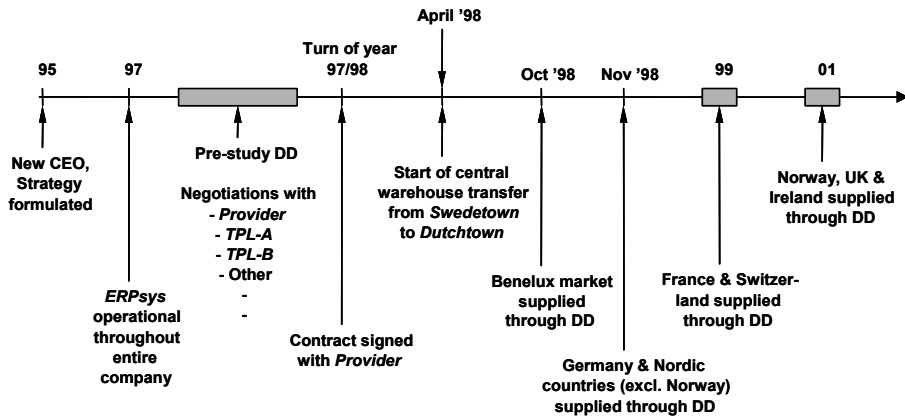
It was decided quite early that direct distribution (DD) was to be evaluated, since several persons thought that this probably would be profitable for *Shipper*. But, it was also realised that, in order to succeed with DD, timely and correct business information is vital, and implementation of the *ERP System (ERPsys)* platform became a prerequisite for transforming the distribution system.

S0:1

At the time there was also a lot of quarrelling between the national subsidiaries and the head office, caused by problems with product availability – in the entire system there could be more than enough to meet demand, but unevenly distributed, so that one national subsidiary could have excess stock, whilst a sister company in another country could suffer shortages.

It was concluded in the group that the starting point of the studied process was the new strategy, as formulated by the new CEO. This was sometime during 1995.

ODM then draw the following timeline on the whiteboard, which was the basis for the remainder of the discussion:



1995

As mentioned above, the new company strategy was formulated in 1995. In that same year, *ODM* was appointed Logistics Manager, after having held a position in quality management. He already had thought about the problems with poor business information flows between the subsidiaries and the head office, and how to work around these problems. One of his ideas was to install some new, company wide, information system, so that correct business information could be made available to all units in the company. Thus the new CEO's strategy was very much along his own line of thinking. He also thought that a centralised inventory would solve many of the availability problems that the subsidiaries suffered at the time.

1996

Screening of ERP system market to find suitable system and strategic partner for implementation & operation of system. Resulted in choosing *ERPsys* and a project for implementation. *ERP System Consultant (ERPsyscon)* was chosen as partner.

1997

ERPsys was installed 7th January 1997 in HQ, Nordic subsidiaries and the production facility in *Swedetown*. Then a rollout project started to include all subsidiaries in the *ERPsys* environment. During 1997-98 *ERPsys* was made operational throughout the entire company. The system was welcomed in most of the subsidiaries, since it was

commonly acknowledged that the lack of system support was one of the main reasons for the poor information flows. However, some of the subsidiaries objected the implementation, since they themselves had invested in new systems, which worked fine for their own purposes. No communication between units of the kind *ERP*sys would offer existed however.

A pre-study aimed at analysing the effects of a centralised distribution system (henceforth Direct Distribution, DD, *Shipper*'s own internal name) was carried out.

Sales- and inventory data was gathered from all the subsidiaries, as well as data on service levels. The measure that was commonly used in the company was *Order line completeness* (e g if 95 out of 100 order lines are delivered to the customer in full, on time, the OLC is 95%). The gathered data did not allow for a reliable measure on the service level, so assessments had to be made; it was concluded that the overall performance for all subsidiaries together was about 90%.

It was early realised that if DD was to be implemented, the central warehouse could not be located at the factory warehouse in *Swedetown*. Only 40 % of the volume was produced there, the rest was outsourced to different contract manufacturers in Europe (measured in *Cost of goods sold* outsourced volumes represent 60% of total), and that the Nordic market only account for some 20% of sales. A European warehouse site was found necessary, and it was deemed that *Shipper* neither had the competence, nor the resources to start such a facility.

S0:3

In parallel to the DD analysis, discussions started with 10 logistics service providers (e g *Provider*, *TPL-A*, *TPL-B* and others). Several of these however showed very little interest in adopting *Shipper* as their customer, since their flows were deemed too small to become profitable. Of those that were interested, *Provider* quite early stood out as the best candidate.

When the DD analysis was finished, a meeting was held with the subsidiary managers to inform them about the results, and discuss the options. Several of the managers were initially quite reluctant to accept the idea that they should let go of their own stock keeping and instead let their customers be supplied directly from a European warehouse. They doubted that it would be possible to maintain the delivery service required by the customers (on some markets, customers demand to be able to place their order late one afternoon and have the goods delivered the following morning) if stock was not held locally.

By presenting facts about the sales and inventory data that was gathered from the different subsidiaries, the head office representatives, however, managed to demonstrate that in a centralised structure. It would be possible to keep a sufficient stock to meet demand peaks in all countries with as little as 60 % of the average stock

level the subsidiaries hold in total in the present structure for low volume articles, and 80% for high volume articles. Guarantees were also given that next day deliveries would be possible throughout the continent.

An agreement was eventually reached that stock-keeping should be centralised, with the exception that the subsidiaries were allowed to keep small emergency warehouses of their own. The stocks in these were only to be used when delivery from the central warehouse would not fulfil the customer's needs. It was also agreed that the stocks should be minimal in terms of both assortment and number of items per article number. This compromise, along with the convincing analysis offered by the head office representatives, eventually led to acceptance of the new distribution structure.

By the end of the year a contract was signed with *Provider*, and planning began for starting up operations in their facility in *Dutchtown*, the Netherlands.

1998

The first step was to move the existing central warehouse from *Swedetown* to *Dutchtown*. The transfer finalised in the beginning of April and took two weeks, during which no deliveries to the subsidiaries were possible. To compensate for this so that no unnecessary shortages occurred, the subsidiaries were urged in advance of the transfer to build up stock.

When the transfer was completed and the *Dutchtown* facility was up and running, it was time to start shifting the subsidiaries into the DD system. The first subsidiary to enter the system was the Benelux subsidiary, this happened in October.

One month earlier, in September, *Shipper* announced the acquisition of *Competitor*, a major American competitor. This acquisition was part of the third phase (Business development) of the strategy formulated in 1995. Thus the third phase of the strategy started earlier than was originally intended, when a lot of work still remained before the second phase was completed.

The acquisition of *Competitor* led the DD *Project Leader (PL)* to resign and leave the company; the added complexity of integrating the new assortment in the system - in parallel with phasing in the subsidiaries - would be too much. Another project leader was appointed for DD and *Project Manager (PM)* was appointed as the new project manager for logistic integration of *Competitor*.

In November, Germany and the Nordic countries (except Norway) were also brought into the DD-system.

Shipper experienced some unexpected trouble when *Provider* started to ship goods to countries outside of the EU. It turned out that their experience in producing and handling the necessary documentation for export was insufficient, much to *Shipper*'s surprise. There had been no discussions about these issues before implementation started, since *Shipper* expected a TPLP of *Provider*'s kind to be familiar with all such issues. It also turned out that the Dutch customs office is a whole lot more bureaucratic and demanding than its Swedish counterpart, so *Shipper* was also taken quite off guard.

Initially the service level was quite low; *Transport performance* was about 88%. Transport costs also exceeded expectations, mainly due to poor preparation work on behalf of *Provider* – what first seemed to be feasible transport alternatives turned out to be too slow for some markets, which forced *Provider* to choose a more expensive option. This in turn increased *Shipper*'s costs, since the contract is written in such a fashion that *Provider* does not have to cover for any excess cost.

By the end of 1998, the service level had improved to an OLC of 94%.

1999

Due to the unexpectedly high transport costs, and the problems associated with export from the EU, consensus was that it was better to fix the problems at hand before involving more subsidiaries in the DD-system. Some subsidiaries also increased their service offerings to customers (order cut-off time, delivery time etc.), which in part changed the circumstances so that direct distribution was no longer the best alternative for these markets (at least not without exceeding cost limits). Together, these factors led to a slower rollout of the system than originally intended.

During 1999, France and Switzerland are integrated into the DD-system.

2000

No countries introduced in DD.

2001

During 2001, Norway, UK and Ireland are integrated into the DD-system.

The service level is now up at some 99%, measured in OLC. Transport performance depending on service alternative and country varies from 80-97%. The major part of the transports has a success rate around 95%.

2002

The contract with *Provider* ends mid-year. *Shipper* is analysing the options and preparing for re-negotiations. The options are either a renewed contract with *Provider* or bringing operations back in-house.

Story 1 Operations Development Manager

Introduction

I started my position at *Shipper* in 1993, as a quality engineer. My background then was in the automotive industry, where quality awareness was very good. I was intent on starting to work with quality improvement at *Shipper*. I was “deeply religious”, and I had read all the texts about the Japanese wonder and so. But *Shipper* turned out to be quite different than the automotive industry. Here, quality didn’t stem from a client/customer perspective. Rather it was demands and regulations from authorities that set the rules.

I worked with quality issues for some years, and managed to affect the quality awareness within *Shipper*. A TQM-initiative was started and the company received ISO9000-certification in 1995.

Working with quality issues was exciting, but I lacked a real responsibility for business processes. I knew about the large inventories within *Shipper*’s distribution and I felt that something ought to be done about it. I knew from the quality world that large inventories serve only as protection against bad processes. I also felt a desire to work with business process development to - among other things - increase the inventory turnover rate.

S1:1

Shift to logistics

I was extremely lucky, because this is exactly what I got to do.

It is sometimes hard to separate my own strategies from those of top management, since I got the responsibility to do exactly what I had thought about myself. Of course, sometimes I influenced management, but in some instances they had already made up their mind about what to do. Sometimes it is difficult to see who came up with the idea in the first place.

In 1995, I started a new position as logistics manager. At that time, logistics was a low-prioritised area in the company. The company had a great overweight on R&D. We fought from an inferior position.

At the time being, the group had as many information systems as there were subsidiaries. I received reports on sales, forecasts and inventory levels once every

quarter from each subsidiary, for about 1/8 of the total assortment. Headquarters also retained information on inventory levels.

It was an untenable situation. Once every quarter I had to sit there and juggle with some twenty-odd Excel spreadsheets and try to puzzle together the information, to try to see how we were doing logistically.

So I started to demand information from the subsidiaries more often, once a month. I specified which information was needed: stock levels, sales data etc. It was up to each subsidiary to decide exactly how to dig out the information from their respective information system, as long as they sent in the required data.

It was quite early clear that lack of correct information made it very hard to run the business. There were huge problems with backorders, when one subsidiary could have stock that would last for months, another could suffer from backorders.

“Critical mass”

The subsidiary managers were in general very annoyed with HQ’s poor performance.

S1:2

At the time, we had subsidiary manager meetings twice a year. At one such meeting, I challenged the subsidiary managers by showing them that in the total distribution system, there was more than enough stock to meet the total demand, but that some subsidiaries held too much and others got too little. This was the starting point for the entire logistics improvement process at *Shipper*.

I confronted them and asked “Why are you holding five months of stock, when your neighbour suffers from backorders?”. They soon realised that product supply not only is a matter of manufacturing and purchasing, but that it also requires a large amount of co-ordination and co-operation.

During the period when backorders was a big problem, logistics was always an issue on the agenda of subsidiary manager meetings. Already during the first meeting, some awareness awoke among them, some realised that they also were part of the problem, that backorders weren’t entirely HQ’s fault.

I explained that increasing inventory levels and producing more and faster wouldn’t solve the problem. It was also an issue about asking oneself how to structure the business, and how to work. It won’t do as a subsidiary to only protect one’s own market. At the time being, the backorder lists distributed by HQ were interpreted more

as a recommendation for purchase orders, than – as intended – a recommendation to take it easy and hold back orders for a while.

That was the situation: very little information, big problems with product supply and no organisation to handle the problems. We were at a starting point, both organisationally and system-wise.

New management & strategy

In 1994 we had a large management shift. We were profitable, but on a dangerous path. The old management believed the company had a perfect product portfolio and could offer the customer a well-functioning system, and that documenting and informing and educating customers were the most important tasks.

The new management team instead insisted that product development was essential, but realised that it would be difficult to work with many new product launches in such a poor-performing distribution system, with such bad quality of business information.

So in 1994/95 a clear strategy process started, which built on a number of fundamentals. One of these was rapid new product development. Of total sales volume, the target was that 30% should come from products newer than three years. This actually culminated in 2000, when 60% of sales came from such products. Another fundament was to increase customer service levels. Operations were charged with the task to free up capital, to cover R&D and marketing expenditure.

From these fundamentals, detailed plans were drafted.

Implementing ERP System

We soon realised that a common business information system throughout the company was essential. In my role as the company's logistics manager, this meant that one of the most important cornerstones was laid.

We screened the ERP-system market in 1995, and in the beginning of 1996 we initiated a project. By May that year, we had chosen *ERP System (ERPsys)*, and decided that *ERP System Consultant (ERPsyscon)* should do the installation. Then the project carried on with process mapping, in order to lay the grounds for system implementation.

Between August 1996 and January 1997, *ERPsys* was installed at HQ, at manufacturing in *Swedetown* and at the Nordic subsidiaries. It was a large installation,

we had opted for modules in Sales & Distribution, Material Management, Production Planning, Quality Management and Finance & Controlling.

Initially, the plan was to follow up the *ERPsys* installation with a roll-out of direct distribution (DD) shortly after the system was installed. We had to revise this plan however, as the heavy workload during installations, and some initial problems with *ERPsys*, consumed all the resources that would have been needed for DD start-up.

In May 1997, the German subsidiary implemented *ERPsys*, and thereafter the rest of the European subsidiaries followed.

The implementation of *ERPsys* was in general accepted among the subsidiaries. Well, some of the subsidiaries did say “our systems are working fine, we don’t need a new system”, but it was never a question about choosing. We ran this project quite firmly, there were never any discussions about whether or not a subsidiary should implement *ERPsys*. But, we learned from this episode, and we used this knowledge later on when we rolled out direct distribution. We ran a dedicated project for each *ERPsys*-implementation, so there was a small project organisation for each subsidiary.

Each project lasted about three months. The project team went through the business processes of the subsidiary and matched these against *ERPsys*. If the subsidiary required any modifications of the system, they had to write a formal change request and submit this to the responsible manager. For the logistics modules of the system this was myself, for the financial modules it was the finance manager.

We rolled out the system, we didn’t just force it upon them and say “here’s a training package, go!” We made a project out of it and I think this made them respect the implementation, and that they gained some approval for the change.

There were many system change requests since the subsidiaries wanted to tailor the system according to their business processes, but we very rarely accepted them. The way in which they had worked before was the way in which they wanted to continue working. This required some “mild convincing”. In some instances we agreed to make local adjustments to the system, but we strove towards keeping the system intact.

This was, in some sense, a pre-phase of direct distribution. The fact that each subsidiary had been involved in *ERPsys*-projects laid the grounds for the DD project; when DD was rolled out, it was basically the same people that were involved as for the *ERPsys* projects.

Pre-study for European direct distribution

In 1997, when *ERPsys* was implemented in most of the European subsidiaries, we initiated a pre-study for direct distribution. We hired the consultants *Logicon* for this study, although I and my colleagues at HQ were convinced that direct distribution would be the right path even before the pre-study.

I believed strongly in the theories about direct distribution. I had read a lot about it, and I think that I perhaps believed in it a bit too strongly. Now, in retrospect, when I have followed it through, I realise that there were more pitfalls along the way than what I first expected.

We needed the consultants' help to have valid, external proof of the motives for closing down the warehouse in *Swedetown*. Of course, we realised that *Swedetown* isn't the logistical centre of Europe, and with the demands for short lead-times that our customers have, direct distribution from *Swedetown* was never an alternative. Also, I believe that the turnover from having been a factory warehouse shipping weekly replenishment orders, to shipping some 6-700 deliveries a day isn't an easy task.

Logicon's task was mainly to gather facts, a task they fulfilled very well. We wanted them to prepare an analysis that supported closing-down the *Swedetown* warehouse.

S1:5

TPL necessary for implementing DD

The decision to implement direct distribution was taken quite early, and also that, based on centre-of-gravity analyses of in- and out-going material flows, a suitable warehouse location would be somewhere in the Netherlands.

Based on this analysis, we sent out a request for proposals to a number of third-party logistics companies. The RFP was quite detailed in terms of the services we required, and we also stated that we wanted to shift fixed costs into variable – this was one of our main objectives for seeking an outsourcing solution. We wanted to benefit from the fact that a large service provider with many clients could balance uneven demand among them. *Logistics Consultant (LC)* helped us to evaluate the proposals.

Start of the DD project

Parallel to the supplier evaluation phase of this project, we started the DD project. I was formally appointed project leader, but in practice it was *Project leader (PL)* who ran the project. Due to the extensive impact the project would have on the organisation, we deemed it necessary to have a well-known name formally at the top of the project, and *PL* had only worked with us for some 1½ years. But *PL* did a tremendous job, and my role quite soon shifted more towards that of a coach.

The composition of the steering group reflected the areas of the organisation that would be affected by the distribution restructuring. HR as there would be personnel reductions; Sales as the subsidiaries structure would be affected; Finance due to the large amount of money involved, both in the project itself, as well as in the financial impact of the changes; Operations since there would be significant changes in the processes.

Sales company involvement

S1:6

We carried out the pre-study in parallel with discussions in a reference group, consisting of nearly all the subsidiary managers. The purpose of these discussions was mainly to “get them aboard the train”. During the first few meetings, subsidiary managers were in general reluctant to let go of their own stocks, but the HQ representatives succeeded quite well in convincing the subsidiaries that direct distribution would work out fine.

Some arguments were raised against direct distribution, for instance that the subsidiaries needed the flexibility local stock keeping offered. Some subsidiaries, in the major cities in Europe, offered their customers express deliveries by motorcycle or taxi and said that this was a very important service, that couldn't be removed.

This argument led to an initial compromise, we agreed to allow the subsidiaries to keep small emergency stocks of one day's consumption of certain articles. This compromise was very important for “selling in” the direct distribution concept.

Later on, we scrapped the compromise, however, since the subsidiary managers then preferred to get rid of their stocks completely. “No half measures”, they said. Today, those subsidiaries that are supplied through DD hold no stocks of their own, everything is delivered from the central warehouse directly to the end-customer.

We put a lot of effort into convincing the subsidiary managers that a centralised warehouse would offer better product availability and lower costs. We used real examples of sales data and stock levels to illustrate the difference between today's situation and what would happen if we centralised stock keeping.

At one meeting, we used sales data from the different markets to illustrate that sales patterns differed. Then, we asked each subsidiary manager in turn to state how much they would require in stock to be able to meet their demand peaks. The answers were generally the same amount as their peak monthly demand. Then, we aggregated demand for the whole European market and applied the same reasoning with regard to stock keeping, stock levels were set equal to the aggregated demand peak. The results showed that in a centralised structure some 40% of the sum of stocks in the decentralised structure would be sufficient to meet all demand peaks and, in fact, increase the overall service level.

This was probably a quite traditional “sell-in” of centralised stock keeping. We showed, by using data for products they all were familiar with, that the numbers would change. It was real data, it was exactly a real situation.

Another important part of the “sell-in” was analysing how much time and money the subsidiaries spent on purchasing and inventory management, and how much this would cost in a centralised structure. Our results showed that total costs also would decrease, by some 10-12 MSEK group-wide. It was very hard for the subsidiary managers to oppose such savings for the company.

S1:7

The savings however didn't turn out to be as big as we first expected, rather they stayed at some 8-10 MSEK, mainly due to some miscalculations. For instance, the initial plan was to mostly use postal services for transportation, but for some markets this turned out to not be a feasible alternative, if we should meet the demanded service levels.

We spent a lot of time on selling in the project, partly through having such a heavyweight steering group as we had, partly through inviting the subsidiary managers into the process early, before the decisions were made. Quite simply, they were involved in the decision-making.

The subsidiary manager for France and Spain also helped out. He had earlier been employed by another multinational Swedish company, and had gone through a similar process of centralising distribution, and had seen how well it worked out there. I think he played an important role. It is always worth a whole lot more if someone “internal”, someone from subsidiary ranks, says “this is good”, than if it comes from someone external, so to speak, someone from HQ. The subsidiaries stuck together as a group. If problems occurred, it was always HQ that was to blame, not any other subsidiary.

Alteration of DD scope

Some subsidiaries, I believe it was Italy and Spain, showed proof that DD wouldn't be the best alternative. They showed us that, by calculating the costs for maintaining the required service levels, costs would increase. This was quite what we had suspected, we had a gut feeling that implementing DD in for instance Spain would be a lot more difficult than in many other European countries.

The situation in Spain was mainly due to the extremely high service levels that the subsidiary offered their customers. The customers could order as late as 18:00, and get deliveries no later than 9:30 the next morning, without paying anything extra for this service. If Spain would have changed its service offerings to for instance those of France, with a cut-off at four p.m. and 24 hours delivery time, DD would have been profitable for Spain too.

This is how far DD implementation has come today for Italy and Spain. The intention is to attempt to gradually change the service requirements on these markets, so perhaps also these markets will be supplied directly sometime in the future. We have charged the subsidiaries to work with their service offerings, but very little has happened so far.

S1:8

For most of the European markets, service has improved due to DD. Such services as motorcycle deliveries have of course been eliminated, but the improvements in product availability outweigh that by far.

Third party logistics

We sent a request for proposals to some ten third-party logistics companies. Of these, quite a few weren't interested in bidding since they thought our volumes were too small for us to become a profitable customer. After this initial screening five candidates remained, of which we selected three for further analysis. These were *TPL-A*, *TPL-B* and *Provider*.

We visited the proposed facilities of these three and quite soon we decided to work with *Provider*. So, why did we choose *Provider*? Everything worked fine with them from the beginning. They had a very professional attitude, and answered our questions in just the way we wanted them to, costs were quoted in the format we requested.

We ruled out the *TPL-A* alternative since their proposal was based on a facility in which they already had a very large number of clients. We felt that we would be too

small to be prioritised in such a setting. We didn't want to go into that mess with our stuff.

TPL-B were also quite professional, but they gave us a quotation based on fixed costs, which wasn't in line with what we had requested, and they wouldn't accept switching to variable costs.

We evaluated some qualitative criteria, too. Among these, language was one issue. *TPL-B* proposed a facility located in France, but when we went to see this facility, we began to suspect future communication difficulties. The salespeople involved could of course speak English quite fluently, but the operative personnel had a really hard time understanding us and expressing themselves in English. It felt slightly suspicious, we thought "what will happen when the salespeople disappear after the deal is closed, and we are to make the operations work? How are we supposed to communicate with warehouse personnel who know no English at all?".

Provider's offer was also slightly better cost-wise. But that wasn't the determining factor.

It was myself, *Vice President Operations (VPO)*, and *LC* who evaluated the three prospective suppliers. *PL* also helped out, mainly as back-office support with cost-analysis and such.

So, in October 1997 we chose *Provider* and signed a letter of intent. We then started with deeper analysis work before the contract was drafted. Several *Provider* employees, both operative and administrative personnel, visited our *Swedetown* warehouse for some weeks, to learn about products and processes, and gather statistics on our flows. We intended to, as far as possible, write the contract on the basis of facts rather than assumptions regarding volumes, frequencies and order sizes.

By the turn of the year we signed the contract. Prices for the services *Provider* provided were included in the contract from the beginning, and these have remained largely unchanged during the entire contract period.

As we made our analyses, we found out about a company that was planning to move their warehouse to *Swedetown*. They were also planning to implement *ERP*sys, so they actually were in need of warehouse employees who were familiar with that system.

We established contact with the company and reached an agreement that all our warehouse employees should be offered job interviews at this new company. We also agreed to pay for part of the training expenses for those who eventually were employed by this company. About 25 people were affected by our outsourcing, some

of these got new jobs in our production and almost all of the rest of them went to the new company.

Two of our people, the warehouse manager and another person, went down to the *Provider* warehouse to help out during start-up. Their task was to help *Provider*'s personnel and to be our "fire-fighters". The original plan was that they should stay there for six months, but as things turned out they stayed almost a year.

The other fellow didn't actually work in our warehouse, he belonged to production, but since he is of Dutch origin and speaks Dutch fluently, he was a very valuable resource. Having our people on-site was very important for us to get things up-and-running.

As soon as we had decided to close the warehouse in *Swedetown*, we held an information meeting with all the personnel there, in November 1997. This was very important, we wanted to avoid having rumours rather than facts spreading. We also informed all subsidiaries as they also had employees that would be affected by the implementation of DD. In fact, this was how we launched the DD project in the group, by informing about our deal with *Provider*.

As things turned out, DD wasn't implemented as shortly after turning over operations to *Provider* as was first intended, due to some problems that occurred. We informed about the outsourcing deal in November 1997, but the first subsidiary warehouse wasn't closed until October 1998. However, some subsidiary employees chose to quit their jobs since they realised they would become redundant in a near future. This forced the subsidiaries to hire some temporary staff to cover the workforce loss.

S1:10

Implementation of TPL

The first phase of the implementation was to physically and operationally move the warehouse to *Dutchtown*. Initially, *Dutchtown* should assume the same function as the *Swedetown* warehouse, that is, shipping replenishment orders to the subsidiaries. *PL* was in charge of the warehouse move.

There were four parties involved in this phase: *Provider*'s operative staff in *Dutchtown*, *Provider* management in Brussels, *ERPsyscon* and ourselves. Together we made a very comprehensive plan for the new warehouse. We used data on sales volumes, order frequencies, physical properties of the products, etc, and designed the warehouse to efficiently support in- and outbound flows, and at the same time we should have a high utilisation of investments.

We installed a new module in *ERPsys*, for warehouse management. We hadn't found that module necessary before, but now we saw that our product launch strategy made it necessary to have efficient warehouse management support. We saw that new products were launched more frequently, and that sales volumes and order frequencies of products changed more rapidly than before. All this made it necessary to have an efficient system support for relocating goods in the warehouse. In the old warehouse, we had fixed bins for all products, but we realised that that would be too inefficient in the new warehouse.

The *ERPsyscon* consultants were responsible for registering each article in the new warehouse management module of *ERPsys*, so that when the products arrived physically at *Dutchtown*, placement lists could be printed out from the system. Placement of an individual product was decided through optimisation based on sales data and physical properties.

Provider was responsible for designing, building and investing in equipment in the warehouse. They decided on the number of bins, physical dimensions of shelves and other equipment, allocation of zones etc. This was good, fun work. It was really exciting to be in the middle of all that competence on warehouse design and IT-system opportunities.

These preparations were very time-consuming. We had to gather a lot of very detailed data about the product assortment that previously hadn't been needed, for instance we physically measured and weighed each article.

S1:11

Moving the warehouse

So, our main task between contract signing and physical move of the warehouse was planning the move and designing the new warehouse. A lot of our people were involved in this phase, even people who weren't involved in the project otherwise. There were people from HQ who went to *Swedetown* to help out with packing the goods.

We packed the stuff in boxes, and for each box we documented the contents in detail. These lists were sent to HQ so that the people here could enter the information into *ERPsys*. In this way, the warehouse was moved "IT-wise", and we could print out placement documents upon arrival in *Dutchtown*.

The physical move took about one week, and it wasn't until 3 o'clock in the morning before we should go live that the warehouse was set up and everything was in place. I went to *Dutchtown* myself for two days, to help out with unpacking and so. I ran around, dressed in suit and all, and helped solve problems, unpack crates, carry products to the right shelves, counted and checked.

Start of operations

The morning after the move was finished we started operations. In the beginning it was rather simple. As we hadn't launched DD yet, the warehouse still worked only with supplying replenishment orders to the subsidiaries. Systemwise everything worked quite smoothly from start, all documents came out of the printers as planned, order picking went fine, etc.

The warehouse staff mostly uses our *ERPsys* for information handling. Sales orders registered in this system by our subsidiaries generate picking lists, which the warehouse staff prints. When an order is picked, packed and shipped, a delivery acknowledgement is registered in the system. They use their own system for transport management, however, so they transfer information daily between the two systems with floppy disks.

Working in a customer's system was new to them, previous customers have been handled through *Provider's* own systems. They hadn't worked with *ERPsys* before, but as they saw that more and more of their customers implemented that system, they were keen on getting to know it. If we hadn't chosen *ERPsys*, I think they had been more reluctant to work in our system instead of their own.

S1:12

What turned out to be a problem quite early was export shipments, especially regarding customs. This was an issue that had been totally neglected in negotiations and planning. I think *Provider* had taken for granted that we held certain documents that customs required for exports, and we thought that, since *Provider* never asked for any such documents, they wouldn't be necessary. After all, when exporting from Sweden, Customs never asked for any such documents. Dutch Customs, however, required certain supplier declaration documents, documents that contained proof of origin of the goods.

Our relationship with Swedish Customs had been based on trust. They made regular routine check-ups of our documentation and since everything always was in order, they never required any documentation with our day-to-day shipments.

Now, suddenly, Dutch Customs required documentation of supplier and country of origin for each and every product being exported. It took us quite some time to get hold of all these documents, since some of our products were quite old by now and some were even purchased so long ago that the supplier no longer was in business.

This was our first major disappointment. *Provider* should have known that such documents were required and they ought to have informed us about it. They should have done more research into export issues, and they should have asked us.

In the beginning operations ran smoothly, but then again, *Provider's* task at the time wasn't all that difficult – handling of replenishment orders from subsidiaries isn't as complicated as handling direct distribution orders. From April to October there were only subsidiary replenishment orders to handle, and that made things easy.

In October, we rolled out DD on the first subsidiary. Our original plan was to start rolling out DD directly after operations in *Dutchtown* were running, and to ship the first direct deliveries in August, but because of the problems with export documentation, we had to delay the start.

Another reason for this delay was that we experienced back-order problems again. We had encouraged subsidiaries to stockpile before the warehouse move, in case something should go wrong. So when *Dutchtown* was up and running we had a situation with a lot of stock in the system, but at the wrong places. It took a lot of effort to redirect goods and bring the system to balance.

Preparing for direct distribution

When we started to analyse the planned distribution structure in detail, some new issues emerged. For instance, distribution to our Swedish customers turned out to be a problem. According to our original plan we should use postal services for transportation, but as things turned out it wouldn't be possible to fulfil the delivery times we had promised. We had to switch to *Carrier's* parcel services instead, which led to higher costs than we had first planned for. This was especially sensitive, as the Nordic subsidiary had grown used to low transportation costs when we had the warehouse in *Swedetown*.

They had a somewhat special position in the company, as their own warehouse was in the same building as the old central warehouse, and one can almost say that they had direct distribution of their own. This subsidiary was also the strongest opponent of DD, many harsh words were uttered during our discussions.

Later on, we found out that *Provider* actually had played a little trick, so to speak. As they were responsible for buying all transportation services, they also took care of the invoices from *Carrier*. We never saw the original invoice, so we never saw the actual transportation costs. *Provider* used this situation, and took some of the costs for shipments to Sweden and put them on the invoices for shipments to Germany, in order to seemingly reduce the cost increases for Sweden. Later on, we rewrote the deal so that we paid the actual invoice amount plus a management fee to *Provider*, this was how we found out about their little trick.

It was an easy way for *Provider* to make life a little easier, and in a way this was perhaps a good way to move on. Maybe we hadn't been able to go on if we would have been charged the actual costs from the beginning. We might just have come to a halt there, but we didn't, so I guess it was kind of smart.

We initiated a dedicated project for each subsidiary. We made very detailed investigations, we gathered sales volume data, we charted their business processes, etc. In each such project the DD-team from HQ participated, as did the person responsible for the *ERPsys*-module that handles sales orders.

For all those things we couldn't handle with the new central warehouse, we told the subsidiaries to quit doing it, or find other ways to supply that service or product. Consequently, there were many products that were eliminated. We said "we won't do that, you'll have to find another way". Of course, a certain process was necessary to pull this through, so to speak. We simply had to run it in the form of a project.

We also analysed the service demands of every subsidiary. Some of them wanted to be able to offer their customers several service alternatives; 24 hours, 48 hours, low-cost transports etc. We also analysed the customer portfolio of each subsidiary to find out what service levels the subsidiaries really would be able to offer. We compared the geographical location of each customer to the delivery times *Carrier* promised for each location.

We had to inform certain customers that they no longer would enjoy a 24 hour service, instead they would have 48 hour deliveries since they happened to be located in an odd place. The subsidiaries were of course involved in communicating with their customers about these changes, some of them handled this very well whilst others didn't.

This was very important, it was important that the subsidiaries understood what was about to happen so that they could inform their customers that after a certain date they would be supplied directly from a central warehouse. It was also important that the subsidiaries informed their customers about new working procedures, how to order, how to handle returns and so on.

The subsidiary was still the interface between *Shipper* and the customer. All customer communication went through the subsidiary. Invoices came from the subsidiary and goods came from *Provider*, but in the case of a return the goods should be shipped to the subsidiary. Spreading this information among the subsidiaries worked out well in some instances, in others not.

During this phase of the DD project we had a lot of discussions with the subsidiaries regarding service levels and pricing. As the project evolved and they got to know how

service levels for different customers would be affected, they started to ask for more and more different service options.

It was a bit tough at times. When we left the drawing board, so to speak, when the subsidiaries got to know the exact prices and the exact delivery terms for each customer, they asked us “can’t you arrange some other service?”, “do we have to use *Carrier*, can’t we use some other transport provider?”.

The original plan was to offer only one, maybe two, delivery services, postal or 24 hour deliveries. Suddenly an array of different alternatives was requested: guaranteed deliveries at 9:30, 10:30 or 12:00, deliveries on Saturdays, night-time deliveries etc. A lot of demands were raised and of course pricing had to be competitive at the same time.

This occurred in conjunction with discussions about getting rid of all the local special products, and things got a bit messy at times. We found out along the way that the subsidiaries had a lot of local articles in their assortment; books, information brochures, posters and videocassettes. They had to decide whether or not to continue supplying these themselves or to get rid of them; it wasn’t possible to bring all these local assortments into the central warehouse. Our recommendation was that they got rid of the special items.

We told them “you have enough stuff in the original assortment, you don’t have to supplement it with your own stuff”. The original plan was to centralise everything, but when we saw the amount of local articles that were offered to customers, we had to let them keep some of it locally. But as I said, these weren’t real products, it was “software”.

This was essentially a problem-solving phase and in most instances it worked out fine.

There was some resistance towards the new distribution system as a whole. For instance our Belgian subsidiary refused to completely get rid of its own local stock, they demanded that they would be allowed to keep a local emergency stock. They did a lot of over-the-counter sales, customers were used to walking in to the office and socialising with the salespeople, and the subsidiary people didn’t want to change this. Eventually we agreed to keep the arrangement for six months, but under the condition that during this period they had to prepare their customers for direct distribution. When the six months had passed, we closed down the local warehouse.

Of course different issues emerged along the way. But we had a very strong steering group, and we could turn to them from time to time to settle things. We asked “should we do this or not, should we offer this extra service?”. And mostly the reply was “No, let’s keep it straight and simple. Let’s get things done!”.

Success?

When it comes to the success rate, it is hard to separate one thing from the other. We have grown substantially along the way, for instance we bought *Competitor*. We had a plan originally to cut down on staff, from four to two, in our distribution department, since their workload should diminish as *Provider* took responsibility for some of their work. This didn't happen, but it is hard to point at the exact reason. Partly it is because *Provider* didn't meet our expectations, since they didn't take the responsibility they should regarding exports handling, and partly because our volumes have increased through the acquisition of *Competitor*.

So staff reduction goals haven't been met at HQ, the number of employees are the same as they were when the project started. On the other hand we would perhaps have had even more people here if we hadn't started the project, so relatively speaking we have reduced headcount.

We did however meet the headcount reduction targets among the subsidiaries. A lot of employees were transferred to new positions instead of being laid off, but not without close examination of whether it was actually necessary. We had very strict rules for how subsidiaries had to motivate keeping any local warehouse employee. The subsidiary had to send a special request for each individual, which was to be cleared by HQ.

There are very specific goals for *Provider*'s performance in the contract, and we also had our own specific goals for cost savings, customer service and inventory turnover.

Customer service has improved dramatically, especially in terms of product availability, which nowadays is extremely good. Cost reduction has also come a long way, but we haven't really been able to meet the original target. Of the expected savings of 12 million SEK, we have reached 8, roughly. Even if this doesn't fully meet original expectations, we are still pleased with the savings.

There was a lot of work, a lot of effort together with *Provider* to reach the performance targets. Thanks to our system, *ERP*sys, we have been very closely integrated, at times perhaps too integrated. Sometimes it would perhaps have been nice to be more commercially oriented in the relationship, to say "deliver or leave", so to speak.

We have had to participate quite a lot in their processes to make things work as intended. Partly because we own the system, but they haven't really assumed any responsibility for the system. After all, they are the ones who use it the most, they are an organisation of some 30 people.

They haven't really managed to build up a competency around the system, so we have had to intervene and help out a lot. This has shown in their performance records, at times they have had too much problems regarding shipping errors and such.

The key to making things work was our close co-operation, we worked a lot together. The first year we had two of our people on-site, and I myself, as well as *PL*, worked a lot together with *Provider*. We had a management structure, so to speak, with monthly management meetings and quarterly executive management meetings, where we discussed monthly and quarterly performance, discussed ongoing activities and so on.

We have monitored performance very closely. I believe that it is imperative for making things work, working so closely together. If we had just backed away and raised demands we probably hadn't been as successful. We wanted to reach our twelve million savings and we wanted a certain performance. We didn't want to lose this, so we worked very hard to make things work. I myself have thrown in a lot of time, as did the *ERPsys* team; they have had to put in a lot of effort to make *Provider's* processes work, an area where *Provider* themselves, in my opinion, at times should have assumed a greater responsibility.

Provider's role in development

S1:17

Provider took active part in specifying how they wanted to shape the system, especially regarding the parts they themselves were to operate, for instance regarding warehouse layout, picking strategies, item localisation and picking list specification. We experienced that *Provider* gave a lot of support on these parts of the system, especially during start-up.

After start-up, however, we have experienced that *Provider* hasn't been equally supportive. They haven't raised many demands and haven't come up with any real improvement suggestions. *Provider* has mainly played an active role in developing its own operations.

Provider has however also assumed a certain responsibility for other processes. They have for instance taken over transportation from some of our suppliers, so instead of having the supplier arranging the transport, we arrange it under *Provider's* contracts. This has led to some savings. It was *Provider* who approached us with this suggestion.

Another major improvement in which *Provider* took active part was reception control, an activity that is very important because of the safety- and quality demands on our products. It is very important that no defective products are shipped to customers, since that might lead to extensive recalls of entire product lines. Such a situation might

become very delicate. On the market we compete, suffering too many recalls might harm an actor's reputation so badly that it might severely affect its competitive position.

So reception control was actually a very delicate process to hand over. But when it came to that, *Provider* really exceeded our expectations. They helped us rationalise it, they helped us structure the problems in such a way that we could deal with them together with our suppliers.

When we started our operations in *Swedetown* there were seven people, I believe, handling reception control; today two *Provider*-employees do the same job in the Netherlands. We have of course also done some changes, some products have been eliminated and we have lowered inspection intervals from, say, one hundred to five. As you see, a lot of other things have happened too, but *Provider* was very good at what they did, we got to work with highly competent people on this. It didn't depend so much on *Provider* having good routines to handle this, it depended mostly on that they sent in skilled people.

We do have a gain-sharing clause included in the contract: any rationalisation gains within the partnership are shared fifty-fifty.

S1:18

Provider has had no direct contact with our suppliers, but we have at times involved *Provider* in discussions, for instance regarding reception control. Regarding those parts, we have worked with *Provider* as were they our own people. Otherwise they haven't been much involved. We haven't brought them along to our suppliers to assist with any logistics knowledge.

For instance, we have never considered that they should purchase products on our behalf, we still control our own inventory. Of course, that could have been an option, we could have outsourced that too. All inventory control is done through *ERPs* anyway, so we believe it would have been too much to let them handle that as well. You don't have to hold physical stock to know your inventory levels, since you can handle that through the computer. We felt that they couldn't do that any better than we could ourselves. It would also have been harder to gain acceptance among our sales people, I mean, imagine having a backorder because of a mistake on *Provider's* behalf...

The relationship

In general, we are pleased with the relationship with *Provider*. For starters, we have very good working relations. We have focused much more on results than on

contracts. We haven't been waving the contract and saying "it say's here that you should have done this and that, and you haven't".

In some instances we should have, perhaps. It took years before we reached some of the things stated in the contract, since we focused other issues. My primary focus was to get things working, and to maintain costs of course. There were however certain targets in the contract that we didn't reach. We didn't press them and they didn't bring up those issues.

But it was mutual, I didn't put any pressure on them to save money and start quarrelling about who should pay for what, instead we focused on results, and to make things work. I believe that was the right thing to do. Of course, at times one will be criticised internally for being too gentle, but if you want something to work out, this is the way to do it. I believe I was right to approach things that way from the beginning.

Later on, we have gradually brought in more of a customer-supplier-type relationship, and we have become colder, so to speak. We have pointed at certain issues and said "do it, and do it now". But that took some time, it took us three years before we started doing that, before that we worked closer together.

But the relationship has had its ups and downs. There has been a couple of difficult periods when we have been dissatisfied. Much of this depends on organisational changes within *Provider*. Due to various circumstances, *Provider* reorganised their *Dutchtown* operations a while after start-up. The new organisation didn't match the qualities of the former, and the relationship deteriorated for some time. It all culminated during a half-year period when performance was really bad, which led us to raise demands, *Provider* had to do something. After some pressure, they decided to reorganise again and since then the situation has improved.

Provider has also had serious trouble keeping their operative staff. The Dutch economy has been quite strong, which has made it hard for them to compete for labour, so staff turnover has been quite high. In the last years things have however improved.

So, in general it's been good. But, if we were to ask ourselves "is it good enough for us to go on with outsourcing?" the answer would be "I don't know".

When we did this, I was convinced that it wasn't our core business to deal with warehousing and such, others could do it better. Sure, I've seen that *Provider* has a warehousing knowledge that we don't within the group, for instance it was natural for them to specify which performance metrics to use in the warehouse and so, what you would need to make things work - knowledge that would have taken us quite some time to build.

But in other areas they haven't met our expectations at all, for instance regarding export handling, or IT. They aren't IT-driven, they aren't driven by information. Nowadays logistics isn't only about getting a certain number of items out from a warehouse, load them on a truck and make sure they reach the customer. The customer also wants to know whether or not the stuff will arrive and if it won't, they want the opportunity to react accordingly. Today there are systems that handle this, it is possible to build links between enterprise systems and transporters' information systems so that one can receive warning if something goes wrong along the way. But we don't have anything of the kind. We have very little information attached to our shipments today.

I had expected more from *Provider* on this point. I had expected that we would have had more discussions about gain-sharing, in the form of rationalisation in the warehouse, for instance that they should have pushed for issues such as bar-coding a lot more. It's been sluggish, I mean, they have a rather large European organisation so I think they should have more capacity to run such projects. Then again, what do I know, perhaps its because they have so much day-to-day problems to take care of.

But they ought to have time for such work. They should have approached us and said "hey, we have looked into bar-coding, we have looked into the costs. If we invest this much, we could lower order-picking costs with so-and-so much. Let's share that fifty-fifty". But they haven't.

We have at times brought up certain ideas and suggestions for projects, without response.

Renegotiations

Now renegotiations are coming up as the first contract is coming to an end. To prepare for these, we have interviewed the subsidiaries about the DD system and *Provider's* performance. Most of the responses are very positive, the service levels and *Provider's* performance are mostly rated very good. Of course, there have been some ups and downs. Let me give you an example:

Some time after we had implemented DD in Germany, sales on that market were going bad. The subsidiary people blamed this on poor logistics due to DD, and argued that the local warehouse should be re-established. We held a meeting with all the regional sales representatives in Germany and some of us from HQ. They explained to us that they believed problems with back-orders etc were due to the DD system.

It turned out, however, that they had misunderstood how responsibilities were divided between *Provider*, HQ and themselves; it wasn't clear for them who were responsible for what. Somewhere along time, there had been an information lapse in the German subsidiary. The manager quit during implementation and was replaced by a person from the Canadian subsidiary, who had no knowledge at all about the DD project. The former manager had probably neglected to inform his successor and others in his organisation, since he was already set for a new position outside of the company. The subsidiary people simply had a lot of expectations on *Provider*, which were never part of their job to fulfil in the first place.

So we charged them with the task to conduct a customer study to find out the real reasons behind the drop in sales, and it turned out that poor delivery service wasn't at all the reason. Instead, there were complaints among customers about poor information about the new distribution system. That ended the discussions to resurrect the German warehouse.

Provider took a number of large investments based on assumptions about volumes, order patterns etc. It doesn't help you much to know only that you are to ship, say, 450.000 lines a year. If they all occur between 14:00 and 17:00 in the day, your costs might turn out a lot higher than what you first expected. Their analyses built on a number of assumptions and I think they included some kind of safety level. I believe that there is some slack in their calculations and that's what we'll negotiate about.

S1:21

If we can have good negotiations, and go through all costs thoroughly, I think we'll probably reach the conclusion that it is obvious that we should continue, that it wouldn't be worth the effort to bring it back in-house again. But at the time being, I can see that they are making good money and that we could perhaps save some by bringing things back home.

Why, then, outsource in the first place only to bring it back home? It would seem a little stupid, wouldn't it? Many use outsourcing as an instrument to bring about structural change, they believe sell-in is easier if they can say to their own people "we can't handle this internally, other companies can do this better than us".

But I didn't have such motives. On the contrary, I was truly convinced that we should outsource because they could do it better. I really believed that and I still doubt that we could do it better ourselves. But I have gradually realised that we are dealing with a lot of money here, and they are after all looking for a profit. They have to be so much more efficient than us so that they can offer us a lower cost and still make a profit of their own. I doubt that warehousing involves so much value-add that it really is possible to be all that much more efficient.

Story 2 Project Leader

Background

For me it all started when I wrote my degree thesis at the institute of technology and worked with a quality management project within *Shipper. Operations Development Manager (ODM)* was the quality manager at that time, and he hired me when I had finished my thesis.

ODM then transferred to a new position as logistics manager, and I said that I wanted to join him. I thought logistics seemed exciting and I had also taken some courses in the subject. I knew that things had started to happen regarding logistics in the company, that we were about to look into direct distribution, and I wanted to work with that.

When the project started, it was *ODM* who was formally appointed project leader and I was the assistant, or operative, project leader. When I joined the project, some work had already been done. The consultants had already finished their report and it was already decided that we should go for direct distribution, but it wasn't decided yet to do this with the help of TPL. One of the alternatives we looked into was running direct distribution from *Swedetown*.

S2:1

But we had sent out the request for proposals to potential suppliers. I believe also that the first screening was already done, so only *Provider* and *TPL-B* remained. At this time it was *ODM, Vice President Operations (VPO)*, and myself who worked the most with the project. So it was already decided that we should outsource the distribution when I joined the project.

Starting the project

We were then in a very delicate situation, as the plant manager in *Swedetown* wasn't at all convinced that outsourcing and moving to central Europe would be the best alternative. We had to take them seriously, and thus *Swedetown* was also one of the alternatives we evaluated. However, I felt quite early that *Swedetown* wasn't a feasible alternative, but I realised that we had to take them seriously, or else we wouldn't be able to move on. If the resistance would become too strong there, it would have been very hard to carry on. But I can understand them as well, I mean, *Swedetown* is a small town and the manager wanted to try to save the jobs.

He was very thorough and he examined all our analyses in close detail. I didn't experience that they were opposing the project, rather they wanted to critically examine everything. At this time it was only the management at the *Swedetown* plant who knew about the outsourcing decision. Of course, all the employees knew that logistics had been an issue for quite some time, but they didn't know that we had decided to outsource.

The background for the decision was that we had had some serious problems with logistics for some time. When our products began to gain acceptance on the market, the company was driven by a group of enthusiasts who were intent on growing in Sweden first. When the company expanded internationally, it was basically one of these guys who packed a suitcase of products, went abroad and started a subsidiary. There existed no organisation to back them up, they had to build everything by themselves, and they had to create their own logistics, and so on.

This of course worked fine in the beginning, but eventually they had ended up with the classical problems; large inventories and poor customer service. The common view within the company was in fact that one should build large inventories. I've seen one of the earliest vision statements from that time, in which it was written "we should hold large inventories in order to ensure good customer service". So the common idea was that customer service is built on large inventories.

S2:2

So, that was the view on logistics, every subsidiary built up their own inventory. But it didn't work, so the analyses we made were intended to convince not only management in *Swedetown*, but also the subsidiary managers, who had a very strong position in the company. We had to show that the back-order problems didn't depend on a shortage of products within the group, rather that products were at the wrong locations. As you see, it was a classical logistics problem. That's why we wanted to switch to direct distribution, we wanted to gather all the products in one place and then distribute them to where they were needed.

It's no surprise that we ended up in this situation; it was quite natural. I guess that easily happens when one builds up a company from scratch, with a group of real enthusiasts pushing development, and the products are focal. All the other stuff, such as logistics, becomes set aside, its not important during start-up.

So another important issue was to find arguments to use with the subsidiaries, to be able to show them what they could gain from direct distribution. Since the organisation had been built in the way it had, people having left the country and started up new operations abroad, it was very much "their baby". I guess they saw this as a threat, that we wanted to take away something that was theirs. I think they felt that they were losing control.

So, in parallel to negotiating with *Provider* we developed examples to show the subsidiaries. We took large volume products from our standard assortment, products

they all were familiar with, and showed that we would be able to maintain a good service level with lower inventories if we gathered all products in one spot. We showed that, since sales varied over time on different markets, maintaining a high service level with local stock would require quite large inventories, but that on the whole, sales in Europe didn't vary as much over time. This was a schoolbook example, the results were exactly what we had expected.

I think this was very important, that we showed concrete examples. We showed them that this wasn't something we had only read in a book, it was applicable to our situation too.

We also had a reference group with which we discussed things before the decisions were made. The group consisted of the managers of our three most important subsidiaries. It was *Shipper's* top management who had chosen them. We knew that these three subsidiaries had a very strong position politically, so to speak, so it was very important to get them on board. The reference group was involved in evaluating the options, and without their support I think we hadn't been able to pull this through.

We carried out some quite advanced analyses. Of course we evaluated the bids economically, but we also tried to assess what the suppliers would be able to handle, if they would manage to fulfil all their promises. We also made some more qualitative assessments of what we would be able to gain from each alternative.

This was rather an extensive work. We also had to do a lot of thinking about which criteria were really important. For instance, the facility that *TPL-B* proposed was located in France, which we felt was a little in the outskirts of Europe. We were also afraid of strikes and so, I mean, they do have a lot more of that in France than in for instance the Netherlands. We tried to bring up all such issues; how far away was the airport, how was their sales process, and so on. In the *TPL-B* case it was quite obvious that the salesperson would leave us as soon as the contract was signed, we felt that the shift from negotiations to operations would be quite abrupt.

In *Provider's* case it was different. We got to meet both their salespeople and those who worked with operations, the people who would be running our operations later on. Things also turned out as we had expected, the turnover of operations went quite smoothly. This was very important, as we discussed so many different issues. I think it would have been difficult if the people we spoke to first, just suddenly disappeared and we had to talk to new people when it was time to hand over operations. You know, the operative people might have said "hey, I didn't promise that, it was the salespeople who did, and you know how they are, they always promise a lot of things".

Unexpected events

Choosing *Provider* felt right, but there were of course some problems anyway, I guess that's inevitable. It turned out they had made some mistakes regarding transportation, they had counted on a postal alternative that simply didn't exist. There had been some kind of misunderstanding in the internal communication at *Provider*. This was however not discovered until after we had signed the contract, which messed things up a bit for us, as our calculations were no longer correct. The *Provider* alternative was still better than *TPL-B* cost-wise, but we wouldn't save as much as we had first expected.

Fortunately we discovered this before we had started informing all our subsidiaries about the deal. But in *Swedetown* they reacted to this mistake, and started arguing about whether or not we would actually save any money on this. Luckily we had worked a lot also with the more qualitative aspects, we hadn't only focused on costs, so we could still argue that we were doing this to prepare the company for the future. *Shipper* was intent on growing and we worked a lot to spread the message that we were doing this to be prepared for that. We said "let's do something about it now, before the problems grow completely out of control".

Thanks to this, it didn't turn out to be such a big problem when we discovered that costs would be higher, but of course we were disappointed with *Provider*. We started worrying whether any other mistakes would turn up later on. But in retrospect I see that things worked out tremendously well, although there was a lot of hard work.

We were also very lucky. One of the most difficult issues we had to handle was how to maintain a high working morale among our staff up until the move to *Dutchtown*. I mean, you can't just inform your staff one day and move the entire warehouse the next, and expect everything to just keep on functioning as if nothing had happened. Just as we were about to inform the organisation about the deal with *Provider*, the manager at the *Swedetown* plant came into contact with a company that was about to establish a warehouse in *Swedetown*. He managed to work out an agreement that all our warehouse personnel would be offered new jobs at this company.

This made things a whole lot easier for us, and everybody made a tremendous job thanks to this. Operations went very well for the remainder of the time our own warehouse was operational. For instance, our warehouse manager was a very important information link to *Provider*, he was the only one who could help us with all those little details that are impossible for us at HQ to know anything about. *Provider's* people were treated very well when they came to *Swedetown* to prepare for the transfer, and the warehouse manager and another employee also went down to *Dutchtown* to help out during start-up. And when we packed all our goods, everybody was very helpful, we had a lot of people working overtime, and there were even people from production who helped out with this work. It was fantastic.

But if we hadn't been able to arrange new jobs for everybody, it would have been a lot more difficult; after all we're talking about some thirty people here. *Swedetown* is a small town, and it's really hard to find a new job there.

The timing was incredible. We had just started thinking about how to handle layoffs when we received notice about this new company, right in the middle of our evaluation of the alternatives and the analyses of direct distribution. We noticed that, when this turned up, it was decisive for management in *Swedetown*, and they weren't at all as critical anymore. Of course, we had carried on anyway, but it would have been a totally different situation.

We invested some money in the transition. We paid for part of their training at the new company and I think this was well-invested money. It doesn't feel right to lay off people in a place where you know it's really hard to find a new job. It would have been different if it had been in Stockholm or Gothenburg, there you can always find a new job. We knew there had been several large closures in *Swedetown*, so it was very good that we could offer this solution.

If we hadn't been able to offer new jobs, I think things would have been a lot more difficult, we'd had to work a lot harder to settle things for our warehouse staff, but there would have been other consequences as well. At that time we had all our in-house production in *Swedetown* as well, and I think large layoffs would have harmed the company's reputation in *Swedetown*. But thanks to the new jobs there was a positive atmosphere surrounding the closure and the moving of the warehouse.

I think this was an essential part of making these changes happen, and if you get the chance, do try to speak to some of the people that still work for us in *Swedetown*, and ask them how they experienced all of this. I think everything worked very well, and it would probably be very interesting for you to listen to their views as well.

Tour around Europe

While we were preparing the warehouse move we also visited all the subsidiaries to gather information and to inform about Direct Distribution (DD). We tried to map how they worked in the subsidiaries, because none of us really knew anything about that, we knew nothing about all their special solutions.

When we did these visits everyone already knew that we had decided to move the warehouse. We didn't exactly meet any excitement; on the contrary, all were quite worried about letting go of their stuff. Some sales companies contacted the group's

marketing manager about their misgivings, but the management group had talked things over quite thoroughly so he could handle that well.

Their worries considered issues that we in the logistics group sometimes could not find as troublesome as the subsidiary representatives found them. They could ask things like “if I am going to visit a customer and want to bring some demonstration products along, am I not allowed to do that in the future?”. Those kinds of issues were however quite easily resolved, we could just reply “of course you can, just order some stuff and keep them at the office”.

We worked fifty percent with information gathering, fifty percent with informing, convincing and discussing their fears. Every little subsidiary had their own fears of the future, and they all raised their own arguments against the changes. Some of the subsidiaries had relatively well functioning systems in place and their questions were on a different level, but some of the smaller companies raised questions that were quite surprising.

For instance, we were asked how they should handle those customers who wanted to do business under the counter so to speak. Our obvious reply was that we don’t do business that way. But it turned out that all these special solutions were minor exceptions, they didn’t really account for any large volumes. It was just that some time along the way, a customer had requested some kind of special solution and after that they had just kept on doing it. We had to spend a lot of time on it though, on small issues that weren’t really in focus.

The Dutch subsidiary was the one that was most enthusiastic about this whole thing, since they would have the central warehouse only a couple of miles away. The manager there was glad for getting rid of all the problems of warehousing. So we used them as our example, *Provider* got to visit this subsidiary. It was so easy, with the language, culture and their positive attitude and all.

When we went on our tour of the subsidiaries, I and *ODM* made the first few visits together, but then I made them on my own. Mostly I met the person who was responsible for logistics at the subsidiary, and some times also the one who worked with the physical handling at the local warehouse. It was very different from place to place; at one subsidiary I met only one person, at another it could be the entire staff, depending on how they were organised and how interested they were in these issues.

The most important task during these issues was to gather facts about what delivery alternatives they offered customers in the old structure. Most subsidiaries offered several alternatives regarding delivery time and cost, and it was important for us to try to find sensible alternatives in the new structure.

We also investigated how they handled customer orders and looked at the entire process from customer contact to shipping. Since the subsidiaries are rather small, they had only some five or six employees at the offices, and then of course a sales force in the field. It was sufficient to speak to one person who mostly knew the most about how things were done at their company.

Some of the information we obtained during these visits was however already known to us, as we had based our evaluation of potential suppliers on it. It was the consultants who had gathered that information.

It was also very important to find out about any specialities at the subsidiaries, if they used to ship some special items with the goods and so. It was for instance quite common that they enclosed some kind of information material with their shipments. But they all had their own solutions for it.

When I went on this tour, it was already decided that we would go ahead and implement direct distribution. Of course I realised that it would never work out in some places, but I actually never got stuck in any discussions about whether or not it should be implemented at any particular company.

It was good fun travelling around and doing all these investigations, although every such meeting became a discharge. There weren't exactly many places where they were cheerful about letting go of their stuff, they found comfort in having the products close by. Most often, the warehouse was simply a room in the sales office, and I think they found it comforting to be able to walk in there and touch the stuff. It probably felt weird to see them turn into mere numbers on the computer screen.

Of course, everybody wanted to get rid of the problems we had with back-orders, which is why it was so important that we discussed the new solution thoroughly. Still many didn't want to let go of their products, it was quite a few of them who said "I'm good at making sure I get the stuff I need, why should I let go of them so that someone else can have them?" Others said "These specific products that usually are so hard to get I'll never let go of, now that I've finally managed to get some".

Old problem, new solution

The back-order problems had been around for quite some time and people were aware of them in all instances. But we never asked the subsidiaries for suggestions how to

solve them, and when I joined the project it was already decided that we should go for direct distribution.

When I made my trips I noticed that the subsidiary people had quite an old-fashioned way of looking at logistics. They seemed to think that if we just allowed them to build up some more stock they would get rid of their problems. They never said that explicitly, but it was quite clear from many of the responses we got and the statements they made.

It was my job to make them realise that it doesn't work like that, but that we rather had too large inventories. I mean, we had heaps of stuff, and it was very rare that we at any time didn't have any given product somewhere, but the problem was that they were at the wrong place. 99 per cent of all back-orders were caused by products being somewhere else than where they were needed.

We discovered that some subsidiaries cooperated by sending stuff in between them, as a way of handling these problems. It happened that HQ tried something similar at some occasions. If something was missing at one place they tried to convince a subsidiary to send products back to *Swedetown* so that it could be shipped to the company who needed it, but that never worked out. Everybody held on tight to the products once they had got them.

S2:8

A major part of my work with the subsidiaries was concerned with informing them, answering questions over and over again, and going through basic logistical principles, to explain how they work. We had a lot of old conceptions to fight, to explain why the connection between large inventories and good customer service no longer looked the way they believed. We had to move beyond this, we had to reach a new way of thinking, and we spent a lot of time on it.

A difficult period for the shipping department

Unfortunately the company wasn't doing too well while we were working on this. It had been quite profitable, but now we had entered a period that wasn't all that good, we weren't growing at the same pace and we earned less money. All this mounted to an enormous pressure on the marketing side, that was hard pressed to lower costs and sell more. Everything within the company was questioned at the time and there was a very strict focus on cost, cost, cost.

This led to quite an awkward situation concerning logistics. If something went wrong, if there were back-orders for a certain product, all of a sudden everybody was meddling in the issue, and it was discussed at all levels of the company. It was hard for

a lot of people to get any peace and quiet to do their work properly. The distribution department, for instance, had a very hard time. The mood had been quite bad there before, and it didn't exactly improve during this period. It happened that I myself got involved in single, small issues, as did both *ODM* and *VPO*.

People had a hard time handling any setbacks, and in the middle of it all came this change. I think they felt threatened, thinking "where are we to go, what will happen to our department, what will be our responsibility in all these new ways of doing things?". For them, this change was really tough and we had to spend a lot of time to get them along, since they were really important for day-to-day business. I think they felt that others made a mess and they had to take care of it. And that was true, at least sometimes. It happened that decisions were made at higher levels of the organisation which led to major consequences in the operational work. I believe they felt that others caused them a lot of trouble but that they never received any credit.

We tried to get them involved in the project, we wanted them to help out in evaluation tenders from potential suppliers. We went to ask them things if we wanted to know something, but we didn't invite them to project meetings. The logistics organisation was quite new, and there had been none within the company before. Then all of a sudden an entire group of people turns up: it was *ODM* – who was logistics manager at the time – myself, and a few more. Suddenly there was this new logistics organisation that worked in totally new ways, and of course that was a tough change for some. But they were really good at the operative stuff, all the little practical details I knew nothing about, I mean, I had only read about those things when I was at the university. All those things they knew, everything.

S2:9

Working with authorities

I realise that it all sounds so simple now that I'm talking about it in hindsight, but it wasn't. I mean, when you read about it in the books you believe that third-party logistics, direct distribution, and all that is quite common. But obviously it isn't common or standardised enough for organisations and authorities to know what it's all about, and that forced us to fight our way forward through this. That's one of those issues in which our distribution people helped out a great deal, as it concerned a lot of practical details of which *ODM* and I had no knowledge. It was quite natural that distribution took care of those parts.

The problems we had with customs were a heavy load to pull through for us, as *Provider* didn't manage to solve the problems. But we were a bit hardened I think, and the experiences we had from the *ERP System (ERPsys)*-project helped us in this project. When we implemented *ERPsys*, we had the consultants do a lot of work, and

in this project we let *Provider* do a lot. But we had learned that we couldn't just ask somebody else to do something and then let go of it entirely, we knew we had to stay involved and follow things through, all the way down to the little details. Of course, that's not how you want things to be, but that's how things have to be done.

Different perspectives

One area I think is neglected in literature is the actual warehouse move. If we had relied entirely on *Provider*, things wouldn't have turned out well. We had planned the move in great detail, and if *ODM* and some of the *ERPsyscon* consultants hadn't been down there to help unpack the goods and place them in the new warehouse, we would have been delayed by a couple of days. A few days more or less might not seem to matter all that much, but it does, it was extremely important that we could start delivering straight away. But since we had some of our people down there working really hard, *Provider*'s people also put in a little extra effort.

I think we viewed things differently. From our perspective it would have been our customers that would suffer if we hadn't got the warehouse operational in time, but that's not how they saw things, for them we were the customers. This issue about who is the customer is quite important. When we had our warehouse in *Swedetown*, the warehouse and we shared the customer, but now things are different. *Provider* is such a large organisation that we just become a very small part, and if they have to prioritise it's not at all certain that it will be us they help. But we are the ones who have to take the discussions with our customers if that happens. One has to be aware of that if one decides to outsource logistics to a third party, and one has to work with them all the time, to remind them that you have customers out there that will suffer if they don't do their job properly.

I see some parallels with the *ERPsys*-project. For the *ERPsyscon* consultants, it was the system as such that was the point, and for *Provider* it's logistics that is the point. But that's not it is, for us it isn't. Even if their brochures tell something different, it's so obvious that their focus is to make the warehouse as such to work, it's almost as if they want the warehouse to function in a little world of its own. But that's missing the point, the warehouse exists only because we need it to ship products to our customers. But we have to stay on them and remind them of that constantly. What was our tool for achieving a certain goal, was their goal.

Starting up DD

The original plan was kept more or less intact along the way, we didn't change it much. We did change the order in which we rolled out DD on the subsidiaries. We wanted to start with those where we thought we had a better chance to succeed, where

we had the most to gain from DD. Another thing we changed along the way was how freight documentation was designed. We collected freight bills and such from the subsidiaries and made sure we could print documents that were correct for each market. This was made possible thanks to that we had implemented *ERP*s earlier; that was in fact a prerequisite for pulling this entire thing off in the first place.

But the basics of the design were not altered. In the end it turned out that they weren't all that interested in handling and material flows. After all, they are sales people, the subsidiaries had perhaps one person who worked part-time in their warehouse, that's it. What they find important is the "final touch", how the products look when they arrive at customers, and this was also the part where the subsidiaries had the most influence.

But there weren't any really odd things that turned up along the way. After all, this isn't all that complicated. It is easy to believe that "we are special, our products are unique and we have to make all these special arrangements", but that's not the case. Our products are rather small, light and rather expensive, but otherwise they have no special features. We could see that *Provider* worked with similar products of other clients.

The problems that occurred had nothing to do with warehouse operations. Of course, there were some picking errors in the beginning but that wasn't too bad. It was rather in distribution that we encountered some problems. In the Netherlands things worked out fine, but it didn't when we shipped things to other European countries. But I don't think *Provider* is to blame for that, rather it was the carriers, I think they think their systems are better than they actually are. I don't think they lie on purpose, I simply think they know too little about their own systems.

We monitored their performance closely, and we were on to them for everything. Of course, it wasn't fun experiencing these problems, but as it turned out things hadn't been all that good before either, when the subsidiaries handled transportation themselves.

Another major change, which was quite surprising, was quality control. Back when the warehouse was in *Swedetown*, seven people worked with quality control, but a couple of months after we had moved it to *Dutchtown*, *Provider* had only one person doing that job. And we didn't experience more problems with defective goods being shipped to customers, on the contrary.

But this was a special situation. There had been some attempts to rationalise this part of the operations in *Swedetown*, but these had always failed. The attitude up there had always been that "this is the only way we can do this, we can't change anything". *Provider*'s people were quite surprised that we had so many people doing this work.

Their experience told them that such operations required quite small resources, so they figured our stuff must really be something special. They arranged for having three full-time quality inspectors from start, but quite soon realised that these would have very little work to do. Quite quickly they set up efficient procedures for the paperwork and so on, and could reduce the staffing to one person.

As soon as the warehouse had been moved, our plan was to start implementing DD. *Provider* pushed strongly for this, as pricing was based on shipped order lines. Since we started off with shipping replenishment orders to subsidiaries, they obviously shipped quite few lines, and I guess they were losing a lot of money in the beginning. We tried to start DD quickly, at least in the Netherlands for starters.

Moving the central warehouse was, after all, quite easy, but moving the local warehouses to *Dutchtown* was different, once we started with direct distribution. The subsidiaries had very little control over their inventories and we had to do a lot of work sorting out what products they held, what to ship to *Dutchtown* and what to throw away. There was a lot of old stuff there that would have caused *Provider* some trouble if we hadn't sorted it out first. I think our old warehouse manager came down from *Swedetown* to help out with this at the Dutch subsidiary. When we were done with implementing DD in the Netherlands I quit and left the company.

S2:12

It was one thing moving the warehouse physically, another was doing it in the information system. The move from *Swedetown* to *Dutchtown* wasn't all that complicated. One of our people from the shipping department went there to help out with some configurations and so, but there were really no big issues, the new warehouse was supposed to function as the old one. Moving the local warehouses was more difficult.

If we hadn't implemented *ERPsys*, or another similar system, this would never have worked, we could never have implemented direct distribution. We simply didn't have enough control over our products before *ERPsys*.

Implementing DD in the Netherlands went quite well, which I think mostly was due to the manager there being very enthusiastic and engaged in everything surrounding the project. When we implemented *ERPsys*, he took active part, and so he did when we started with DD.

When telling you about this now, it seems that it all went so easily. It did, actually, we did pull it through, but there were of course a lot of small issues that emerged along the way.

Our original plan was to implement DD quite rapidly in the subsidiaries, but we had to revise that plan, we realised that we couldn't move forward as quickly as planned. With the exception of the Netherlands, where they saw an advantage of getting the

central warehouse so close by, none of the subsidiaries actually pushed the project forward. Nothing really happened if we didn't push things, they did absolutely nothing on their own. We needed a lot of support from management.

We also experienced that things didn't work quite as well as *Provider* had said it would, so we wanted to take things slow. *Provider* pushed for speeding up implementation of DD, they wanted to start earning money, but we tried to take things easy and go about things one market after the other. A lot of things turn up along the way that needed taking care of, we had to do a lot of "hands on" work. I mean, our job was to lead this project on a more general level, I for instance had to help chasing people at the distribution companies. That's the way it is, its inevitable.

We realised quite early that we needed to make DD work on one market before we went ahead on another one. We thought that would be the best marketing we could have, I mean, if one subsidiary says "this works fine, our customers are really satisfied", then that's worth a thousand times more than if ten of our people from HQ would say it. It was important for us to have a good example to point at, and we got such an example with the Dutch subsidiary. After that, I don't know how quickly they could continue with the others, since I quit.

Story 3 Project Manager

Acquisition of Competitor

In 1998 we acquired *Competitor* and it was my job to integrate their distribution with ours. What I did was basically visiting distributors and close down their warehouses, both physically and systemwise; I was out there and helped them pack the goods before it was sent to *Dutchtown*, and I also worked to integrate *Competitor* into *ERP*sys. There was a lot of data that had to be transferred to our system. There were distributors in just about every country in Europe that were affected, and this was more or less their entire assortment; there were price lists, price strategies, customer databases and so on that had to be transferred to *ERP*sys.

In parallel we built up an inventory of *Competitor*-products in *Dutchtown*. But things got delayed when we took over the distributor stocks, and we never really knew in which condition we would get the goods. We had some really tough negotiations with some of the distributors; they delayed things so that they could hang on to their stock. Eventually we chose to build up inventory directly from the American factory, so that we could meet the demand during the time we were closing down their warehouses. *Competitor* had a decentralised structure in Europe when we bought them; they sent goods from the American factory to distributors in the European countries. Unfortunately, *Competitor* hadn't really kept track of their goods, so we had to do a lot of batch tracing and such. The distributors are independent resellers, and when we bought *Competitor*, some of them had to close down their operations, and some had to find a completely new brand to sell. The assortment that was marketed by *Competitor* was very similar to ours; they were one of our main competitors over most of the product line.

We had to synchronise this with in which phase the DD-project was. This meant that in some instances we first had to bring in the goods to the central warehouse, only to have them shipped out to the regional warehouses that were still in operation. When we did this, we also had to take into consideration whether the regional warehouse would be closed down in a near future or not.

There was an issue of traceability, too. In some instances we experienced that the logistics staff weren't all too skilled, like in some of the countries outside Europe. Those warehouses we supply through *Dutchtown*, but we would of course prefer to supply them directly from the factory in the US. But we've chosen this solution so that we can maintain the control we want to have. That's also the reason why we've started

taking over control of regional warehouses to HQ, so that we won't have to rely on local staff.

Bringing in *Competitor's* assortment in our system didn't affect our DD-plans the least bit, which is quite astonishing. Of course, things got quite strained, there was a lot happening all at once, especially for our subsidiaries. They got both a new distribution structure and a completely new assortment to sell at the same time. But it wasn't really the same groups that were affected by all this; for instance the sales people were more affected by the assortment than the distribution structure. But customer support had to take care of a lot of it all at once. We received a lot of criticism for doing so much change at the same time, and that was also part of the reason why *Project Leader (PL)* quit; she thought it was crazy to do it all at once. But it worked out really fine.

In some instances we chose not to build up a regional inventory of *Competitor's* products, because demand for these products was really low in some countries. But I think the subsidiaries have worked around this by buying products and keeping a little stash of their own. We turn a blind eye to that, but you know, they've been really hard to get aboard the train. In general you could say that, the smaller the country, the harder it has been to get them to accept DD, because they're so close to their customers. Like in Belgium, for instance, they've been so used to giving their customers a really local service, so it's been hard to get them to accept DD.

S3:2

When we brought in *Competitor* we experienced a lot of back-orders, but very few of those were caused by the distribution; most of the problems were in production. This is actually quite astonishing; in spite of carrying out two major projects in parallel, the customer wasn't really much affected.

Finding out opinions about DD and Provider

This last month I've been working with an evaluation of *Provider* as a preparation for the upcoming renegotiation. I've carried out a survey among both our subsidiaries and people here at HQ. I've tried to find out people's opinions about DD; an overall opinion. I asked some specific questions, like if they experienced that DD has raised or lowered costs, if it has raised or lowered quality, the pros and cons of DD in their opinion, and so on. I've also asked what they think of the cooperation with *Provider* that they have. I've also asked specifically about order cut-off times, and how they would be affected if these were changed.

Most of the questions were formulated so that they had to consider a certain statement and then estimate on a scale to which extent they agree or disagree; they were also asked to give comments. I believe I managed to cover most of what is relevant, and

I've gotten a lot of detailed replies. Some of the questions i re-used from a questionnaire the distribution department had issued earlier; they wanted to know how the subsidiaries experienced the support they got from distribution.

The questionnaire was sent to the subsidiary managers, and they were asked to distribute it to people both in sales and logistics. But these people didn't have time to fill out the form, so in the end I called the managers, who in turn had spoken to their employees. It's really interesting to see the responses, because in general the logistics people are more enthusiastic about DD than the subsidiary managers themselves. I guess we logisticians see more advantages with direct distribution than what a salesman does. But despite that, the overall judgement is very positive, and when I showed the results to *VPO* he was quite surprised so this really feels good. Next week I'm meeting *ODM* and *Logistics Manager (LM)* to look through the responses in order to find out where to focus our efforts. I think this has a lot to do with information, making things clear. That goes for ourselves too; for instance regarding follow up of costs, that's something we're not that good at.

Cost was one issue to which the subsidiary managers were quite sceptical, and so am I, actually. It's been so long now since we switched to DD that we should have to run some sort of simulation in which we had warehouses everywhere, so that we could do some kind of comparison. But that would have to rely on a lot of assumptions, of course.

In my survey it came to light that *Provider* has improved enormously, especially during the last year. I can see two possible explanations to this. They have switched their management in *Dutchtown* and the new team is a lot better, but it can also have to do with that they know very well that they contract is coming to an end.

In general I can see in the survey responses that our people are quite positive towards *Provider*, what they don't really like is that it is difficult to understand the costs, they think *Provider* could do better at presenting the underlying figures. I can see in the survey that we haven't been all that focused on cost before. But most important are timely deliveries, and lead-times. Costs are ranked third most important.

When it comes to cost, the subsidiaries receive an invoice from us on which there basically is one line that says "distribution and warehousing". So it's difficult for them to understand what it really costs; like, "how much does a single shipment cost?". They also want to be able to see how well they're doing regarding delivery service. We also think that *Provider* could do a better job in developing system so that our subsidiaries could receive information, especially regarding shipments for which there are any deviations. If a certain shipment is delayed, the subsidiary wants to know if it will arrive tomorrow or the day after that, so that they in turn can inform the

customer. And linked to this, we also want to see information regarding costs, because in the end we want to be able to charge the end-customer for the costs.

After having studied these responses, I'm under the impression that *Provider* is a little slow. Especially I think they're the ones who are supposed to be the experts, not us. I can see that our people regard *Provider* as very good at what happens inside the four walls of the warehouse, but when it comes to anything outside, they're not as good. Take exports as an example. When we opened up a new market, we expected that *Provider* should prepare that market; make sure they had customs declarations and all the other documentation that is necessary, but that's being handled by *Distribution Support (DS)* now.

The other major viewpoint that has come to light through the survey has to do with transportation claims; when there's been too many products, or too few, or the wrong items shipped, etc. There's a database in which you're supposed to register claims, but all the subsidiaries complain that *Provider* rarely accepts the claim. But when I look at the statistics, I can see that they accept some 70-80% of all claims. But that's obviously not how the subsidiaries experience the situation. That's something we'll have to look into, we'll have to inform them about this in some way.

Another issue the subsidiaries have brought up regarding costs is that they have to pay for part of the transportation from the factory in *Swedetown* to the warehouse in *Dutchtown*, costs that correspond to the transportation from the factory to the local warehouse before DD was implemented; a cost that they didn't have to carry back then. This has caused complaints that transportation has become too expensive. But this is really only a transfer of money from one part of the company to another, so that's also something we'll have to inform them about. We must inform them that this is a cost that we actually had before, and that it hopefully is lower nowadays.

S3:4

Development and change in cooperation with Provider

I've experienced *Provider* as very compliant whenever we've had any requests, but they haven't really raised any suggestions of their own for how to solve problems; we've had to push them and ask if a certain solution would be possible. Much of it has dealt with their handling in *Dutchtown*. Take returns handling as an example, today we have returns on some 8-10% of all goods that's shipped to customers. Returned goods should be taken back into the warehouse as quickly as possible. The subsidiary is responsible for having checked that the products are OK and then return them to *Dutchtown*. If the products should be scrapped, they should mark them so that

Provider knows that they should throw it away; if not, the good should be repackaged and stored back in to the shelf again.

But the way the deal is now, *Provider* is responsible for the goods in the warehouse, so they check the goods when it arrives too. That's actually good, because our subsidiaries neglect that part sometimes. But anyway, these 10% are there to take care of, and I can feel that *Provider* should work on their returns process, they should make sure these products are stored back in as quickly as possible since we apply FIFO. We don't want to be sending out brand new products when there are returned ones that should be sent first.

I must say I'm a bit disappointed with *Provider* regarding that part; that they haven't looked into returns handling. It's not supposed to be any backlog of returns at all. But that part isn't solved yet. They could also have been a little more forward thinking system-wise, they could have approached our subsidiaries and tried to affect them, to affect what they get sent back to *Dutchtown*. I miss that kind of thinking.

With regard to how many suggestions we've gotten from the subsidiaries that has varied a lot, that depends a lot on how competent their staff is. At one of them the person who is responsible for controlling and logistics is very good at working with *ERP*sys, so he's raised a lot of suggestions. In other cases, where the competence level is lower, it has more been a question of us giving them training and support; not much development there. But if we've started up a new process with one subsidiary, we've tried to implement it everywhere.

My prime contact when I was working with *Provider* was the warehouse manager, but I also got to know some of the staff on the warehouse floor. There's both good and bad sides to that, I guess; the advantage is that if you want something done quickly you can have it, but once that person leaves his job, the knowledge also disappears. They've had quite some personnel turnover, which lasted until last summer, when they reorganised operations.

The subsidiaries haven't really had any direct contact with *Provider* regarding development issues; that's been taken care of through us. About two years ago I was working on a project together with a consultant that was aimed at developing routines for how to produce deviation reports from *Provider*'s system, but that came to a halt. *Provider*'s top executives didn't want any external consultant to come in and look in their system. It was also an issue of neither them nor us wanting to pay for an external consultant, so they said they'd send one of their own guys, but none ever showed up.

I miss some initiatives from their side, they could have been more proactive. But this could of course be an effect of us not being clear enough when we bought these services from them – what should be our responsibility, and what should be theirs?

That goes for the system part as well. When it comes to *ERPsys* it was us demanding that they should use our system, so I guess it's no surprise they've been leaning on us a lot. But when it comes to IT in general, and using the Internet for shipment information it's been worse. They're connected to *ERPsys*, and I guess they take a lot of information out of the system, but they could be more advanced. We're not satisfied with that part.

Another issue is the part regarding performance reports; costs, deviations and such, that doesn't work one hundred per cent. It's a little unstructured, a little messy. We have one person here who is responsible for the communication with *Provider* when it comes to invoices, performance and such. If that person was active and tried to work on these issues, I think we would see some change. But on the other hand, if that person isn't active, but settles for what there is today, then *Provider* won't change. So we get all the facts on paper instead of electronically, and the one who is responsible has to enter it all into spreadsheets manually, or extract it from *ERPsys*.

As a whole I think this is an organisation that's quite keen on changing, we're flexible. But of course there are always some people who have a hard time coping with change. But on the whole I see no problems; culturally the changes have worked great, and that goes for the cooperation with the Americans too.

S3:6

It would have been nice if *Provider* had been more active, raised some demands on us and said, "Hey, we need this and that if we're to do our job properly". None of us had objected to that, on the contrary. There was some of what in the beginning, but then they've mostly kept on going in the same tracks.

Operations Development's interaction with subsidiaries

In our group, that is *Operations Development Manager (ODM)*, myself, and a couple more, we work with developing logistics processes. We were called *Logistics Development* before, but then the name was changed to *OD*. In much of the work we've been doing we've worked with the subsidiaries and as soon as any market issues are raised, there's always a lot of fuss. They always say that every market is unique and that they have to have their own solutions for everything. We could have used support from someone with a more powerful position in the organisation; unfortunately *ODM* doesn't really have that. It would have been good if we'd gotten more support from the marketing director, but since he's responsible for the entire sales- and marketing part, he hasn't really had time to work with these parts as well.

There's been some fuss with the subsidiaries, but at the same time we've managed to establish good contact with them. We've had our fights, but on the whole things have worked fine. We have always strived to get away from the product focus, and instead focus on service; our goal has always been to support the subsidiaries. It's not their job to do logistics, their job is to sell.

But the subsidiaries have unfortunately been strong enough to gain approval for certain things that aren't optimal. Take invoicing as an example; every country wants their invoice to look a certain way. There are of course legal demands in some countries, that you must include certain information on an invoice, but if we'd been able to push out opinion more firmly we could have saved a lot of money on system adaptations. Unfortunately we've been a little weak at times, we haven't showed them who calls the shots.

Lack of clarity

It's the cost issue we must work with the most, both in between us and *Provider*, and between us and the subsidiaries; we must have more clarity. Much of the problems we've experienced stems from not having clear processes internally, there's many of us who have said that. And if we aren't clear internally, how can we expect clarity towards *Provider*? If we start by getting more clarity internally, to sort out who's responsible for what, I think things will be much easier for *Provider* too. We've started in small scale, we've drawn organisation chart with appointed contacts on them. It's gotten a little better, but there's still lots more we could do.

S3:7

The future

As it seems right now, we'll most likely continue doing business with *Provider* after the contract period comes to an end; we simply haven't got the time we would need to shift to another provider because of another major change project that is under way. But what we'll try to do is negotiate a shorter contract period; when we talked to them last week we asked them to make an offer for both one and three years, and if the one-year offer looks good I think we'll go for that. That'll give us time to do some calculations on going back in-house next year.

Switching to a competitor doesn't seem like an option at all, those competitors we've looked at don't really differ much regarding cost and performance. I mean, regarding performance it would be the same carriers transporting out stuff, regardless of which partner we choose. I don't think it's possible to get much better than *Provider* regarding performance, but I think we can do a lot when it comes to price, so I think

these discussions will be about pricing to a large extent. I also want to bring up gain-sharing issues. Our initial ambition was to have a lot of that, but it hasn't turned that way. We've been busy with other projects, and *Provider* hasn't really been pushing things either. Perhaps they've been busy too.

Regardless, it's quite a big undertaking to switch to another provider, or back in-house. Now that we've got this other big project coming up, and that will be going until next summer, it would be too risky to leave *Provider* now. But if we're running this in-house two years from now, I wouldn't be surprised.

Story 4 Logistics Consultant

Initial contact with Shipper

It's a long story... It started when I was in contact with a person from a TPL company. This person had attended a seminar I held on logistics outsourcing. We met a couple of times and then agreed to arrange a seminar on the subject, with the purpose of recruiting more clients to their business.

They already had some kind of cooperation with *Shipper*, I believe for transportation services in Europe. Anyway, this led to a meeting with *Shipper* where I held a presentation, and *Shipper* showed interest in what I said, I stressed outsourcing issues and shared some of my experiences from previous cases I had worked on. This was some time during the fall of 95, or maybe spring 96. The TPL company and I had gathered representatives from a number of companies, and *Operations Development Manager (ODM)* attended on *Shipper's* behalf.

Pre-study for direct distribution

S4:1

So we started some discussions about various issues, and I suggested that he should let me conduct a pre-study. I explained very clearly why such a study was necessary, that we had to look into the conditions first. My starting point was not outsourcing, but centralised distribution. Outsourcing was in fact not an option at all to start with, rather something that gradually emerged along the way, when we got to know their structure.

I gave them a quotation, and as usual it took some time before something happened, but we stayed in touch. But eventually, in springtime 1996, I got an OK to start the pre-study. So me and my partner made a study about centralisation, which was finished by fall 96. The study was mostly an analysis of their current situation, with emphasis on physical distribution. It took us quite some time to carry out the study, mainly because of the difficulties in getting hold of accurate data. I guess this was like most companies; as soon as you start digging into the details you see that things aren't as well-ordered and structured as it looks on the surface. Putting together anything substantial at all wasn't an easy task, but eventually, after a lot of work and patience, we managed to put together our report.

We had a checklist that we based our work upon; we had developed this from our experiences from previous projects. We focused on drawing a complete, holistic

picture of the client's structure; we included key ratios as delivery service, lead times, distribution costs etc, but we also described the administrative routines, and we tried to tell them how things are done out there in their business.

So we travelled around Europe and met with some of the subsidiaries. We went to Germany, France, England, well I guess all the major ones. We met with the managers and some of their co-workers. We looked into costs, delivery service, lead times, and we asked them to describe their administrative and physical routines. The selection of subsidiaries to visit was done together with *Shipper*, and we chose those who represented the bulk of volumes, and those who were most influential in the company.

We compiled data as we went, and managed to draw quite a clear picture of the situation. We developed our pre-study to be able to point out the weaknesses in their current structure; we tried to open the managers' eyes to this. Through my years of consulting, I have seen so many times that companies' management groups, or rather anybody in a company, seldom really knows how things are done in their business, from a holistic perspective. We always try to work from a holistic perspective to be able to figure out how things fit together, and we also give out recommendations from that perspective.

S4:2

Outsourcing as a means to implement direct distribution

So what we did was not merely a charting, the report also served as a basis for decisions for whether they should carry out a structural change or not. We pointed at pros and cons and gave them clear recommendations for what we believed they ought to do. We recommended that they should centralise distribution and we also pointed at outsourcing as means to do this, and we also pointed at pros and cons with outsourcing.

The main reason for recommending outsourcing was to ease the transition process. That's something I've always felt, that if you work with a professional partner you can get the support and help you need. To be honest they didn't really have any people internally that I felt would be capable of dealing with this on their own. My experience is that it helps a lot to outsource when undertaking a change like this, since in the projects I have worked, where the client has chosen not to, things have been a lot more difficult, especially regarding project management, coordination and such. That's why I recommend outsourcing, that you are able to place your business in the hands of a capable partner. If you choose to do this entirely on your own, you are very exposed. I have also experienced that it's a whole lot easier for a third party to take on a new client, than it is for existing employees to learn how to work in a new structure.

There's a lot of psychology involved in this, too, a structural change as this invokes a lot of anxiety; there's the fear of losing one's job among other things. And your internal credibility will suffer compared to using an external partner.

In one case I worked on we tried initially to build up an internal organisation for a distribution centre in Europe, but we got no attention for that whatsoever in the company. The sales companies didn't want to hear of the sorts at all. But when we eventually went to an external partner there was a dramatic change, all of a sudden the sales company people felt that they were speaking to a professional actor.

That was in fact how I came into contact with *Provider* the first time. I had a client in which we felt that we didn't get any response internally for our centralisation ideas, so then we decided to look into the TPL option. I read about *Provider* and understood that they had a good reputation.

That client was up and running with *Provider* when I started working with *Shipper*. I got to know a lot of the people in *Provider*'s organisation and I was quite impressed by how they worked, how they handled transfers and such. They were a very professional group, as it seemed.

Anyway, back to the client, you have a situation with a group of people who have worked in a certain way for years, and then all of a sudden you want to throw that away and bring them to a state in which they work very differently. In order to do that as painlessly as possible, I believe you have to show that you are working with professionals.

But in the future things can look different, of course. In the case of *Shipper* I think that nowadays they might be ready for going back to in-house again. That was actually one of my clear recommendations, that they should consider taking back their distribution internally when they had established the new structure. There's really nothing peculiar in doing that, once you have the volumes it's quite easy to get a really nice, efficient operation running under your own roof.

We presented the pre-study for *ODM* and part of their management team; *Vice President Operations (VPO)* and the CEO were there. They nodded and agreed to much of what we said, but after the presentation we heard nothing for quite some time. But I stayed in touch *Distribution Support (DS)* whom I had established good contact with; he is a person who is really good at what he is doing. So one day I suggested to *VPO* that he should appoint *DS* as project leader for a centralisation project. I really believed he would do a great job, and I thought he needed some encouragement in the organisation. Without any doubt, he was the right one to do the job and when I spoke to him, he was also very positive. I believe he would have managed great, and I think

that if they had appointed him to lead the project, they wouldn't have stumbled into the problems they did, either.

But things didn't turn out that way; instead they brought in *Project Leader (PL)*. Nothing wrong with her, on the contrary, but she was a bit too young and inexperienced to assume total responsibility for such big a project, and that's what I told them, too.

The person I spoke to the most was *DS* anyway; he was the one I felt that I could discuss different ideas with. Structurally speaking, he thought this was the right way to go. I spoke to him daily during a period of time; he was really the one who carried out most of the data collection and such. Without him, I believe it would have been a whole lot more difficult to make this work. But that was informally; formally it was *ODM* and *VPO* I should speak to. But in order to get anything done I spoke to *DS*. Then of course I checked things with *ODM* and *VPO*, but that was on a higher level. Many of the issues dealt with pretty detailed, concrete things. But I had a very good relationship to *ODM* too, there were never any problems.

Shipper decides to go on

S4:4

As I mentioned, nothing much happened after the pre-study presentation. I stayed in touch with *DS* and I learned that discussions were underway, but no decisions were made. Eventually I suggested to them that we should approach a number of candidates with a request for proposals, since this would be quite a lengthy process and I thought it was time to get started. Then one day *DS* told me he had been given the assignment to develop a demand specification to use when speaking to potential partners, and he wanted me to help him with that. So I did, but that was never any formal agreement between *Shipper* and me, I did this more or less free of charge. *DS* didn't have authority to buy that service from me. I gave him some basic input, some thoughts and ideas, and then he wrote up an excellent specification.

Later he asked me for help to choose which actors to send the RFP to, but then I had to say no. I couldn't go on working for free, so eventually I got this as a formal assignment. We agreed that I should help out with support in supplier selection and that I should help them visit some candidates. I pushed things hard, if something was going to happen it was important that they started making things more concrete. That got things rolling.

So we sent out a request for proposals, I don't really remember to how many. Five perhaps, to *Provider*, *TPL-A*, *TPL-B* and two others.

Later on, in springtime 1997, I had developed a plan for action and we had candidates that we found interesting; *Provider*, *TPL-A* and *TPL-B*. By this time *DS* was out of the picture, it was *ODM*, *VPO*, and I who should do a tour around Europe and visit the candidates. First we met with *TPL-A* and the three of us agreed that they wouldn't be a feasible alternative; in that case we would have had to teach them what to do, and that wasn't exactly the purpose. They didn't really understand what it was we asked for, and it turned out to be a very awkward meeting. I had to explain everything for them and eventually they understood, and they said "OK, we can do that", but I was very hesitant, I thought it was obvious that they weren't up to it.

Then we met *Provider* in their facility in *Dutchtown*, where *ODM* and *VPO* both became very impressed. I tried not to meddle too much, I already knew that *Provider* was outstanding thanks to my prior experience with them. I let the others form their own opinion. They thought *Provider* seemed reasonable enough, but still they hesitated a little.

Last we met *TPL-B* in France, they showed us the warehouse they had in mind for *Shipper*. They grasped what we were talking about from the beginning, so when we got back home we had two candidates to keep on discussing with.

Visit to Swedetown

S4:5

By that time we hadn't yet received any real quotations, but we had gotten some indication about pricing. So we asked for full quotations and in the same time we decided to invite their representatives to *Shipper*'s headquarters and to *Swedetown*, so that they could gather some more information.

I joined the visit in *Swedetown* when the candidates went there. That was in the middle of the summer of 1997. The purpose of that visit was that they should get a feeling for the products, the warehouse, and the philosophy of the company. We reviewed the warehouse together with *Warehouse Manager (WM)* and talked through how the warehouse in *Swedetown* was handled; what kind of tools they used, what routines looked like, and so.

WM wasn't much involved in this project, nor was anybody else from *Swedetown*. I had some contact with *WM* during the pre-study, but over all this was like everything else they did; this was *ODM*'s and *VPO*'s show. I think they missed some important issues there, to inform employees about what was going on. It was a small, isolated group who worked with this, which had its pros and cons. I think that, in order to at all be able to pull something like this off, you have to have a small, focused group that runs the show, but you shouldn't forget about your employees, to keep them informed.

I have a feeling that that part didn't work that good in this case, they weren't good at informing.

When we had received the quotations we could start some more serious discussions with the candidates. I made a cost analysis and delivered that to *Shipper*. We looked at a number of different parameters and tried to estimate what the candidates were good at, and not so good at. We looked at logistics competency, flexibility, costs, quality, IT-solutions, etc. for each of these I wrote up my assessment for each candidate.

At the same time I gave *Shipper* some homework, concrete issues that they had to take care of. I tried to push them all the time, I said "now we have to do this, then that" and so on, and all the time as concrete as possible, because I noticed that they couldn't quite make up their minds. They didn't really know which step to take next. I had to make up small documents for them to follow, "How to continue, step one to ten", "Homework for *Shipper*"... it was almost like sending them back to school, in one sense.

After we had met with *Provider* and *TPL-B* in the summer of 1997 I gave them a clear recommendation to carry on with *Provider*, in black and white on paper. It was quite clear, both regarding costs and other factors, that they were the best alternative. That was the end of my assignment for *Shipper*. They went into negotiations, which I didn't take part in. I had carried out exactly what I had agreed to, to help them find candidates and do the initial screening. After that it was entirely up to them to do the final selection. I gave them my recommendation, but I didn't want to influence them any more than that.

S4:6

Shipper decides to do business with Provider

They accepted that right away and went on with *Provider*. I don't really know how long it took for them to reach an agreement and so, but in spring 1998 they started up operations. I know they had worked with the implementation project for *ERP System (ERPsys)* in parallel, and I guess that disturbed the TPL process somewhat.

So that's where my assignment ended. I had some contact with them now and then, they could phone me and ask some questions about various minor things. But it wasn't that often, in fact I was a bit surprised that they didn't call more often. But then again, when I left them it was pretty clear for them how to move on, so I was never worried. In fact I felt slightly redundant, now *Provider* gave them the guidance they needed.

Renegotiations

I have recently visited *Shipper* again and held a presentation. It was *ODM* who called me, he wanted some candidates to send out RFPs to, now that the contract with *Provider* was coming to an end. As I had recently done something similar for another client I said that I had a report and that they could buy that from me. They accepted, on the condition that I visited them for a presentation of the material. The report I had made for the other client was quite substantial, we had approached a large number of prospective service providers, but once again it was quite clear that *Provider* was very competitive. But that's all they've asked me to do now, they haven't asked me to help out in evaluating any offers or so.

The other client I mentioned is very pleased with *Provider*, and that's because they have themselves been very active, unlike *Shipper*. Once again, that's quite characteristic for their slightly naïve approach, their belief that once you turn over responsibility to a third party everything's going to work out fine, without them having to engage. They have to raise demands, not just complain about what's bad.

They had some problems initially, I know, and did for quite some time, but nobody ever really pointed this out to *Provider*, nobody tightened the thumbscrews. At times, when things have been really chaotic, someone from management has reacted, but nobody has really tried to work methodically with the problems and get rid of them. Now *DS* has been assigned to do that, but he should have had that assignment from the beginning.

I know about these things as I've had some contact with *DS* through the years, but he hasn't been let in on things, so he hasn't felt that he could do anything about it. And then I've had some contact with *Business Development Manager Europe (BDM-E)* too, but he hasn't really got all the operative details, of course.

But I've spoken to *ODM* too at times, and asked how they are coping, and I've never heard any real complaints. The first time I heard them complain was actually now when I met them for the presentation, the they raised some issues, there were several problems that they mention that hadn't yet been solved. My opinion is that they haven't acted sternly enough, and told *Provider* "we want things this way". But I think they themselves consider that what they've done is enough. I think their main problem is that they haven't really had anyone who's been appointed main contact with *Provider*.

Story 5 Logistics Manager

Operational Logistics; Shipper's Organisation

This department is called *Operational Logistics*, and it deals with operational, day-to-day logistics activities, material flows in and out. We don't really work with any development or projects, that is handled by *Operations Development*. We belong to the *Operations* division, along with *E-business*, *Purchasing*, *IT*, and *Production* – both in Sweden and the US. The warehouse in *Dutchtown* belonged to *Operations Development* until most of the operations were up and running, and thereafter responsibility for the warehouse was transferred to us.

Our department contains the functions *Global distribution support*, *Launch support*, *Inbound material control*, and the distribution centre in *Dutchtown*. Our mission is to secure product supply at minimal cost. We try to organise the department according to our processes. We have two main processes today.

One of these is product development in which we are present from initial product idea to commercial launch. We contribute by looking into the material flows of the new product, which logistical solutions that are necessary. Mostly we look at volumes, by using forecasts from subsidiaries, we also calculate our own forecasts based on historical sales data for similar products. We also place orders for production and monitor the launch to see if things turn out as expected, or else we take corrective action. When things are settled, the product is handed over to our second main process.

That process is the recurring product supply. We have inbound shipments from suppliers and production units to the distribution centre, which is managed by a group of employees called *Inbound material controllers*. Then there is the delivery process, which is handled by another group of employees. Both these two groups have daily contact with *Provider*, both regarding in- and outbound flows.

Then there is the function *Global distribution support*, which is responsible for the administrative contacts with *Dutchtown*. They work with issues like handling invoices from *Provider*, monitor performance metrics and so on, and they serve the subsidiaries with information.

There is some direct contact between the subsidiaries and *Provider*. Those subsidiaries that have local warehouses have no contact at all, then all communication is directed via our people here, but those who have direct distribution do speak to *Provider* at

times, mostly regarding individual shipments or claims. Claims are registered in an online database that is monitored daily.

We have one employee who works with *DD support*, who answers questions from subsidiaries regarding product availability and such. Subsidiaries only have direct contact with *Provider* when there are deviations from the normal; in day-to-day business they have no direct contact.

The way we are organised is a direct consequence of DD. Nowadays each individual is responsible for one specific market, but before DD we had a group of people working with distribution, who took care of what had to be done, and there were no specific responsibilities within the group. So in that sense we have reorganised. We have become more specialised, especially because we have wanted to build up the personal relations between people, something we find very important.

Development and change within Shipper...

But development, new processes, running projects... that's mainly the responsibility of *Operations Development*. Of course we are responsible for adjusting and trimming day-to-day routines, but if there's something more extensive, then it is run as a project and isn't our responsibility.

S5:2

Our cooperation regarding development with *Provider* has worked quite well. Look at inbound deliveries, for instance. *Provider* had noticed that deliveries were very irregular, almost all our suppliers delivered goods on Mondays or Tuesdays, and then there was nothing to do on Wednesdays, but on Thursdays and Fridays there were a lot of outbound shipments. So they asked us if we could contact our suppliers and ask them to spread out deliveries over the week, and they also wanted us to adjust the shipment day for our internal production in *Swedetown*. They asked the same on the outbound side, they saw that we had several large subsidiaries that had shipments on the same weekdays. As we have included more subsidiaries in DD, *Provider* has asked for adjustments in the shipment schedule to those subsidiaries who still operate their own local warehouses, in order to even out the workload.

That's typically a change that we handled internally here at the department. There was no need to run that as a project with *Operations Development*, since it didn't involve any process changes, only minor adjustments of routines.

But if it would involve a more comprehensive change, for instance if you wanted some changes in *ERP System (ERPsys)*, then we would have to bring in help from *Operations Development*. They have *ERPsys* specialists who deal with such issues.

Look at the claims issue for example. If a subsidiary have received the wrong products, a number of options emerge; do they want to keep the products, do they want return them, or what? There are lots of options. Should we enter a new order in the system, or should we return them in the ordinary returns process in order to keep batch traceability intact? Any alterations to this we have to test with the subsidiaries first. Theoretically we could of course do it all from here, in the system, but it also has to work practically with those who are closest to the customer. So any such a change is run as a mini-project, and when the *Operations Development* people see that it works, then we take over and establish it as a system routine. Then it's up to us to keep the routine fit and trim.

We really have no resources at all for running any projects in this department; all our people are fully allocated to day-to-day business. Resource-wise we are dimensioned exactly so that we can cope with everyday work, but there are no extra resources to run any development projects.

I believe this is the right way to organise things when a company is in a phase of extensive development, when there is fast growth or if there are other major changes going on. In that case I believe having a number of designated project leaders is a good thing. But once you enter a less dynamic phase, I think it's better to free up resources at this level and do more of the development work in parallel with everyday work, where people see the actual needs. This is important, not least to stimulate those who work here, to let them work not only with the routine things but also develop their work, their own processes.

S5:3

Many of the change initiatives that arise come from this department, but a similar amount come from the steering group for *Operations*. But the change initiatives they bring up come from the respective departments, so I believe we are comparatively active in this sense.

The division of responsibilities we have worked out quite fine, I mean, we are always involved in projects anyway, in one way or another; by having a project group member, being part of some reference group or what have you. On the other hand our organisation can experience a certain frustration at times when certain changes have been proposed for a long period of time without any response. But this is mostly due to the management team seeing a bigger potential in some other change, so they put our suggestions on hold.

It's especially changes in *ERP*sys that is the bottleneck. Some 80 percent of the changes we carry out lead to adjustments in the system of some sort, since our day-to-day work is so integrated with the system. Then there are of course the softer parts as well, if it's necessary to do some minor organisational change, or issue some training or so, but I don't really find that to be the big issue.

A project in which we take part usually looks something like this: There is a project leader from *Operations Development* who runs the project. Then, depending on the character of the project, different representatives from various functions take part; most of the time there is someone from every function. Most projects are internal, say someone from our department takes part, and then there's someone who knows *ERP*sys, and then a representative from some subsidiary to account for the market side. These people do all the tests and so, and then it's time to implement the solution, to do some training at the subsidiaries or go down to *Dutchtown* to educate *Provider's* people.

... and in collaboration with Provider

As you can see, *Provider* isn't involved much in projects directly, they come in when things are set and it's time to train their people. I think this works fine, but we should perhaps have training more often, or do the training sessions we do more thorough.

In one sense it would perhaps be better to involve *Provider* earlier, already in the development phase, but the problem is that they are as operatively oriented as we are, and they don't have much resources to put in to development work. But at the same time that's exactly what we expect from them, we want them to come up with more suggestions on different things, say regarding different trends on the market regarding solutions for offering the end-customer better service and information. That's the kind of things we thought they would push more from their side, but it's been us driving that kind of development those times when any such efforts have been made.

Sometimes I have experienced that when there's talk about doing any changes in their system it has to come from their own central organisation; they seem to be quite bureaucratic internally. At times when we have raised suggestions they have replied that they have to check internally first, and then the central organisation have slowed things down. Maybe that's a drawback of working with such a big actor, but on the other hand that's an advantage as well, since they have such strong bargaining power.

Of course there has been instances when they have proposed changes in *ERP*sys, but we would like to see more, they don't really attempt any big leaps.

In one way we see them as a department within our own company, for instance they use the same reporting system as we do. If there is some support-case, for instance, they register it in our system and then it goes to our IT-department, who then handle any request for changes in *ERP*sys. In that sense they are closely integrated in our company, those issues don't necessarily have to go through me or *Operations Development*, they can go directly to IT if they want to.

If we look at business culture I believe Swedes and Dutch have many things in common. From the beginning there was a lot of giving and taking, we had quite an open working atmosphere; we didn't always demand to get paid for things we did, neither did they if we asked for something extra to be done.

But then quality deteriorated and we started raising our demands, both regarding service and payments. So we had some problems and irritation. This was about two years ago, in the middle of 2000. It all ended up in the two parties together looking over our ways of cooperating, which resulted in them inviting us to a kind of culture get-together. They invited some key people from our side and some of their own people. We met during one weekend and there was a consultant they had invited, and we discussed differences in culture in Sweden and their respective countries. We tried to understand why we couldn't communicate fully. We played some games and did different tests, personality analyses and so, and then these were analysed. To be honest this didn't give all that much more understanding, we realised that it had more to do with individual issues than cultural. So later on they reorganised operations in *Dutchtown* and from then on things have improved dramatically.

We have done some similar things after they reorganised as well, we invited them to a telephone conference about a year ago. There were people from our distribution and those who work with exports on their side. That conference also concerned communication issues, we tried to find out why there was so much communication back and forth regarding issues that there really was no need for communicating; things we shouldn't have to phone and e-mail that much about. So we talked things through and realised that the involved parties claimed the reason was that they lacked essential information. But we could also conclude that the information was there in the system, so we decided that from now on we shouldn't communicate at all and we should see what happened. We agreed that if a question of some sort arrives, we should not answer the question as such, but point out where the requested information can be found in the system. We did this in order to force everybody to start looking for information in the system and not just toss away a question as soon as some issue emerges.

So we tried this and soon we realised that in some instances the information that was needed to run operations in fact wasn't available in the system where it was supposed to be, and in other instances we found that it indeed was there. So after a month or so things worked quite well, we had reduced communication to about a third. You could say that we based this on an assumption that if all necessary information is there in the system we shouldn't have to communicate at all; all necessary information should be there in the order. Then we asked ourselves the question "If that is true, why do we communicate at all?". So we started analysing what type of questions we sent back and forth, we looked at the types of questions that were posted by e-mail and telephone. We concluded that we mostly were asking for information of different sorts, about

certain orders, about routines and such. Then we asked ourselves “isn't this information documented somewhere?” and we concluded that it ought to be. So we said “OK, let’ stop communicating from now on. If a question arises, post it and reply only with information on where the answer can be found”. They did that and we did the same. In this way we learned how to search for information, and where to look for it. After all it takes a lot of people’s time if they are to stop doing what they are doing and start answering a lot of e-mail.

The starting point for this was an analysis we had carried out internally at our department. We analysed what we did with our working day, and concluded that a large portion of time was spent on answering e-mail. This made me wonder what kind of e-mail there were and so we started examining that.

It all started when I had just started my position as logistics manager. I was new here and wanted to find out about what we were doing. *Distribution Support (DS)* then suggested “you should do some PMO, Practical Manager Orientation”. So I did, which meant that I spent an entire day with each and every one of my colleagues. I listened to their telephone conversations, I looked at in- and outgoing e-mail, looked at the kind of tasks that were carried out, and so on, and I took notes along the way. In this way I went around to everyone here and I could conclude that sometimes unnecessary work was being done. Then we brought in a consultant, working with “personal efficiency planning”, and ran a project that was aimed at standardisation; standardising how things were documented and archived, standardising routines so that it would be easy to help out if somebody was absent.

The consultant also visited everyone at the department and asked a lot of questions about everything; “What kind of a paper is that? Why haven’t you sorted out these piles here? The phone is ringing, why aren’t you picking it up right away?”. The message was that it was important to either deal with things straight away, or plan when it should be done. This made us start with time measurements, we charted what we did and the amount of time it took us to do it. Then we asked ourselves “Is it reasonable to spend this amount of time on this and that, should we perhaps spend more time on something else instead?”. This way of thinking about our way of working made us start thinking about our e-mail traffic, and that’s how we got started on this effort together with *Provider*.

The bigger issues that have been have evolved around direct distribution and replenishment, as we call it when we take over the control of subsidiary inventory. There has also been some system changes, but those have been lesser issues. For instance, we have implemented functionality for keeping track of whether or not a certain batch has been checked at goods receipt in *Dutchtown*. We have also implemented changes to handle production orders for kit assembly more efficiently.

We assemble kits in *Dutchtown* and they consist of components from various suppliers, which makes the planning process quite complex.

We have examined whether it would be possible to have our suppliers deliver more frequently. For some expensive components we have been able to increase delivery frequencies quite dramatically, and in turn we have been able to implement some changes in *Dutchtown* so that they don't have to examine every delivery. Instead we have implemented a skip-lot system so that if a certain batch of a certain article has been examined, the next few batches can be stored without prior examination.

One change that hasn't been implemented yet is barcode readers. That's something we should have done a long time ago. The reason for the delay is that we don't have barcodes on our products, and we won't until we start launching our new products in the future. We see substantial gains to have such a solution, especially since it would minimise the risk of errors in order picking, barcode readers would give us an automatic control of whether the right product from the right batch was picked or not. We would also have gains in inbound deliveries, as of today the staff in *Dutchtown* enter all information manually when a shipment arrives, which of course leads to a risk for errors. If we had barcodes, that information would be scanned directly into the system. At times we have had quite some problems with such errors, but today we are able to meet our target of maximum 10 errors out of 10 000 orderlines.

That is one ratio that we measure and track, we call that warehouse claims. We have another one which is transport performance, that measures how well we perform in delivering on time, that is, how well *Carrier* manage to keep their promises. The target for that ratio is 95 percent. Then we have order line completeness, for which the target is 99 percent. We also calculate a total logistics performance by multiplying these three ratios; the target is 94 percent.

We have had some smaller projects to increase our performance. For instance regarding transport performance we saw that we didn't really reach the targeted 95 percent for Great Britain and Ireland. For starters we thought that this was because of the distance, but when we looked into it we realised that on Ireland, for instance, there are no postal codes except for Dublin, so different shipments to the same customer could be sent off to different areas. We also noticed that we had a lot of errors in the system for customers' belonging to that subsidiary, so we had to go through the entire register and correct errors. We also realised that when data was transferred from *ERPsys* to *Carrier's* system, certain data fields ended up in the wrong place, which caused a lot of confusion.

When it comes to *ERPsys* training for the *Dutchtown* staff, that's *Provider's* responsibility, they have one employee who is responsible for the system on their behalf. They also have a number of troubleshooters, people who are supposed to know

the system the best. If they employ new people it's their responsibility to train them. When we had the problems with high personnel turnover rate I mentioned earlier they, in fact didn't really manage to make sure their staff really got to know the system. But now they have less turnover and things are working out fine. We can observe when they have someone new down there; we can see it by the mistakes that are made. But that's no big problem, it happens to us as well.

Involvement in the DD project

When I joined the department in 98-99, the central warehouse had already been moved and direct distribution was implemented on about half of the markets that are included today. Before that I worked in a position as an interface between new product development and purchasing. My task was to set up routines between us and our suppliers for order handling and quality assurance.

Direct distribution was run as a separate project in which I was not involved, other than as manager for the operational parts of logistics, I was only indirectly involved. For instance, when certain markets were included in DD it was my job to find out the consequences for other parts of our everyday business; what would happen with materials control, what about the subsidiary, all kinds of practical things. But I wasn't involved in rolling out the project. The major work with the project was to get things set in *ERPsys*, especially training the subsidiary people in how to handle the system. Usually there were some test shipments first to make sure deliveries arrived on time and so, and when that was evaluated they transferred data over a weekend and next Monday they started working. Then the project moved on to the next subsidiary.

One can see different phases in that project. The major phase was to move the central warehouse and get things up and running in *Dutchtown*. The following phases have dealt with implementing subsidiaries in DD. In one way these can be regarded as two separate projects that have only had the name in common.

One could say that this has been much of a learning process. Every time we implemented a new subsidiary in DD we learned a lot of new things, we made some mistakes and tried to think of what we could do better the next time, with the next subsidiary. We made up an information package about the project and we refined that after each new implementation, so things went smoother as we implemented more and more subsidiaries.

For starters I experienced that the subsidiaries were a bit reluctant to let go of their own stock. But there was a political dimension to it as well; we felt that if we could show one subsidiary for which things had turned out very well, it would be a lot easier

for us to sell in the project at the next one. They monitored us very closely, and as soon as something went wrong they informed us about it immediately, which in a sense was good for us. But as more and more subsidiaries were included I experienced that things turned out quite well for those who had been included for a while.

The most important gain, at least that is what I believe, is product availability. The risk of having back-orders was substantially reduced as we got more even in- and outbound flows. The subsidiaries could see that too, and they saw that this is good for the company as a whole and then their fears of losing control disappeared. Those subsidiaries that we included later on had been able to see that things in fact did work out quite well for those that had been included earlier. But I think they were anxious anyway, they were used to having that feeling of control when they could physically see and touch their inventories. But as soon as they realised that things worked out I believe that most of them are quite glad that they don't have to handle the warehouse any more.

Above all it was the deliveries they were most anxious about, they feared that we wouldn't be able to deliver on time. They felt that when they had their own warehouse, they were in control of the carrier, they knew the people and they also saw that the geographical distance was a lot shorter in most cases. They weren't comfortable with letting away things to another country and trusting another party to order transportation on their behalf.

Of course, some of them wanted to bring back the local warehouse before things had fully settled. But as far as I know there's nobody asking for that today, but sometimes they bring it up in arguments. Sometimes they point at transport performance and say "it wasn't as bad as that in the old days, when we were in control". But I don't really believe that anyone wants their warehouse back, because they experience so many other advantages with this. Above all, they can concentrate on sales and marketing, and not have to deal with messy logistics.

Effects of DD

The department was called *Shipping* when I joined, it was at that point in time responsible for coordinating deliveries from *Swedetown* to subsidiary warehouses. There were frequent contacts with different carriers and there was also some materials planning for the *Swedetown* factory. The initial plan was that this entire process should be transferred to *Provider* and that a large portion of the department should disappear, maybe half of all our employees.

As things turned out, it wasn't possible to do this as quickly as planned, since certain issues weren't possible to solve in *ERP*sys. There were some problems initially that took a lot of manual work. And there were also certain functions that we assumed would be taken over by *Provider* that weren't, especially all exports handling. We believed that *Provider* would have a lot of knowledge on customs requirements, documentation, rules for imports and exports and so on, but they didn't. We felt that *Provider*, instead of being experts at this, needed us to take care of a lot of things, which in turn made it impossible for us to cut down on staff as planned.

One positive thing we noticed was however that they were a lot better than us at warehouse management; how to work with bin placement, picking strategies, and such. They knew those things a lot better than we did.

If we look at our department self-critically, I believe that we have been extra critical towards *Provider* when we have handed over responsibility for certain things. I think there was some anxiety among us as well to hand over something we had handled ourselves before. But we got over that quite soon when we could see that things worked out fine, and we realised that this isn't our core-business anyway.

Renegotiations

S5:10

Today I am quite satisfied with the cooperation we have with *Provider*, but if I had been asked two years ago I guess I would have wanted to change to another partner. But they have worked really hard to make things work, and since they reorganised things are working really fine.

Now we are facing renegotiation as the contract is coming to an end soon. We'll look into the economical aspects as our volumes have increased throughout the years, perhaps it's not profitable to outsource this any more. Maybe we would be better off if we took care of the profit ourselves, the profit that *Provider* is making today. But if the economical analysis points in a direction that we should go on with third party logistics, I wouldn't mind renewing the contract with *Provider*.

Story 6 Distribution Support

The early days

Before we started thinking about direct distribution (DD) or outsourcing we had a fairly traditional distribution. In the eighties we had the warehouse here at headquarters (HQ) and in 1989 it was decided to move it to the factory in *Swedetown*. For some reason they had concluded that it would be nifty to have the warehouse close to the factory, and that was surely correct, but this meant moving the warehouse to a location where we had nothing to offer from a distribution point-of-view. Of course, those of us who worked here at shipping at that time, we thought this was an unwise decision; there was no reason to move the warehouse from our viewpoint. It happened of course that we had to send goods back and forth between the factory and us at times, if something had to be reworked or so.

But, as I said, we had a very traditional structure with a large portion of problems with back-orders. We had for many, many years, constant back-orders. We at distribution had to roll back-orders in front of us all the time, we had to handle the same order many, many times. And when we looked at the total situation, we saw that there were enough goods, but in the wrong corner of the world. We could see this through the reports from our subsidiaries that we demanded.

S6:1

There was a lot of quarrelling with the subsidiaries regarding the back-orders. We had to explain why the stuff wasn't in stock and that we tried to divide what was available to the best of our ability. But there were a lot of comments like "How can this happen? This is unacceptable!" and so on. At the same time we knew there wasn't much we could do about it, all our time was spent taking care of the back-orders we already had. We had to sit there and try to divide the goods. If there was an article that had been backlogged for a long time, we put up bills telling us how the products were supposed to be divided among the subsidiaries.

It was an incredibly tough situation for us. But at the same time I guess the sales people had an equally tough time in the field when they had to handle these discussions with the customers. But still, we at distribution were the last in line, we were the ones who each week have to handle a large volume of back-orders, and that really wears you out, and you have no slack to do any improvements.

Here we had a fixed shipment schedule, with fixed days for each subsidiary, and we knew which day shipments to certain subsidiaries were due and when they had to order; that was our backbone. But then we had extra shipments with *Carrier*

sometimes. But there were also distributors and certain customers who bought directly from us, who couldn't be handled the same way, so it was a rather complex situation. But the worst part was the back-orders. You know, we were told whenever they had launched a new product how successful it had been, but from a logistics point-of-view we didn't see it that way. For us, they were mostly really tough.

Direct distribution emerges as an alternative

I think this was the primary reason for starting think about DD, the fact that we couldn't trust the orders from our subsidiaries. It's quite natural of course, as everyone is one's own best friend, everyone makes sure to order what he needs and then there's nothing left for the others. One could see that in total, in the entire group, that there were no shortages, but the stuff was spread out in the wrong places. We did a lot of bringing stuff back home and sending them out to new places, and we had to tell the subsidiaries "hey, you have too much of this, send it to us so that we can send it to someone else". There was a lot of crediting back and forth. I think this was the primary reason for them starting to think this way, that "it must be possible to do something about this!".

S6:2

We had a lot of discussions with *Carrier and* that was really how it all started if you ask me, they were really keen on helping us out in this part. Most of our shipments at that time were sent by air, combined with express shipments through *Carrier*.

I think my manager at the time met *Carrier* at some kind of seminar or so, and they started some loose discussions; that's how it all started. Eventually we made a visit to one of their clients, for whom they had arranged direct distribution; we also went to visit one of their Swedish facilities, and a central European hub. It was I, my boss at the time, and the IT manager who did these visits. This was some time during the early nineties, but I can't remember exactly.

One could say that all this was aimed at starting up benchmarking; we wanted to see how things worked at other companies, to see what it had meant for them. Our distribution system was, what should I call it, not really old fashioned and I think many were doing it like that in those days. We got our orders by fax, we sat there and entered them one by one manually into the system, we had to do delivery planning and be in constant contact with the warehouse in *Swedetown*. We had a very clear division of responsibilities between the warehouse and us; we did the paperwork, they did the picking and packing.

From the beginning the warehouse was localised in the same building as the factory, but shortly before we moved down to *Dutchtown* they moved the warehouse to another address in *Swedetown* as they had run out of space.

All these discussions with *Carrier* and all that we were thinking of, it was never really an issue about outsourcing; what we wanted to do was some kind of direct distribution. We also had a very clear goal to reduce fixed costs and turn them into variable, and to improve service. We thought that by having a central warehouse we would be able to get the goods to where they were needed.

We realised that the main obstacle was that we didn't have a common IT structure over the world, which is necessary to make this work. OK, you can do it by fax, but that doesn't keep up in the long run, when the sheer volumes will overwhelm you. We realised that we weren't going to get much further with the system that we had, so we started looking into what the effects would be if we installed a common system throughout the entire company. The starting point for this was in 1996, we had just got a totally new group of top executives, and they realised that we needed a common IT structure, and when that was in place we could start looking into having a centralised warehouse. The fact that we now have a common IT structure through *ERPsys* is very important for our processes and routines.

When I first heard mention of outsourcing I was quite doubtful. I mean, if you want to produce and sell products, why then should you not be able to take care of warehousing and distribution yourself? Where should you draw the limit for outsourcing? I mean, if you want to you can practically outsource everything. But at the same time I realised this was something that was coming up, so I found it wisest to try and influence things so that it would turn out as good as possible. Of course I realise that one has to draw the line somewhere, you can't own your own trucks and airplanes, there are others who can do that better. But storing and distributing your own products, that's something you should know how to do yourself. And I haven't changed my opinion on that point; I think that your distribution, that's something you should be able to handle internally.

S6:3

Pre-study for direct distribution

In 1996 we brought in a consultant company, *Logicon*, to do a pre-study, to chart how things were and to get suggestions for what we could do about it. I think it was *Operations Development Manager (ODM)* who had come in contact with *Logicon* in some way.

Logicon visited a number of subsidiaries to see how things worked out there, and we sent out questionnaires to all those subsidiaries that were in the target group for direct distribution. The questionnaires held questions about such things as volumes, which transport providers they used, how much things cost... I guess you could call it hard facts. I know that they visited France, Germany and England. I believe it was clear in the material we sent out that we were investigating direct distribution. I think this was also brought up at a subsidiary manager meeting and as I remember it several subsidiary managers looked forward to this, they thought this would be a good arrangement. They could see the problems we had too, partly their own problems in having to keep a local warehouse, partly the difficulties in trying to make sure things were sent to the right place. I guess there were some mixed responses, but the majority were positive. I think we were quite open about what was going on, to avoid rumours and such.

One of the main problems in a traditional distribution structure is that you have a very vague notion about what is going on out there in the subsidiaries; who they are using for transports, what it costs and so on.

It was time to do something about it; you can't go on working like that forever. But it wasn't for our sake this was done; it was to enhance our overall situation.

S6:4

When *Logicon* started the pre-study I was the one who helped them out with gathering information, booking their visits and so. We saw that it was difficult to get hold of information regarding our imports; those products that we didn't make ourselves in *Swedetown* were really hard to obtain any information about. So we had to do a lot of estimations, it was really difficult to measure correctly. All those products were kept in stock in *Swedetown* too; there were no flows directly from manufacturing to our subsidiaries.

Logicon really asked relevant questions in my opinion. As I understood things, one of them was more theoretically oriented and the other (*Logistics Consultant, LC*) was more of the practical fellow. They had been through similar projects before, both direct distribution and outsourcing. I think the report they produced was good; of course it was sometimes hard to obtain reliable data, but you can't really expect from them to do miracles. I think it was a good constellation, they asked the right questions, they knew what kind of answers they needed in order to do this investigation. We had a really good cooperation, the three of us, although it was mostly *LC* i spoke to. Their report is clear-cut regarding their suggestions, both regarding centralisation and outsourcing. It was a good pre-study, it gave us a lot of valuable input.

Regarding the future of the distribution department we had some plans that we should transform to a supporting function, we should sit in between the subsidiaries and the warehouse. When we did this it was planned that we would need less staff here, but it

didn't really turn out that way. As a matter of fact, we've never been so many as we are right now. We were quite a few when the pre-study was carried out, but the goal was to transform us into a support function with some four to six people.

It was clear that those who would be affected the most that was the people in the *Swedetown* warehouse. This meant that we had to make a serious attempt at looking into the possibilities to distribute from there, to keep the central warehouse in *Swedetown*. At least to be prepared for that those questions would come up from the union and so. We wanted to be prepared and to be able to answer, "yes, we have looked into that and it would cost so and so much". But the order cut-off times would have had to be placed much earlier, so that was not really an option.

Of course one thought a little about what would happen to the people in *Swedetown*, and what would happen to us here at HQ? You know, I have never really seen any figures on how much we've saved on this, but it is said that we have saved some money.

Going for third party logistics

Anyway, the pre-study led to a request for proposals being sent out to some ten different actors, those we believed would be able to meet our demands and be interested in doing business with us. These were *TPL-A*, *TPL-B*, *Provider* and some other larger actors. But some weren't even interested in replying, I think they considered us too small or that we didn't fit in with their other business.

My first impression of *Provider* was that they were very serious and professional. This was just before Christmas that the requests were sent out, and they got back and said they wouldn't be able to meet our deadline. But as things turned out, they were the first to give us a proposal. At that time I talked a lot to *Business Development Manager Europe (BDM-E)*. He asked the right questions and seemed very interested in us.

When the proposals started dropping in I wasn't really involved any more. I took part in the pre-study and in sending out the RFP, but no more than that. It wasn't until when we were about to get started with *Provider*, in the beginning of 1998, that I started having any more contact with them. But I wasn't part of starting up operations down there. When there have been any issues regarding formalities surrounding exports and imports I have been involved all the time though, I have tried to settle things when something has gone wrong.

I saw the proposals we received of course, but I wasn't involved in any evaluation. As far as I can remember they never asked for my opinion. I guess *Project leader (PL)* had started by then, and assumed the project leader role. But when they started reaching a conclusion to do business with *Provider*, then they asked some questions and so, but not very much. I knew that when they started charting our flows and so, I felt that there were certain things that I had to make sure would work out, for instance all things regarding Customs and so. So I sent that to *PL*, after all she was the one who had the project leader role and handled all such issues with *Provider*.

Working with DD and Provider

One issue, for instance, was that here in Sweden we had a permit to issue certificates of origin. I checked with Swedish Customs and they told me that this was a national permit that we couldn't use in Holland, and that we would have to apply for one locally down there. So I told *PL* that she would have to tell *Provider* get a permit, but they didn't have a clue about what I was talking about... *PL* hadn't thought of this herself, it was I who told it to her.

S6:6

But, as mentioned, from *Provider* we were met with total ignorance, they had no idea what this was all about. They had heard of something else that was similar, but this was new to them. I even think that someone at Dutch Customs had told them that it would be OK to use the Swedish permit, but I told them that wouldn't work out. This is a permit you must have if you are to ship goods to the free trade partners outside the union; Switzerland, Norway... If you don't have this permit you'll have terrible delays in Customs, and that would make life a lot more difficult for us.

I had a real hard time trying to explain to them what this was, they didn't get it. So I started wondering if it was I who had misunderstood something, maybe this was how things were done in Holland after all? But at last I got hold of a person at the Dutch Customs' head office, who eventually confirmed that we had to have such a permit, issued by Dutch Customs. It wasn't until then *Provider's* people started grasping that "OK, maybe we need one of those permits". But then it took a couple of years before they eventually managed to get one.

All this led to us starting a process here, so nowadays we have a binder with complete declarations from all our suppliers, in which it is stated the origin of each and every article. It took a lot of work to get that sorted out, but eventually this led to us getting the permit we needed from Dutch Customs; they wanted to see we had all this in order. But that kind of documents had not even been requested by Swedish Customs. You know, its about trust, they knew that "OK, this is from *Shipper*, their papers are usually in order" and then we got the stamp we needed. But the chamber of commerce

down there seems to want to see papers for just about everything, it doesn't seem like it is possible to build up any trust with them. They want papers for everything.

I had already begun to get a bad feeling by then. I thought, "What is this? Don't they know this stuff?" For instance, regarding our imports to Holland, *Provider* said they weren't allowed to handle that for us, but they could recommend a forwarding agent who could help us out for clearing our goods through Customs. That's how it is, certain bits we still don't have a firm grip on even though it has been four years; for instance imports to Holland, that's still a loose end.

As I mentioned earlier I was initially against outsourcing, but at the same time I thought it was exciting to get the opportunity to work with people who really knew this whole thing with logistics; maybe even get the opportunity to learn something new myself. But in my opinion it is us having educated them regarding the whole exports part. But then again, the question is which service it is that we have actually bought from them; maybe it is really our job to supply them with the information that should be on invoices, which documents that should be included and so on. But I guess that it's only recently that people from our side have come to realise that *Provider* aren't really that good when it comes to those parts. But you expect for such things to work fine when you turn to a third-party logistics provider.

Suppose we had only gone for DD within the EU, then we wouldn't have had these problems. It was the exports to outside the union that caused this mess. I don't know, perhaps I had my expectations up too high, but facts remain that if they had listened to the wrong Customs official down there things just wouldn't have worked at all.

Sure, I've learned things about national oddities that I didn't know of before, there are after all certain exceptions even though we're all in one union. As we've moved on I've learned that in certain areas we haven't done our homework properly. For instance regarding imports, as I mentioned earlier. We had a Customs audit a while ago; Customs asked us about certain shipments and I answered that these hadn't been imported to Sweden but to Holland. Then they wanted to see papers that proved this, but I couldn't give them that because I simply didn't have the information. Then I learned that it is written clearly in the EU law how such things should be documented. I had no idea about that before the audit.

But you know, I've figured that in such a large organisation as *Provider's*, there must be people who know all this. But we have asked ourselves, and I think I'm not the only one who has, "in that case, where are those people and why haven't they let us meet them?". They must understand that not one client is like the other; there are different documents, different products...

I believe the problem when you outsource the way we did, by moving from *Swedetown* to *Dutchtown* is that you're moving an operation that is functional, and it has to function from day one after the move. I mean, there's really a difference if you're starting up something from scratch. But in this case we had a functioning distribution operation running, although it was a bit old-fashioned and so, but from the first day we opened up the doors down there in *Dutchtown* it had to work.

I think we made a couple of mistakes, for instance we weren't focused on imports. Instead, focus was on getting distribution running from *Dutchtown* as quickly as possible, with the purpose of starting DD as quickly as possible too.

Then of course it probably takes a couple of years before you get to know each other, and have trimmed the organisations to work together. Perhaps were getting there now, after four years, that the initial problems have been worked out and we've understood how to work together. But that's the problem, really, that when you move an operation such as this one it has to work from day one. You can't just disregard things and say "nah, well take care of that later", because things have to be solved sooner or later, and sooner is better than later.

When it comes to DD, or rather when i was talking to *Logicon*, we were quite clear on that when we roll it out on the different markets, we must do it in a very orderly fashion. I'm not saying that the way it was done wasn't orderly, but our reasoning was that if you approach your customers and say "alright, now we're closing down the local warehouse and we're gong to implement direct distribution", then you have only one shot to get things right. It's very hard to succeed if you stick your neck out and then mess things up

That was exactly what happened in Norway. A couple of years ago it was decided that DD should be rolled out in Norway, exactly the same way as in Sweden, Finland, and Denmark. But it didn't work, we had to pull out from Norway. I think they did things right though, but not completely. Of course, I don't know really what it was that messed things up, I wasn't really involved. *PL* had left us by then, someone else had taken over. But I can imagine they had problems with Customs, and therefore encountered too poor delivery times. You know, we have a goal that 95% of all deliveries should be on time – last month we had only 77% for Norway! Especially concerning Norway I think they didn't do their homework properly, we're way too far from 95% there.

I think outsourcing also means that you in many instances have to do things through delegates, so to speak, you never speak directly to *Carrier*, or to Customs, it's always through *Provider*. Sometimes, if things go really bad with *Carrier*, we demand to sit in on meetings, but look at the problems we had with Dutch Customs as an example, then we had to speak use *Provider* as our messengers all the time. That's also the role they assumed, if you ask me. They spoke to Customs, then they spoke to me, I said "it can't

be that way”, they replied “but were only telling you what Customs said”. Then I replied that I had read paragraphs that said this wasn’t correct, and then they replied that they would speak to Customs again. And it went on like that. They really couldn’t contribute anything to these discussions; they couldn’t value the information they received.

In sense, it feels like you’re put aside to be a spectator. Of course you have opinions you try to put forth. For instance regarding airfreight shipments, I saw that they used some really odd airlines, but when I asked them about that the reply was more or less “hands off, that’s our business”.

If everything works perfectly, then you don’t have to care; everything works and someone else has to take care of all the fuss with forwarding agents and so. But if it doesn’t work, then it’s a whole lot more complicated, because then you’re always speaking through a middleman.

We’ve got some reactions from *Provider* that “none of our other customers are as involved in our internal routines as you are”, *LM* has heard that from them. Why, that’s not strange if things don’t work! Now, when we’re on our fifth year with *Provider*, we can see that we haven’t raised enough demands. I mean, even if you outsource, you must have a counterpart at the head office who can deal with different issues, one to whom they can turn and who can see to it that they get in touch with the right person if they have questions.

S6:9

You must have someone to coordinate it all, you can’t just let things go and say “nah, we’ve outsourced that now, it’s their business”. I think we’ve let things get out of hand for too long. Of course, there have been clearly appointed contacts regarding DD issues, but for all the other issues it hasn’t been as good. We have a communication matrix printed, with names from *Provider* on one side, and their counterparts from *Shipper* on the other. But I say we’ve been handling this too loosely, and the reason that things have started to improve now is that we’ve taken a firmer grip on things.

But part of the problem is also, I think, that they don’t have their heart set on doing the best they can for us. They work for us, but *Provider* pays them. But even if they do, you want them to work for you, to feel for you... But you never get it the same way, for better or worse. You can see it really clearly at times, like just the other day we had a shipment to South Africa that was delayed since *Carrier* had sent it to Canada instead. Normally, if we had had such a shipment with *Carrier*, I’d have phoned them up and said, “you’ll have to credit us”, and they would have accepted that. But now *Provider* said “no, we won’t make a claim towards *Carrier* for this”. I insisted, but they refused. When things like that happens, I feel that *Provider* don’t side with us.

Another feeling I have is that now that we've outsourced there's someone who has to make money on this; it's business now. It all started when there were a lot of problems with different things. Goods could arrive damaged, or there could be missing items; I know that in the beginning there were also lots of damaged goods because *Provider* hadn't packaged properly. So I thought they should credit us since they hadn't done things right, but their reply was "no, we can't do that because you haven't asked for any insurance". We have transport insurance of our own, but we haven't asked for any from *Provider*. I think that's really bad; they haven't packaged properly, they even admit to that, but they don't have to pay for it. There were a lot of those things that made us feel like the constant loser; it was always *Shipper* who had to pay for everything.

We started up a claims database from the beginning, in which we register everything we think *Provider* has done wrong. The reason for setting up the database was to get away from having a lot of loose complaints about "too much goods is damaged, too many shipments are late" and such. Everything is being logged, both inbound and outbound shipments. We do it to have statistics for follow-up purposes, and to give *Provider* a possibility to issue corrective and preventive actions. Unfortunately we don't see too many preventive actions, but when we had problems with packaging the reply was they would make sure the goods was correctly packaged.

They did solve the problems with packaging. Of course, they do some mistakes sometimes, but we can keep track thanks to the claims database; we do quarterly audits to see if the number of claims are increasing, if certain categories are more frequent than others, and so on. The trend is positive; there are fewer and fewer claims.

We actually had something similar when the warehouse was in *Swedetown*, but not an online database; we used forms that the subsidiaries could fill out and send us by fax. But nowadays we have a totally different type of shipments, since we're distributing directly to the customer. The trend is positive, however, but sometimes one can see there's a peak; it can happen that the number increases a certain month and when you ask, *Provider* can usually point at a specific cause.

But at times it's been catastrophic. I think it was in April last year that we gave *Provider* an ultimatum; "get your act together or take the consequences". After that they've made some changes in their organisation, and that has really worked wonders. But I think they also have a central policy to only have a certain portion full-time employees; the rest they have to bring in as temporaries from manpower companies. But I think the supervisor has done some changes and made sure that people who don't do a proper job have to leave immediately. Nowadays they make sure they have good people working there, and if they bring in someone from a manpower company who they think is doing a good job, they offer that person employment with *Provider* instead.

As I said, it's difficult to say how long it takes before you get things settled, but I think it takes a couple of years before you find your forms of cooperation and learn how to work together. We had two guys from our warehouse in *Swedetown* down there for half a year or so, the former warehouse manager and another fellow, but perhaps we should have done more, perhaps we should have had someone from the shipping side too to educate *Provider's* people. I think we should have been in on that from the beginning, I believe that was a mistake not to involve us from the beginning.

The guys we had down there became trouble-shooters, they had to take care of things if any problems came up, and that was very valuable. And I think it would have been good to have someone from the shipping side down there too maybe not all the time, but someone who could do frequent visits. But I think most of us thought *Provider* knew more than they did regarding shipping.

I took over DD quite recently, at the turn of the year; it wasn't until then it was handed over from a project to Operational Logistics' responsibility. I can see that, just for the part I'm responsible, there's a lot left to take care of. That's stimulating of course, but still there's a lot left to do; there's routines and processes that need to be set. I myself had to sit down and learn things; "how far have we come with DD, which countries are included, what carriers are we using?" and such.

Nowadays we have Open Day-events in *Dutchtown*. The purpose is to give an opportunity to those who haven't been there, those who work with the warehouse in some way, to get to know the people and see how things work. They get to meet those with whom they are in contact regularly and so. The last time we were some 20 people, three from HQ, and the rest were from different subsidiaries. We got to walk around the warehouse, and they held some presentations and so.

S6:11

Working with the subsidiaries

Those who work at subsidiaries that don't have a warehouse of their own today, those that are included in DD, they have to learn that working with a central warehouse makes it necessary to stick to certain routines. If you have a warehouse of your own, you can do as you please; you can have your own routines, you can accept certain returns, etc. But that won't do when you're working with a central warehouse; a central warehouse must have stricter routines that serve all. I'm not saying that local warehouses aren't strict enough, but you do have a certain degree of freedom, which you can't have if you centralise. You have to adapt and everyone must stick to the routines, to understand the rules of the game.

That's really difficult to accomplish; to spread the information so that everybody gets it. Communication is always difficult. For instance I could see this at the last Open day; I think that for many of the questions I got from subsidiary people, there are people at the subsidiaries who know the answer. The problem is the information doesn't reach the person who needs it.

Sometimes you can see examples of how knowledge is used to obtain power. Some people in the subsidiaries they get certain information, but they don't share it, because they see that they'll have an advantage if they're the only one who knows about it. And sometimes information doesn't come through for other reasons. Like when I took over DD at the turn of the year; I, LM, and my predecessor sat down and went through things for a couple of hours, and I made some notes. But it wasn't exactly like "here you go, it's all in here, this is what you're taking over"; it was all kind of new to me. It wasn't all news of course, but I still think a lot of information was missing. Therefore I've started gathering information in our logistics handbook; I've tried to gather what I call "facts and guidelines about DD", I've tried to gather as much facts in there as possible. This is partly for my own sake, I want to get a good overview of what I am actually working with; which countries are we talking about, which are the contacts...? I've tried to spread the information that this handbook is available online. I've noticed that when you try to communicate about things, there's always a lot of e-mail going back and forth. Therefore I think it's better to have it all gathered in one place, where everyone can go and look for themselves. This is the embryo to a document that can be used as a reference book. This also makes it possible to hand over something more substantial, if I one day will hand over responsibility for DD; then I can say, "here you go, it's all in here".

The logistics handbook is part of our quality handbook, which is divided in different sections according to how *Shipper's* world looks. We try to gather as much information as possible that has to do with logistics routines; returns handling, distribution policy, those kinds of things. I don't really know for how long we've had the logistics handbook, but the online quality handbook has been around for some time. Initially there were binders that were distributed to certain managers, but we've gradually transferred the information to the online handbook.

The handbook is divided into different sections covering different geographical regions and functions; logistics, production... There are different sections regarding routines, policies, *ERP*sys-issues, DD and such. There's a lot of general information in there, and there's also a lot of specific information regarding for instance DD. There's directories of all the people working with DD in the subsidiaries, in *Dutchtown*, at HQ... There's information on which carriers we use, the order cut-off times for these, what service alternatives they offer. The entire handbook is an online database included in our Notes-system; everyone who has access to Notes also has access to the handbook.

Everyone has access, but what we don't understand here at HQ is that even if we try to be clear in our information, the people in the subsidiaries don't always know how to find the information they need. We must make sure that they've got it, it's not enough to say, "the information is on the global handbook" if they've never seen the handbook at all... For instance, I noticed that nobody had told the subsidiary people which fields in *ERPsys* that are transferred to *Provider*'s system. That's really important; if you don't know where to enter information in order to make sure it's transferred correctly, well, then the address won't be correct and then they can't send the goods to the right destination. But nobody had told that to the subsidiaries. When I noticed that, I informed them.

There was a mailing list in Notes called "DD members", but far from everyone working with DD were members on the list. So I charted which people it was who actually were involved in DD, and started a new list, so that if I have some information I think they all should have, I make sure they get it right away. But at the same time I realise that if I for instance send them an e-mail telling them how to enter address information in *ERPsys*, they'll pretty soon forget that. Therefore I think it's better that I gather the information in the handbook; then all I have to do is teach them how to access the information.

In working with *Dutchtown* we have another aid as well, there are shipping instructions so that they can see how they should handle shipments to different markets; they can see which forwarding agent to use, which airport to ship to, which documents that should be included in how many copies, in which language... We started off doing this on paper, because we realised we had to give them the information for how to ship. But then we've transferred this to a database.

S6:13

What is the outcome?

Regarding the effects of these changes, I know what *Logicon* estimated that we would save, but I've never seen any figures on the actual outcome, if we reached the targets. We're renegotiating with *Provider* right now, so I guess that'll be an issue, to see how costs have developed and if things have turned out as we hoped they would. But I'm not involved in the discussions with *Provider* now, not more than that I get to see some things that come up along the way and to give my opinions. But we've previously discussed the pros and cons of our current contract, what has and what hasn't worked out in practice. For instance, we've had a very strange clause regarding stock counting; if there were inventory balance differences it was the net that was counted, which means that if you had too many at one time, and too few the next, these would cancel each other. From my point of view you've done something wrong in

both instances, counting the net is purely a theoretical construction and you can't have it that way. I just can't understand how we could accept such a clause.

But there hasn't been any follow-up of savings that's been distributed to us who've been involved or affected. We've never been able to see anything like "the goal was to save so and so many millions and this is what we reached"; nothing of the sorts has ever been presented to us. I've asked both *LM* and *ODM* several times if we've really saved any money on this, and they've replied "yes", but I've never heard if we've done more or less than the target, or exactly what was expected. On the other hand, that's not what's most important for me; I'm interested in making sure things work. Of course, making sure costs go in the right direction is important, but for the day-to-day work the most important thing is making it work. But since I saw *Logicon*'s estimates from the beginning, it would of course be interesting to see what we've actually accomplished.

But sure, things have gotten better over time, but it can get better still. Some countries are still outstanding; I mean, we can't have a transport performance of 77% to Norway! But looking at the overall level to all countries, we have good transport performance, but some countries are really bad and it's those I have to work on. As with Norway, for instance, right now I'm sitting there going through the entire customer database to make sure all addresses are correct. That's the level you have to work on to do things properly.

Story 7 Subsidiary Manager

Before distribution was centralised, we had a rather traditional structure with local warehouses at each sales company, and all the problems that are associated with such a structure, mainly having a lot of inventory but stored at another place than where it was needed at the moment. In that sense centralisation has been very good for us, our ability to deliver what the customer orders has increased dramatically.

On the other hand it is very bad that we can't rely on the carrier to ship the goods in time. That is a part that hasn't worked at all, especially when it comes to shipments to Norway, which isn't part of the EU. *Carrier* has no routines to handle shipments outside of EU, which causes us a lot of trouble.

This means insecurity for our customers, they can't rely on that they will get what they order within the time we promise. It was only this year that we started direct distribution, to Norway, before that we had a local warehouse, but it won't be long until we start losing customers because of this. They give us some slack, but customers have a limit to how much they can take, you know.

Distribution costs have increased a lot for us locally. Before centralisation we could use inexpensive postal transportation from our warehouse in *Swedetown*, now we have to rely on expensive courier services from abroad that cost a whole lot more.

It was at a subsidiary manager meeting that the people from HQ informed us that they had decided to centralise distribution and had closed a deal with *Provider* and *Carrier*. There were never any discussions about whether or not this should be done; it was rather that they informed us that so would it be.

Of course we knew before the meeting what was going on, that kind of information always spreads in an organisation like this. We didn't take part in any analysis or so, but we were asked for some information. We were also asked about our opinion on some structural issues.

Now in retrospect we can however see that there wasn't included any substantial penalty clauses in the contract, I mean, as the contract seems to be written today any one of the parties don't have to worry about any penalties if they don't fulfil their part of the deal, and that is absolutely absurd. If we had taken more active part in the process, I guess we would have made sure that kind of clause was included.

Sure, one can of course think that it should have been so that everyone along the line should have been involved, but that wouldn't have been practically feasible. One can't demand that everyone participates in every change project, that's just unreasonable.

The cooperation should be directed to one party only, otherwise we will only end up with the parties blaming each other if something goes wrong. That's exactly the situation we're in now. The communication should be with *Provider* only, and then it should be up to them to handle the carriers, in fact I don't care how, as long as they do.

Today we spend a lot of time chasing a carrier that doesn't function, and they in turn, I guess, spend a lot of time on coming up with excuses for why they don't perform as they ought to. In fact, things have gone so far that I myself have summoned *Carrier's* Nordic management to a meeting here at my office to try and sort things out. It shouldn't have to be that way that I, who work in the line organisation, should have to deal with these issues, but that's how things are now.

If people who read your work are to learn something, I guess that's the purpose, they should know this: To succeed with something like this, four things are absolutely necessary. You need a strong contract, you have to specify the demands on each part very clearly, you should write the contract with one part only and you should make sure that penalty clauses are included.

S7:2

If you decide to outsource, you must do things one hundred and twenty percent, since once you decide to do so, you burn so many bridges. You change the infrastructure of the company so radically that it is very hard to turn back.

In fact, in worst case we will have increased costs not only because transportation is more expensive, but if the carrier doesn't function properly we might in some cases have to pay our customer penalty fees.

We have a contact at HQ – *Distribution Support (DS)* – who has helped us a lot, and that is really good, he does a tremendous job, he tries really hard to help us out here. But he doesn't succeed with *Carrier* either, as soon as he tries to approach them with some issue there is a lot of people involved to solve it and the result is often negative.

I think this entire change process that we've gone through is a double-edged sword. I realise that I seem somewhat negative about this whole thing, but there are positive effects of it too. The entire availability issue is one thing that has improved radically thanks to centralised distribution, it is transportation that doesn't work. *Provider* has caused us few troubles, it's *Carrier* that doesn't do their part.

Story 8 Subsidiary Logistics

Before direct distribution

At the time when discussions about direct distribution started I was responsible for logistics in the Nordic subsidiary. We had our main office in Sweden, with branches in Norway, Denmark, and Finland; we also had a distributor in Iceland. The Swedish market is our largest one. We had a small warehouse in each country, and I was responsible for logistics and customer service. We thought things worked fine in those days, we had full control over our products; we knew what we had in stock and we very seldom had any backorders. The distribution to our customers worked fine, we used postal services. There were rarely any delays, we had things under control.

We had a warehouse in the same building as the main warehouse in *Swedetown*, and the small warehouses were supplied from there. We had about a month's consumption in stock in Norway, Denmark, and Finland, and in Sweden we held about two months. We made our own forecasts and kept an eye on things all the time. We had a great advantage in having our warehouse right next to the main warehouse in *Swedetown*, and if something happened it was easy to fill up our own stock.

So we could supply our customers from three warehouses; the national warehouse, our warehouse in *Swedetown*, and the factory warehouse, and it was always possible to move goods in between them if necessary.

We mostly offered our customers 24-hour delivery, due to the postal service, but in some places like in northern Sweden it could be longer. It was quicker than it is today, but I can't really remember exactly.

We had people in our offices that received orders and packed and shipped goods; two each in Norway and Denmark, and one in Finland. In Sweden there were two people in *Swedetown* who did the packing and shipping for us.

The DD project

At that time I was in close contact with *Operations Development Manager (ODM)* at the head office, so I knew quite early what was going on, about a year in advance I think, and then they had to take it step by step, one country at a time. They had to make sure everything worked and solve any problems that emerged.

Having a central warehouse has both good and bad sides. The advantage of not having a central warehouse – since things worked so great for us on the Nordic market – was that our customers were satisfied, and we seldom had any backorders. The advantage of having a central warehouse is that a lot of work has been lifted from us, we've been able to free up resources that we can use for doing other things. Like the people who worked with orders and shipping; since the central warehouse came they can work more with the customers, and we can offer better customer service.

The decision to centralise and outsource was taken at HQ. There were never any real discussions about whether or not we should do this; it was rather that they informed us that this would happen. But I got to do an evaluation of how things worked here in the Nordic countries before that. We looked at our shipments; did we have any delays, what kind of transportation did we use...

This was something we wanted to do ourselves. We felt that if they were to go through with this central warehouse, they would have to show us that it would really be better than what we had. So we wanted to show them how things worked. It was *Subsidiary Manager (SM)* who pushed for that; that we should evaluate closely what we had and if things really got better afterwards. But this was after they had decided on centralisation, I think.

Distribution Support (DS) – and I think *ODM* too – were here and discussed things with us, how things would be in the future, and gathered some information. They wanted to know what kind of transportation we used in different countries, what kind of delivery times our customers were used to, and such. There were never any real discussions about whether or not this should be done, regardless of which conclusions we had reached, the decision was made centrally.

We weren't exactly thrilled over this, but there are both pros and cons with this. One could see the advantages of not having to take care of handling logistics; having all these warehouses to keep an eye on all the time. One could free up resources for other things; I could see other things I could do with my time, that I would be able to work more with customer service. But at the same time we worried that we were going from something good to something that was worse, that was our main concern. I mean, if you should do a change like this, you want it to be for the better.

By their calculations things looked really good, but at the same time you know that in reality things always look different; there's always something that comes up under way that will make things more complicated.

We had our fears, and we brought up those issues with the people from HQ, and they promised they would see to it that all things were taken care of. They would take one country at a time and make sure all problems were sorted out before the next country was included.

Our biggest problem was Norway, since they aren't part of the EU; things get stuck in the Customs and you have all sorts of problems. We understood that for Denmark things would be slightly better, since that would be closer to the central warehouse. And then there was Finland, we had some minor problems there too when starting up this central warehouse thing.

The main conclusion of our investigation was that we were quite satisfied the way things were, and that our main concern was whether things really would turn out as good as they promised. We worried about the delivery times, and if our customers would really receive their shipments in time, and if there would be more backorders than before. But they promised that all those things would work out fine.

They had a schedule for in which order to include the countries, and that was changed along the way since problems came up. Norway was the last one to go, I can't really remember when that was since I was on leave then; 2000, 2001 perhaps.

I can't really remember which country was first, but I think it was Denmark. We took the countries one at a time when the decision was made, we just had to get in line and do what we had to. We got to keep our local warehouse for about a month after they started delivering from the central warehouse, and when everything was set and working we had to return the products. And we had to change everything in *ERP System (ERPsys)* too.

I can't really remember in what order direct distribution was rolled out, but it was done quite quickly, with about a month in between the countries. But Norway was last; I know that for sure since they aren't part of the EU. The people at our Finnish and Danish branches were relieved to get rid of the warehouse handling, and especially Denmark was positive, since they saw that they would be able to offer a shorter delivery time to the customer. They did have some problems in Finland, things got worse than before. But in Norway they weren't all that positive, they knew how hard it was to ship goods from EU into Norway. Things still aren't working there, they're discussing with *Carrier* how to solve the problems. But I don't really know what they're discussing, that's on a higher level, with HQ, the Norwegian manager and *SM*.

S8:3

Effects of DD

Nowadays, when we've been doing this for a while, I think we're at the same service levels as we were before centralisation. I have no idea how we're doing cost-wise because that's not my job, but service-wise I think Denmark is better, and Sweden and Finland are at the same level as we were before. In some places up north I think they're having some trouble delivering the next day, but those customers are used to slower service, so that's not really a big problem. I guess they're better at planning in advance.

But we don't have the same control over things as we did back then. Looking at backorders for instance, we have more backorders now than we had before. That's because we held better stock. Nowadays there are more of us competing for the stuff and I don't think they've really sorted out routines for how to control inventory yet. But I don't really have any statistics for backorders or so, and I guess it's a little unfair to say that it's worse right now since we've had a lot of new product launches. But delivery times are about the same for Sweden, slightly better for Denmark, slightly worse for Finland and Norway is a disaster.

Before the warehouse was centralised we didn't really have these problems with Norway, they had their own warehouse and that worked really fine. In those days we had a good relation with Customs and we had all the documentation. And there were only shipments to one destination, to one company; nowadays that's split on all our customers, there are many small packages.

The head office people got information from us regarding how we took care of our shipments to Norway, but that wasn't really useful since they're shipping from *Dutchtown* now. But they have the information, so I don't think that's the problem. I think there's something wrong in the contacts between *Dutchtown*, *Carrier*, HQ and Norwegian Customs. The people at our Norwegian office laughed when they heard that we were going to ship directly, they know how difficult it is.

S8:4

But as I said, there are pros and cons with central warehousing. I think I would keep the central warehouse if it was my decision to make, but I would have liked them to do more investigations regarding transports, so that our customers could have their shipments on time, so that we could compete with other suppliers that are better at delivering on time. They should have looked into that more closely. I can't really say that we're losing sales because of delivery time, but I think that's the dominating reason. I'm not sure, but that's what customers say sometimes. But I don't really know how our sales volumes have developed over the years, since I haven't studied that.

My own work has changed a lot due to this change. Before centralisation I was responsible for four warehouses, I took care of replenishment and all that. Nowadays the head office does most of that. What I do today is mostly pricing, and taking care of contacts with the customer if there's some problem with a shipment; I've shifted from logistics to customer support. And the contacts with head office are less, that's not really necessary any more. It happens that I talk to *DS* at times, if there's a problem with a shipment to Norway. And sometimes I talk to them if I want to know when a product will be available if there are backorders.

Story 9 Warehouse Manager

This is the story told by the person who was the manager of *Shipper's* warehouse in *Swedetown* before it was moved to *Dutchtown*

About the warehouse in Swedetown

I started my job as warehouse manager in 1990. I took over after a person from the head office who had started up the warehouse here when it was moved from HQ. That was in 1989, and the reason for moving it here was that we had some empty space available, and that the warehouse at HQ had become too small for our volumes. We also had staff available, so it fitted quite well.

Before the decision to outsource

I remember that my boss at that time, sometime during the spring of 1997, spoke about some kind of investigation that was under way; it was about where to localise the central warehouse. We reacted according to our own interest of course. After all, we were 23 people working in the warehouse and goods reception by then. We tried to develop a competitive alternative of our own, but we realised where things were headed after a while. We could read between the lines that we wouldn't make it.

The reason for moving to a central warehouse was that there was a lot of capital tied up out there in the subsidiaries around Europe, and I guess they saw advantages in being able to control things centrally. The issue was the delivery time from the warehouse to the customer, so for our alternative here in *Swedetown* we had to close down order reception a lot earlier than they had down in Europe, to be able to ship all orders on time. That was a big disadvantage for us. But cost-wise I guess there wasn't that much of a difference between the alternatives. I think they had two alternatives, one in Holland and one in France, and they chose to work with *Provider* in Holland. How they selected the partner to work with and such, that part of it I never got to see. They didn't include us in that work, it was *Operations Development Manager (ODM)* and *Project Leader (PL)* who worked with that.

I was more in on the operative parts, the shop-floor work, so to speak, so what *ODM* and the others were doing, I never saw. Of course, it happened at times that they invited me to some meeting, but most often I only joined then for some ten minutes or

so, when they were dealing with the issues in which I was involved, and then I had to leave the room again.

Response from Swedetown

But the information that came to my knowledge in spring 1997 I was told to keep secret, in order not to invoke too much anxiety in the organisation. That made it necessary to do some work after the workday was over, when people had gone home. Then my boss came over, and we counted and measured, and tried to see if we would have room for all the stuff in the warehouse. Had we done that in daytime, people would have known what was going on, so we had to do it secretly. I served my boss with information and he made the entire investigation, he was really good at that. Then we went through it together until we felt that “OK, this is something we can back up”.

The decision to outsource

S9:2

But then it was decided to place the warehouse outside of Sweden anyway. By then they had two candidates and they brought those two here to *Swedetown* to look at our warehouse to get a feeling for the kind of products, how we were organised and such. That was in fall 1997.

When the decision was made, all the staff was invited to an information meeting. *Vice President Operations (VPO)* came here for that occasion; he has always had to play the role of the archangel in times of bad tidings. But he was also the highest ranking manager for this. There had been no official information prior to that meeting, but by that time I think people here had understood which way things were going. I don't think anybody had gotten any information that the decision was actually taken, but there are always rumour and speculation.

At the information meeting, they presented the different alternatives, and pros and cons of each of them, and they told us their conclusion. I guess they showed a number of slides and so. I didn't really agree with them at that time, but after I had worked down in *Dutchtown* I realised that this was actually quite a good solution. But initially we thought that the service they would be able to offer from a central warehouse in central Europe, we could offer from here as well; other companies have done so with good results, so why should we be any different?

But when I was down there I saw that they could keep order admission open until six or seven in the evening, and still be able to ship the goods in time to deliver to the

customer on time. We would have had to draw the line at four o'clock, so I guess that was some wishful thinking on our behalf.

But when they visited us here in *Swedetown*, *Provider* and *TPL-B*, they did so after hours, to keep it secret from our staff. It was I, my boss, a delegation from HQ and representatives from the candidates came here in the evening when the building was deserted. There was some secrecy, indeed.

But I didn't join the visits to the proposed warehouses, it was *ODM* and *PL* who handled that part. *PL* was very capable; she did a tremendous job. She was very enthusiastic and worked hard, but at times you could tell that experience does matter. Sometimes I had to intervene when things were running away a bit too fast, when enthusiasm got the upper hand.

Of course you want to stick to things that you're used to, that's just how things are, but as we went along, and I realised that this was going abroad after all, I had to think about what part I would play after this was over. After all, we were 23 people, I worried if there would be anything I could do here after the warehouse had moved. At that time, there were other larger employers here in *Swedetown* that had closed down facilities too, so it wasn't easy finding a new job here. I guess it would have been tough if the opportunity with this new company hadn't emerged.

S9:3

Unexpected relief

There was a company that was going to move a large warehouse to *Swedetown*, and they needed staff. This was very convenient, because that made it possible to offer our people new jobs. In fact, in order to make it possible for them to take over our people at all, some of them had to quit here before our warehouse had been moved, and we had to bring in people from production as backup. We did this to give our people the opportunity to get these new jobs, so that the new company wouldn't hire somebody else.

The new company wasn't willing to pay anything more than the salaries for those they took over, so *Shipper* paid for their training. We were quite well paid here, at least for doing warehouse work, and the new company wanted to pay less. To compensate for the income loss, *Shipper* agreed to pay the difference for one year for all the people who moved to the new company. Every one of our people was in return guaranteed employment for a certain period of time at the new company.

This deal with the new company came as a positive surprise, exactly at the time it was decided to move the warehouse to *Dutchtown*, so our manager here could present this

at the information meeting at which the decision to move was announced. In that way, they could present some good news along with the bad.

Of course the spirits sank among our people in the warehouse as soon as the decision had been announced. Some of them lost their motivation to work, but we were prepared and had arranged with extra staff to compensate. But that didn't last too long; I guess they were too proud to let things go wrong because of that.

Preparing for the transfer to Provider

In connection to the warehouse move there was a lot of work, and we had to do a lot of overtime and most of our people helped out. We even had to ask people from other parts than the warehouse. They got to sign up on lists if they wanted to do some extra work to help out and pack the goods and so. That was a little extra motivation, that they could do some overtime and earn some extra money. We also arranged with food, and baskets with fruit and candy, for those who helped out. Those who wanted could do as much overtime as they wanted, some worked a lot whilst some others chose not to work extra at all.

S9:4

We prepared the move in such a way that when we got deliveries of goods we knew would be transferred to *Dutchtown*, we packed that in boxes directly and marked those with article numbers, batch numbers and so on. We made sure it would be easy to unpack when the goods arrived in *Dutchtown*.

The stuff that was most difficult to deal with was all the promotional material, all the printed matters were the most bulky things we had. We took the opportunity to throw a lot of it away, we had been hoarding some stuff through the years.

In parallel to preparing the move we let more and more of our people go to the new company, so we had to compensate with more people from production to keep the warehouse and packing running.

The transfer to Provider

When all the packing was finished there was actually no more work to be done in the warehouse, so we let our people go home and have a couple of days off. I think it was quite a good divorce, if one can say that about a divorce... at least it wasn't unhappy. We even had a real farewell party in the warehouse.

We started up down in Holland in the beginning of April. I, the supervisor from reception control and another guy from here, who was of Dutch origin, we went down there to help them during start-up. That other fellow, he worked in production, so he undertook six weeks of training in our warehouse before we left. He was really good at handling computers, which was good as that was basically all we did down there. There were two consultants from *ERP System Consultant (ERPsyscon)* too, to help sort out all the errors that were encountered as we went live with the system.

My job was mainly to develop routines for error handling on the warehouse floor, for instance if they would encounter an empty bin they needed routines for how to generate a new picking order with an other bin number for that specific article. I worked with all kinds of routines to make them as simple as possible. But configuring the warehouse management system was *Provider's* responsibility. Of course, they came by and asked for my help at times, but it was their decision in the end.

Operations caused no problems in the start-up, *Provider* has a lot of experience of such things, so that worked out fine. Perhaps it was a little different for them to get acquainted with packing our products. They required different packaging than what their people were used to, but we got that sorted out as well. The biggest problem was with *ERP System (ERPsys)*, to get communication between *ERPsys* and *Carrier's* system to work. Every order generates many *Carrier*-documents, and that caused some trouble.

But it was just the same when we started up *ERPsys* here in *Swedetown*, when we still had the warehouse here. The system could do just about anything, but printing address labels just wasn't possible. But the problems we had in *Dutchtown* were slightly different; we didn't have all that many shipments through *Carrier* before we moved the warehouse to *Dutchtown*.

They sometimes thought we took too much initiative. They didn't like us going directly to the employees to talk something through if we wanted something done. That's not how things are done down there, they want you to go through the correct channels, via the managers. Things are much more in the hands of the boss.

I spent a total of eleven months down there. We shipped the last part of our stuff in the end of April so that they would arrive the last weekend that month, and we came down next Monday. We had a deadline to have things up and running within two weeks from that, so we worked really hard and late into the evenings. When I left I was guaranteed another job here when I would return.

It was a positive period, with a lot of work, but it was good. The initial plan was that we should stay for ten months, but when that period came to an end we realised I had to stay on for another month. The company had really arranged things well for us, we

had a little house that we lived in, and they had rented us a car, and we had free trips home to visit family and friends.

From HQ's side they had expected that reception control would be the most complex part for *Provider* to take over, but it turned out that it was in the warehouse operations part we had to do most of our work. That meant that our reception control supervisor – he should have stayed on for the entire time – got to go home early and instead the other fellow got a prolonged assignment.

It's funny, they said from HQ, that the part *Provider* was supposed to know the best was the one in which they needed the most help. But you know, it was working with *ERPsys* that was the biggest problem, it was new to them. *ERPsys* is no easy system to work with. In the other warehouse they operate down there, they have their own tailor-made system, but for us they had to support their operations with a standard system. So most of the time down there we sat with the computer and helped out when things went wrong.

Starting up DD

S9:6

In the beginning the new central warehouse fulfilled the same function as the *Swedetown* warehouse had, we served the subsidiary warehouses; this went on until fall –98. At that time DD was started, and in a short period of time Germany, France and the Netherlands were included. That was when the returns started to pour in. Earlier the subsidiaries had handled returns themselves, but now they came to the central warehouse and by December, when we were going home, they had a huge pile of returns that hadn't yet been taken care of. *Provider* didn't have the resources to handle returns, they hadn't realised just how much resources that part would take. I guess that was our mistake, but I'm not sure if this had been an issue in the discussions with *Provider*.

There were a lot of things with returns that could cause trouble; the packaging could be broken and need replacement, or the number of articles could be incorrect. We could get a return order from the subsidiary for ten items, but no matter how many times we counted the goods we had only got nine from the customer. If that happened, the goods should be sent back to the subsidiary, but they had already credited the customer since they never got to check the products themselves, the product was shipped directly to the warehouse from the customer. Sometimes the lot number was incorrect and it had to be placed in the pile for "items under investigation". That pile just kept on growing, and eventually we had goods worth several million in there. *Provider* had no routines for how to handle this, and I didn't really know how to

either, so we had to develop routines as we went. Then we could start working and piece by piece do away with the pile.

Another problem was that as soon as a return was handled in the system, it was booked as available for picking, and of course it was almost instantly booked on a picking sheet, but it wasn't yet available physically on the shelf. We had some real problems in getting *Provider* to allocate staff to immediately transfer the goods to the shelf. But eventually they did, and now they have one person working full time with returns.

Provider was quite professional regarding warehouse operations, but they weren't used to our IT-system, and that was their biggest obstacle for making things work smoothly down in *Dutchtown*.

They should work in our system, *ERPsys*. So when it was decided that we should work with *Provider*, the person who got the responsibility for our central warehouse on their side demanded that the system should include a full warehouse management-module, so that the system would handle all the warehouse data. It should say where to place goods, keep track of empty bins, etc. We didn't use such a module before, but it was an unyielding demand of theirs. But he was really good at what he was doing, their person in charge, he knew exactly what he wanted and why.

We hadn't thought so much about that part when we implemented *ERPsys*, as we hardly knew about that module. We had used manual warehouse placement up here, we placed the goods wherever we wanted to, and manually entered that information into the system. Now things became the opposite, it was the system telling us where to place the stuff.

But this was an entirely new part for us, so we didn't do much right in the beginning. We had had a crash-course in that module, but that was in a training environment prepared by *ERPsyscon*. In the training facility everything worked just fine. But when we started using it in reality, things didn't really work out the same way. But after a while we started to figure out the logic of the system. The first week was one of trial-and-error, but when we got things right we didn't really understand why. So we had to bring a guy from *ERPsyscon* to explain things for us.

Another thing we noticed after a while down there was that employee turnover started to escalate. In the beginning there was almost no turnover, they had a bunch of young, enthusiastic blokes and gals, it was a little like McDonald's. Youngsters are quicker, they run faster, they have the energy to work harder and they don't demand as much pay. But they go for another job after a while. When they have learned how to do the job, they quit, and then someone else comes in and does the same mistakes once again. What you learn from experience you can't get from someone else.

In the beginning there wasn't much of a turnover, but after the first period of time, after the honeymoon, things changed. In the beginning it was really cheerful down there, people were singing and laughing, but the laughter slowly faded and it became more of an ordinary workplace. Problems started arising, and it happened that people had arguments and yelled at each other.

I had to write weekly reports to *ODM* and when the day of my departure was approaching, that was my biggest worry, the employee turnover. I realised that it would cause trouble in the future. I could see with my own eyes how people quit, and they could see that back home as well, through the picking errors that were apparent.

In the beginning they were seventeen people working with our stuff, and when I went back there in November last year (2001), there were only three left from the original team. All the really good ones had quit, especially those who were good at handling *ERPsys* had gotten jobs at other companies using the same system.

ODM wanted the weekly reports because he thought the information he got from *Provider* wasn't always correct. He could see for himself what happened in *ERPsys*, so he wanted my view on things too. I guess that it differed a little from the information he got from *Provider*, who mostly spoke to the managers and never really got to talk to the people on the warehouse floor.

HQ demanded a lot from me, but they listened too. *ODM* is a person who is good at listening; he could really pick out the important parts of the message I tried to put forth. *ODM* was the one I spoke to the most, *VPO* was involved too, but one could say that *ODM* was my boss when I was down in *Dutchtown*.

Coming home from Holland

I didn't start my new position directly when I came back from *Dutchtown*, I spent a couple of months correcting things in *ERPsys*, together with the people down there. After that I went through some things in *ERPsys* related to our production here.

When I went back in November it was the first time I visited *Dutchtown* for a year. There's really no reason that I should go there, except when something happens. This time it was the kit assembly that caused some trouble; we just couldn't understand why certain things happened. So we had to go down there and sort things out, we changed some routines to make things work, since they were doing it wrong in *ERPsys*.

But otherwise I shouldn't have to go there, but if there is a need they send me since I have been there before and know their operations. But most of the issues we can

handle by e-mail and telephone, and since we are working in the same system online it's quite easy to sort things out without having to travel. There's no delay, we can sit and talk to each other on the telephone and work in the system simultaneously. That's how I work with their trouble-shooter if he calls me up with some question, and if I can't help him straight away I'll have to do some testing on my own and call him back after a while.

Most of the time when they call me it's because they're having some trouble with kit assembly and the production orders that generates. When that happens they call me because the people at HQ don't know anything about it. But I shouldn't be spending five minutes a week with *Provider*, but at the same time I enjoy doing it.

I can tell when they have someone new down there, because it always renders a little more phone calls than otherwise. But after a while things slow down and then I can tell that I have done what I am supposed to. But, as I said, I shouldn't be doing this at all, I guess it's kind of a heritage of mine.

Working with Provider

Up here in *Swedetown* we really don't have any contact with *Provider*, apart from the four weekly deliveries from our production. I guess it should be the one responsible for our shipments who should have contact with them, but if something goes wrong, I'm the one who talks to them. It can happen that we see in the system that a certain shipment of ours hasn't been entered into the system, then we call them and ask if something's gone wrong. We call mostly to check if they have forgotten to do the transaction in the system, which happens sometimes.

But it's only if something goes wrong that we have any contact with them from up here. We can see what we want to in *ERPs*ys, so most of the time we have quite a good hunch of what they have done wrong. But it's equally common that we have made a mistake up here, we forget to do the last transaction in the system when we transfer goods to the *Dutchtown* warehouse.

Successful?

I think this has been good for *Shipper*, no doubt. I was there when the Dutch subsidiary warehouse was dismantled and the goods was packed for shipment to *Dutchtown*, and I've never seen so much old junk in one place.

Many of our subsidiaries had no professional material controllers. Instead it could be the manager's secretary who went through the inventory every now and then and ordered some new stuff. I guess it was like "OK, I need five of those, and perhaps a couple of these", but they could just as well order several months of consumption for some products. We saw a lot of that stuff; we ended up with quite a pile of products that were out of date. And it was the same story everywhere, at every subsidiary. So I believe the total inventory has been reduced quite substantially.

I mentioned before that Provider is supposed to be really good at logistics. They are, but the problem was that they weren't any good at *ERP*sys. But sure, organising and managing a warehouse, that part they did really well.

But there have been some problems when they have lost people. To those who worked there from the beginning, we managed to raise them to quite some skill level, but when they quit and were replaced with others, we never really managed to raise them to the same level. Instead of walking up the stairs, I experienced we were walking down.

But from what I understand from *Logistics Manager (LM)*, both the people at HQ and those at *Provider* have understood that high employee turnover is bad, so *Provider* have signed more people on longer-term contracts. Otherwise they work a lot with short-term employees and people from staffing companies. I think they have overrated that resource. You need more people who know your operations really well.

Story 10 Warehouse Worker

Before the warehouse closure

A couple of years before the information came that the warehouse would be closed down, we had moved to a new warehouse here in *Swedetown*, we had also employed some more people. I think we worked for some three years before it was decided to move the warehouse abroad. When we got to know that we thought, “couldn’t they have thought about that in the first place?”, but I guess that wasn’t part of the picture at that time.

We heard rumour that there were discussions going on about moving the warehouse. Before they had given us the information from HQ there was some talk about that, we asked *Warehouse Manager (WM)* and he could confirm that something was going on. There was also a meeting with management here in *Swedetown* and those issues were discussed there too. We were some 15 people working in the warehouse by then, and there were also some 5-6 in reception control.

Our job was to receive orders from the subsidiaries around the world and ship goods to their local warehouses. It was those warehouses they wanted to get rid of; they wanted to ship direct to the customers. There were some 20-25 subsidiaries we shipped to. We had reception control too; when the stuff arrived we had to check them very carefully when they came here from suppliers. We had some 2000 articles in the warehouse by then, and on top of that a lot of printed matters, like brochures, manuals... We shipped a lot of goods from here. We had specified times to stick to, and different transportation alternatives depending on to where the goods should be shipped. We had daily deliveries to all subsidiaries.

The decision to move the warehouse

We were informed that the warehouse should be moved to the Netherlands, to *Dutchtown*. There were a lot of discussions back and forth about what would happen to us, both the union and HR people were involved. We got to know it through the backdoor first, there was some rumour spreading. But then as soon as possible after the decision was made they came here and informed us, and explained the situation. It

wasn't strange there was rumour, after all this is a big issue and it doesn't just happen over night.

The reasons they told us was that they wanted to place the warehouse centrally in Europe, they wanted to be able to ship quickly to all customers. There was a cost issue too; they said it would be a lot cheaper this way. But nobody has said anything about how cheap it really turned out... Someone from *Swedetown* asked the people at HQ at some meeting, but got no answer, they hushed that down. So I guess it hasn't turned out all that cheap after all, in that case they would have told us for sure.

When they informed us they showed figures for how much they would save on this, I don't remember the exact figure, but it was several million. But I think the actual move turned out a lot more expensive than first expected. And I think they've had trouble getting hold of capable people down there. We had our daily shipments from here and those worked, there were never any problems, but to gather people with the capability to deliver with the same accuracy down there, I think that's been hard. I've heard they had a lot of turnover of staff.

New employer

S10:2

The first notice wasn't that we would have to quit; they said they'd try to work something out for us. But there were no other jobs here. One or two got jobs in production, but that were people who'd worked there before. But there was this other company moving their warehouse to *Swedetown*. Everyone in our warehouse was offered to go there for training. We worked on site in their old warehouse for six months. *Shipper* paid for the difference in salary for one year, to compensate for the income loss.

More or less everybody got jobs at the new company. Some declined for various reasons, but most of us accepted the offer. You wanted something to do in the meantime at least, just being sent out wasn't really an option. It wasn't easy to find a new job straight away and the choice between that job and unemployment was easy. But most of those who came along there have quit by now, I think there are some 5 or 6 left, and 5 or 6 have got new jobs here within *Shipper*. The mentality there, how they took care of people and so, was very different there. They had a completely different attitude towards their employees, you were expected to do what you were told and not ask any questions... It's a lot better here; they're really good at taking care of their people here at *Shipper*. If there is a problem, they take care of it; they don't just let it pass. I guess that's part of why I like it here, that things are in order.

In the beginning when they had informed us about the decision the mood was pretty bad, we wondered why they should move the warehouse when we had just got the new warehouse in order here in *Swedetown*. All deliveries arrived as they should; we never had any problems with that from here. We couldn't understand why they wanted to move. After all *Shipper* is a Swedish company, with both manufacturing and head office in Sweden, why couldn't the warehouse be in Sweden too?

We got to talk to our site manager here, and to the HR manager and the union, but it was only once there was anyone from HQ here to talk to us. The union talked to us frequently, and answered our questions and so. There was a lot of discussing back and forth before everything was settled with the new company. They made it sound really good in the beginning, but it turned out they promised more than they could keep in the end. We made good money here and they said that would be no problem, but it didn't turn out that way.

But the information that they were moving their warehouse here was given at the same time as the decision that our warehouse was being closed down. The timing was really good. They were going to start using *ERP System (ERPsys)* too, but they hadn't implemented that when we started there, so I got to educate the other people they brought in from outside, which was fun.

There was a lot of anxiety surrounding this, many of us had worked here for a long time. One wondered if it really would be all that economical to move the warehouse, and how much faster the deliveries would be. They had figures to show us, but we wondered a lot anyway. It felt a little like deception, too. You thought you had a job, but then in a couple of weeks it turns out you don't. There had been some other large closures here in *Swedetown* before, so it wasn't exactly easy finding a new job.

The management here in *Swedetown* didn't like getting rid of people, but there wasn't much they could do about it. But for the HQ people it was different, it was after all their job to do what is best for the company as a whole.

The warehouse move

We helped out and packed all the goods before the move, but then some of us went to the new company in advance of the others to start our training. We had to get people started there gradually, so I guess we were five who went there first and when the goods had been shipped to *Dutchtown* the rest came along. Our HR manager here in *Swedetown* helped out and made sure things were arranged well for us during training, that we had a good place to stay and so.

I'm not sure if this has been good for *Shipper* or not. If there are results, if I got to see a paper that shows this really has been profitable, I guess I'd think it's good. But if there's been no change, I'm not sure. I think they managed to shorten the delivery time to the customer, but then there's been other problems. There were a lot of picking errors in the beginning, and that delays things. After all, it's no use having next day deliveries if you get the wrong stuff... Here we had almost none of that, we knew the products and many of us who worked in the warehouse had been in production before. And we double-checked all orders before we shipped them.

WM and the supervisor for reception control went down there to help out during start-up, and there was another fellow too. And I think they sent someone from *Provider* to *Swedetown* for a while, some kind of supervisor.

I've heard from those who went down there that there were a lot of problems in the beginning, a lot of people who quit. I think they tried to get rid of people quickly if it turned out that they weren't interested in doing a good job, and get hold of someone new. So they had to train new people all the time, and I guess it takes a while before you get everything in place. That's no surprise, if you have to train new people all the time you have to start over again and again. I've heard there was a lot of that in the beginning and that caused a lot of delays. But later on I haven't heard all that much about how things are down there and I don't really care either.

APPENDICES

APPENDIX 1 TPL literature survey

The main part of the covered literature is journal articles, which I consider to be the most publicly available “arena” for publishing, as academic theses and dissertation (henceforth theses), research reports and conference proceedings seldomly are easy to get hold of if one has not attended the particular conference, or has connections with people at the department where the thesis is published. This has been the case in my survey, the theses have either been published at my own department or it has come to my knowledge through colleagues that a thesis that deals with TPL was being published at another institution.

Regarding conference proceedings, I have had access only to a limited few, as I myself have not yet attended any conferences, and even if I had I would only have managed a very limited sample of all relevant proceedings ever published. There is also a disturbing lack of proceedings readily available through online databases or such, why this part of the literature search has been very difficult, rendered only a few hits and thus probably is severely flawed.

However, as mentioned above I consider academic journal to be a much more “official” means of publishing, why I have put more effort into finding relevant journal articles. This search has been carried out as follows. Through the university library I have had access to online databases, either fulltext or abstracts only, in which the logistics (and closely related) journals that are most commonly cited (to my knowledge) are available. These journals are:

- International Journal of Logistics Management
- International Journal of Physical Distribution and Logistics Management
- Journal of Business Logistics
- International Journal of Logistics
- European Journal of Purchasing and Supply Management
- Logistics Information Management
- Supply chain management

I have then either conducted keyword searches with “logistics “ and “third party” or “alliance” or “partnership”, or browsed through the table of contents of the journals looking for these same terms. I have also looked at the reference lists of those articles, theses and so forth that I have read. For all hits I have then read the abstract and tried to assess whether or not the main topic of the particular article is third party logistics. For the selection of articles to include in the overview, I have tried to pick articles that

cover different topics related to TPL, in this way excluding some articles that in my opinion didn't add anything further to what was already included in others. This selection process was quite cumbersome, and it was difficult to maintain an overview of the material I had gathered so far, yet going into sufficient detail to be able to assess the articles. Thus it is possible that I have missed some important parts of the body of literature that deals with TPL, or have included articles that cover mainly the same topics.

Schematic overview of surveyed TPL literature

		LaLonde & Cooper (1989)	Sheehan (1989)	Bowersox (1990)	Sheffi (1990)	Lieb (1992)	Gardner et al (1994)	Maltz (1994)	Rao & Young (1994)	van Laarhoven & Sharman (1994)	Andersson (1995)	Lal & van Laarhoven (1995)	Leahy et al (1995)	Rogers & Daugherty (1995)	Sink (1995)	Skjøtt-Larsen (1995)	Bagchi & Virum (1996)	Dapiran et al (1996)	Frankel et al (1996)
Format	Article		x	x	x	x	x	x	x	x		x	x	x			x	x	x
	Book	x																	
	Acad thesis										x				x				
	Conf proceed															x			
Type	Empirical	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Conceptual	x		x			x				x				x	(x)	x		
Method	Survey	x			(x)	x	x	x		x	x	x	x	x	x			x	x
	Case		x	(x)			x		x		x	x			x	x	x		x
Theo. base	RBV																		
	TCE							x								x			
	Other	1	2					3			4				5	6	7	8	
Perspective	Buyer	x	x	x	(x)	x	x	x	x	x	x	x			x	x	x	x	x
	Provider	x		x			x			x		(x)	x	x					x
	Strategic	x		x			x				x						x		
	Operative																x		
	Other																		
Focus	Decision	x	x	x	(x)	x	x	x	x	x	x	x			x	x	x	x	
	Relationship	x		x			x			x		(x)		x			(x)		x
	Process														x	x	x		
	Other				1	2	3			4			5					6	7

		Gentry (1996)	Lieb & Randall (1996)	Sink et al (1996)	Tate (1996)	Andersson (1997)	Berglund (1997)	Daugherty & Dröge (1997)	Sink & Langley (1997)	Bagchi & Virum (1998)	Lieb & Maltz (1998)	Menon et al (1998)	Razzaque & Sheng (1998)	Berglund et al (1999)	Boyson et al (1999)	Fernie (1999)	Lambert et al (1999)	Langley et al (1999)	Rabinovich et al (1999)
Format	Article	x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	x
	Book																		
	Acad thesis					x	x												
	Conf proceed																		
Type	Empirical	x	x	x	x	x	x	x	x	x	(x)	x		x	x	x	x	x	x
	Conceptual					x	x		x	x	(x)						x		
Method	Survey		x	1		x	x	x	x		(x)	x		x	x	x		x	x
	Case	x			x	x			x	x							x		
Theo. base	RBV																		
	TCE					x			(x)										
	Other	9				10	11	12	13	14		15		16	17	18	19		20
Perspective	Buyer	x	x	x	x	x		x	x	x	x	x			x	x	x	x	x
	Provider	x			x		x				x			x			x		
	Strategic					x				x				x	x		x		
	Operative	x								x					x				
	Other																		
Focus	Decision					x		x	x	x					x	x			
	Relationship	x			x					x					x		x		
	Process									x	x								
	Other	8	9	10				11	12			13	14	15	16		17	18	19

		<div> <div>Rosén (1999)</div> <div>Berglund (2000)</div> <div>Lewis & Talayevsky (2000)</div> <div>Lynch (2000)</div> <div>Maltz & ElIram (2000)</div> <div>Murphy & Poist (2000)</div> <div>Skjøtt-Larsen (2000)</div> <div>van Laarhoven et al (2000)</div> <div>Bask (2001)</div> <div>Andersson & Jockel (2002)</div> <div>Andersson & Norman (2002)</div> <div>Bolumule (2002)</div> </div>											
Format	Article			x		x	x	x	x	x		x	x
	Book				x								
	Acad thesis	1	x										
	Conf proceed										x		
Type	Empirical	x	x		(x)	x	x	x	x		x	x	x
	Conceptual		x	x	(x)			(x)		x		x	
Method	Survey	x	x			x	x		x		x		
	Case					x		x				x	x
Theo. base	RBV					x					x		
	TCE					x		x					
	Other	21	22	23	24	25	26	27	28	29	30	31	32
Perspective	Buyer	x		(x)	x	x	x	x	x	(x)	x	x	x
	Provider		x	(x)			x			(x)	x		x
	Strategic		x		(x)	x		(x)	(x)	x		(x)	x
	Operative				(x)			(x)	x				x
	Other			1						2			
Focus	Decision					x		x	(x)	x		x	x
	Relationship						x		x				x
	Process							(x)				(x)	
	Other	21	22	23	24	25	26		27	28	29		

Notes to TPL literature survey

Format

1. Research report

Methodology

1. Focus group interviews

Theoretical base

1. Strategic alliance literature.
2. No specific theoretical base. Describes differences between public and contract warehousing.
3. Also competitive strategy (Porter 1980).
4. Distribution channel structures and business/strategic alliances.
5. Draws on four literature areas according to author: strategic decision making in organisations, industrial buyer behaviour, transportation purchasing, and supplier selection.
6. Also network theory.
7. Third-party logistics literature.
8. Looks at previous empirical studies of TPL usage.
9. Logistics alliance/partnership literature.
10. Incorporates TCE with the theoretical base of Andersson (1995).
11. TPL, literature, strategy literature.
12. Literature on "outsourcing decision in logistics" and "strategy and structure".
13. Same as Sink (1995).
14. Same as Bagchi & Virum (1996), as well as literature on European integration.
15. Literature on "freight transportation choice".
16. Third-party logistics literature.
17. Third-party logistics literature.
18. Various outsourcing literature.
19. Mainly literature on partnerships.
20. Literature on third-party logistics and on functional processes in logistics.
21. Literature on third-party logistics, other logistics literature.
22. TPL and strategic positioning.
23. Various literature on TPL and information technology in logistics.
24. TPL literature.
25. Also buyer behaviour literature.
26. TPL literature.
27. Also network theory (e.g. Johansson & Mattsson 1986).

28. Third-party logistics literature.
29. Third-party logistics literature, supply chain and service strategy literature.
30. Third-party logistics literature.
31. Mostly third-party logistics literature.
32. Mostly third-party logistics literature.

Perspective

1. Interorganisational information exchange.
2. Supply chain perspective rather than single actor.

Focus

1. Segmentation of TPL actors.
2. Descriptive statistics on types of services used; impact on cost, service levels etc, outlook to future usage etc.
3. Develops a “strategic model of the partnership building process” that covers choice of partnership strategy, choice of partner(s), design of partnership, evaluation of partnership and evaluation of partnership strategy.
4. Descriptive statistics on drivers for outsourcing, alliance benefits, alliance success rate etc.
5. Descriptive statistics on TPL providers; providers’ views on determining factors of successful partnerships.
6. Descriptive statistics on types of services used; impact on cost, service levels etc, outlook to future usage etc among Australian firms.
7. Examines the role of contractual degree of formality in logistics alliances.
8. Examines degree of carrier involvement and relationship success in strategic buyer-supplier partnerships.
9. Descriptive statistics on types of services used; impact on cost, service levels etc, outlook to future usage etc among American firms.
10. Examines TPL buyers’ perceptions of “key issues relevant to the purchase and use of third-party logistics services” (p 39).
11. TPL provider strategies.
12. Examines the effects organisational structure has on outsourcing decisions.
13. Relates to surveys and some other empirical material to discuss different issues concerning the future of the TPL industry, client usage etc.
14. Examines TPL buyers’ criteria for provider selection.
15. A survey of literature on outsourcing of logistics functions.
16. Identifies “waves of entrants” and strategic segmentation among TPL providers in Europe.
17. Examines logistics outsourcing practices among British retailers.
18. Looks at partnerships and partnership failure.
19. Descriptive statistics of TPL usage among American companies.

20. Examines the extent of outsourcing of integrated logistics functions in industry.
21. Examines logistics outsourcing practices in Swedish industry.
22. Examines strategic positioning of TPL providers based on modes of value creation.
23. Argues that advances in IT have spurred growth of TPL.
24. Management guidebook.
25. Examines the outsourcing of inbound logistics services in relation to the degree of “strategic criticality” of item/product that is sourced.
26. Descriptive statistics on TPL usage and provision; success factors of TPL relationships; satisfaction with TPL relationships.
27. Descriptive statistics on scope of TPL activities performed, driving forces, key success factors etc.
28. Couples supply chain strategies to TPL provider service offerings.
29. Descriptive statistics on buyers’ requests and suppliers provision of skills and capabilities in TPL arrangements.

APPENDIX 2 Outsourcing literature survey

This survey has been carried out in basically the same manner as that which is presented in appendix 1, apart from the keyword that has guided the search has been “outsourcing”.

		Reve (1990)	Bettis, Bradley & Hamel (1992)	Loh & Venkatraman (1992)	Welch & Nayak (1992)	Lacity & Hirschheim(1993)	Pagnoncelli (1993)	Quinn & Hilmer (1994)	Cheon et al (1995)	De Looft (1995)	Ellram & Maltz (1995)	Jurison (1995)	Lei & Hitt (1995)	McLellan et al (1995)	Rothery & Robertson (1995)	Chesbrough & Teece (1996)	Corbett (1996)	Cox (1996)	Brandes et al (1997)
Format	Article	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x
	Book	1													x				
	Acad thesis																		
	Conf proceed																		
Type	Empirical		x	x		x	(x)	(x)		x	x			x	x	(x)	x		x
	Conceptual	x	x		x		x	x	x		x	x	x		x	x		x	
Method	Survey			x			(x)										(x)		x
	Case		(x)			x				x	x			x	x				
Theo. base	RBV							x	x				x					(x)	x
	TCE	x							x	(x)		x						x	x
	Other	1		2					3	4	5	6		7	8	9		10	
Perspective	Buyer	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Provider																		
	Strategic	x	x		x		x	x		x			x	x	x	x	(x)	x	
	Operative														x				
	Other		1								2								3
Focus	Decision	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x
	Relationship														(x)		x	(x)	
	Process						x								(x)		x		(x)
	Other					1							2		3				
Funct. area	IT/IS			x		x			x	x		(x)		x					
	Other																		

		Elitzur & Wensley (1997)	Augustsson (1998)	Bragg (1998)	Lonsdale & Cox (1998)	Smith et al (1998)	Fine & Whitney (1999)	Greaver (1999)	Klaas et al (1999)	Lankford & Parsa (1999)	Lee & Kim (1999)	Lonsdale (1999)	Quinn (1999)	Wasner (1999)	Widener & Selto (1999)	Arnold (2000)	Fill & Visser (2000)	Hancox & Hackney (2000)	Kern Willcocks (2000)
Format	Article	x				x			x	x	x	x	x		x	x	x	x	x
	Book			x	x			x											
	Acad thesis		x											x					
	Conf proceed						x												
Type	Empirical		x	x	(x)	x	(x)	(x)	x	(x)	x	(x)	(x)	x	x	(x)	x	x	x
	Conceptual	x	x	x	x		x	x		x	(x)	x	x	x		x	x	x	x
Method	Survey				(x)	1			x						x				
	Case		x	x	(x)				(x)		(x)		x		(x)	x	x	x	x
Theo. base	RBV				x		x					x	x			x		x	
	TCE		x		x				x						x	x	x	x	
	Other	11				12				13	14			15			16	17	18
Perspective	Buyer	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Provider		x								x			x					
	Strategic	(x)	x	x	x		x	x		x		x	x	x		x	x	x	x
	Operative			x										x					x
	Other																		
Focus	Decision	x	x	x	x	x	x	x	x	x		x	x	(x)	x	x	x	x	
	Relationship	x	x	X	x			x			x			(x)				x	x
	Process			(x)	(x)			x		(x)				x					
	Other			4	5	6	7				8		9				10		
Funct. area	IT/IS	x	x			x					x							x	x
	Other								1						2				

Notes to outsourcing literature survey

Format

1. Book chapter.

Methodology

1. Secondary data from literature databases.

Theoretical base

1. Also agency theory.
2. Investigates IS outsourcing decisions from a diffusion of innovation-perspective.
3. Incorporates resource-based, resource dependency, transaction cost and agency cost theory in a “contingency model for IS outsourcing”.
4. Incorporates a plenitude of different theoretical perspectives, e g agency cost, competitive strategy and power theory into a “descriptive framework of IS outsourcing decisions”.
5. Discusses outsourcing from a total cost of ownership-perspective (Ellram, 1993).
6. Incorporates risk/return-models from financial theory with TCE.
7. Strategic networks.
8. Identifies developments in practice of e g business process reengineering and competitive strategy (Porter, 1980) as drivers of outsourcing.
9. Argues that degree of “virtuality”, i e degree of outsourcing, depends on whether innovations are autonomous or systemic, and whether necessary capabilities exist on the market or not.
10. Uses TCE and the works of Reve (1990) to develop a “contractual and entrepreneurial theory of the firm”.
11. Discusses IS outsourcing from a game theory perspective.
12. Identifies drivers of IS outsourcing from previous outsourcing literature.
13. Various outsourcing literature.
14. Social exchange and power-political theory.
15. “Process literature”.
16. Various outsourcing literature.
17. Integrates TCE and RBV theory with agency and partnership theory.
18. Integrates organisation, social exchange and relational contract theory.
19. Various outsourcing literature; also some on analytic hierarchy process, attributed to Saaty (1990).

20. Various outsourcing literature.
21. Various outsourcing literature.

Perspective

1. Individual firms and industry-wide.
2. Discusses outsourcing from a strict cost perspective.
3. Studies the “outsourced unit”, i.e. the part of the buying organisation that is outsourced to the provider.

Focus

1. Also contracting issues.
2. Discusses effects of outsourcing and acquisitions on firms’ abilities to learn and develop skills/capabilities.
3. Guidebook intended for practitioners considering outsourcing. Covers several aspects of outsourcing, e.g. decision-making and contracting.
4. Similar to Rothery & Robertson (1995), a guidebook intended for practitioners considering outsourcing. Covers several aspects of outsourcing, e.g. decision-making and contracting. Offers guidance on outsourcing of an array of different functions.
5. Guidebook intended for practitioners considering outsourcing. Covers several aspects of outsourcing, e.g. decision-making and risk-handling. Summarises previous literature on outsourcing.
6. Examines financial characteristics of firms entering outsourcing arrangements.
7. Argues that “the skills required to do outsourcing competently are precisely the skills of system engineering” (p 59).
8. Examines the effect of “partnership quality” on outsourcing success rate.
9. Discusses outsourcing of knowledge-intensive services/activities.
10. Develops and empirically tests a “composite outsourcing decision framework”.
11. A survey of literature on outsourcing of IS outsourcing.
12. Discusses outsourcing of innovation activities.
13. Discusses the notion of “Winner’s curse” (a supplier winning a contract by making unrealistic bids) in IT outsourcing.

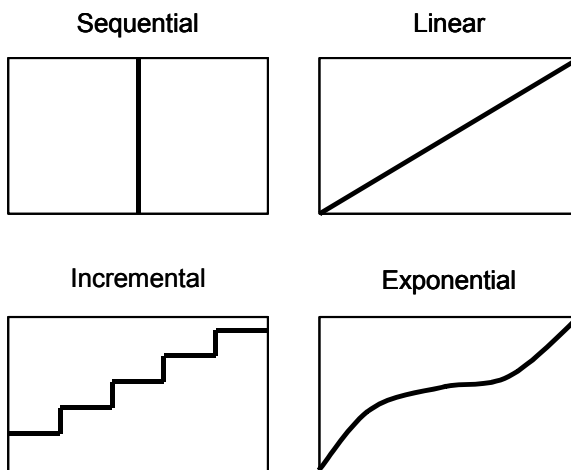
Functional area

1. HR outsourcing.
2. Internal auditing.

APPENDIX 3 TPL establishment process illustrations

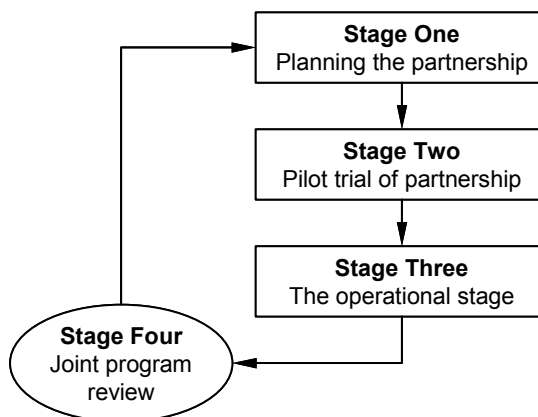
LaLonde & Cooper (1989)

Managing the change process, p. 122:



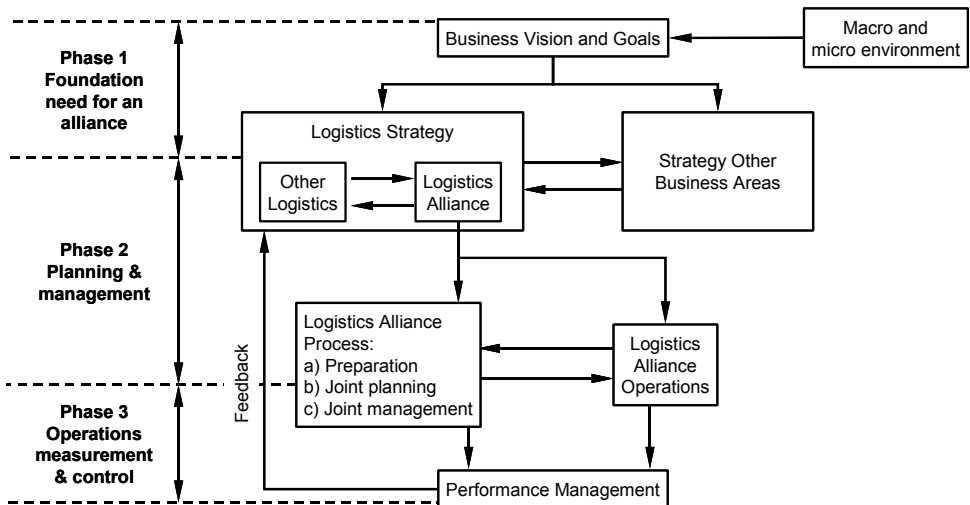
A3:1

The partnership development process, p. 123:



Bagchi & Virum (1996)

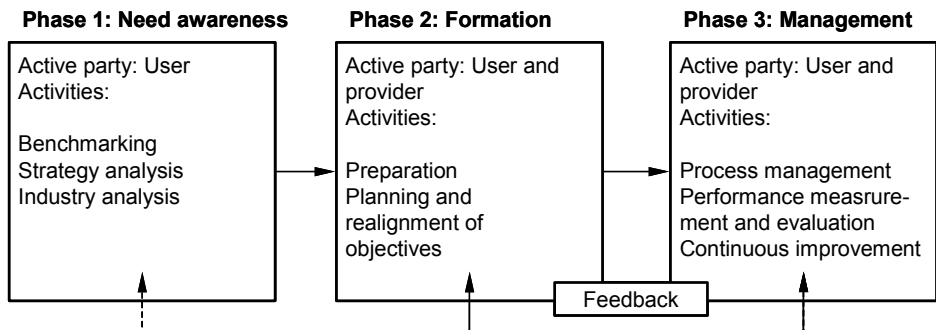
Logistics alliance business process model for a shipper, p 99:



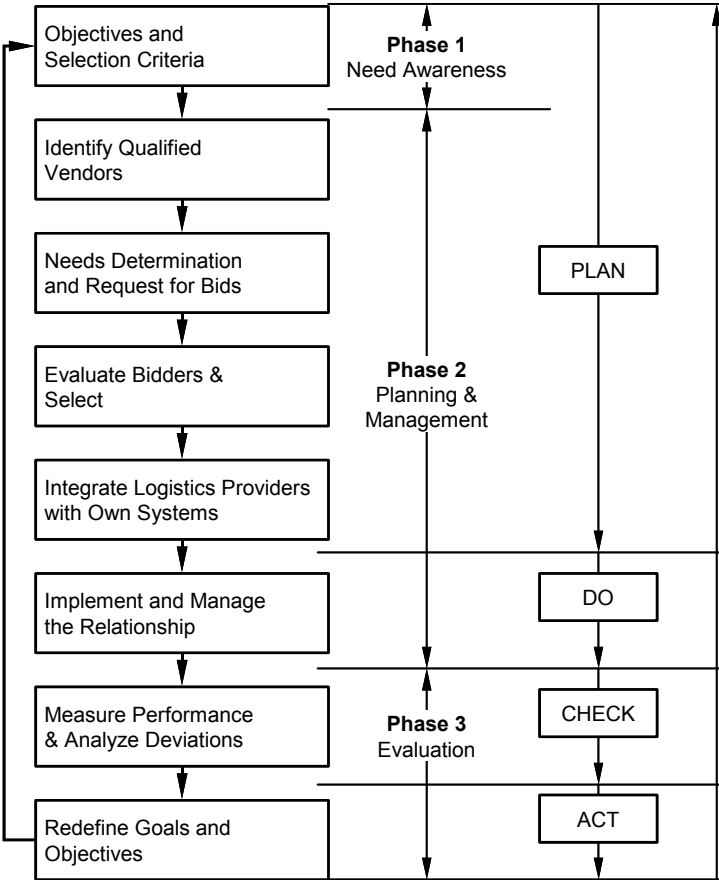
A3:2

Bagchi & Virum (1998)

The three phases of a logistics alliance, p 205:

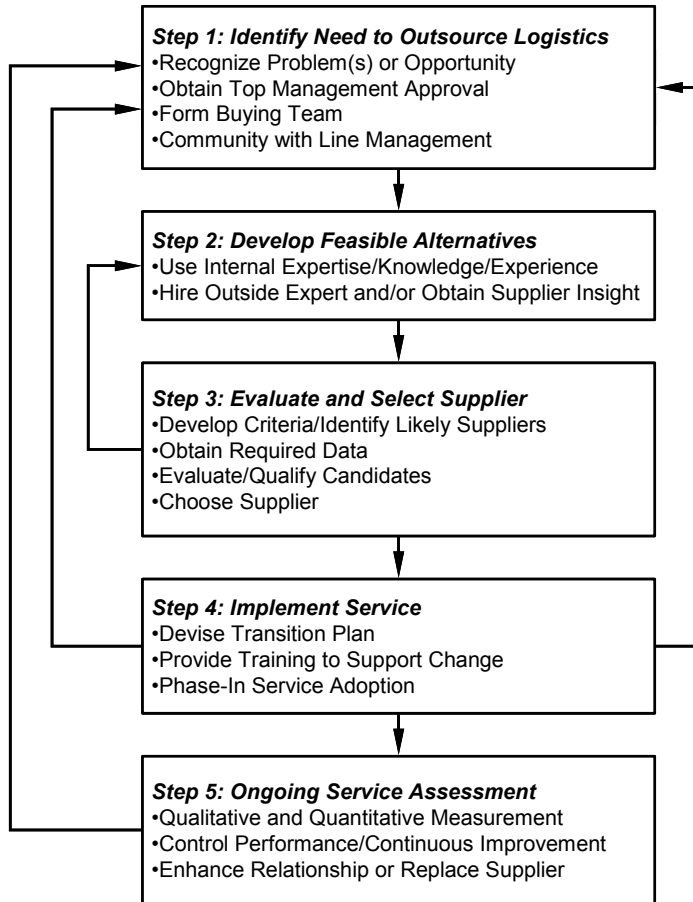


Steps in logistics alliance formation, p 209:



Sink & Langley (1997)

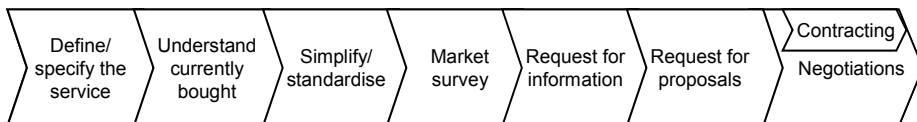
Third-party logistics buying process, p 175:



A3:4

Andersson & Norrman (2002)

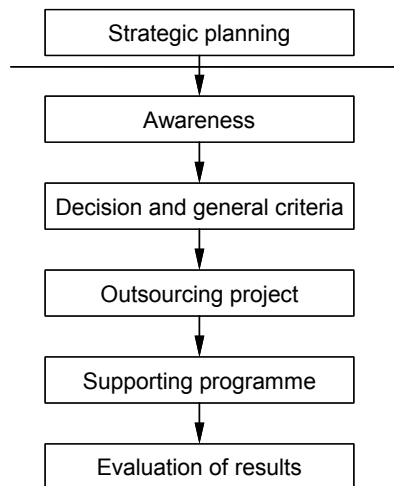
The purchasing process for logistics services, adapted from p. 8:



APPENDIX 4 Outsourcing process illustrations

Pagnoncelli (1993)

Methodology related to the implementation of a managed outsourcing programme, p 20:



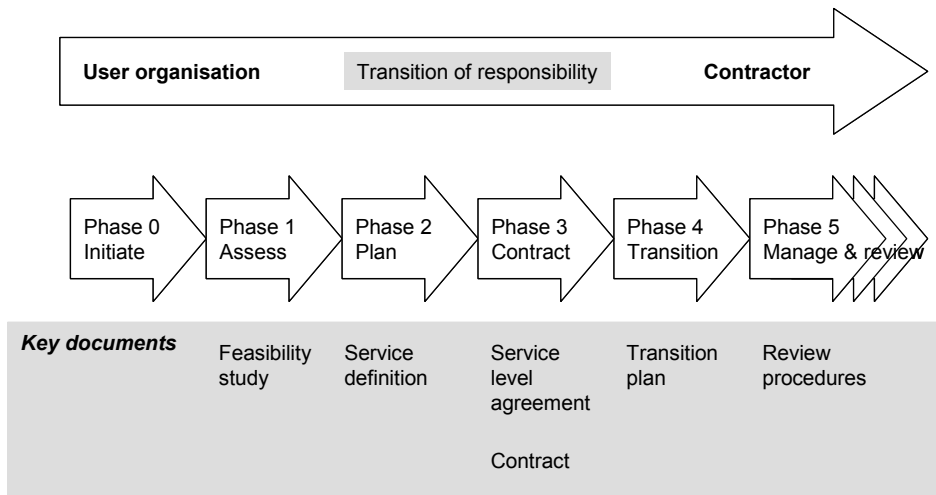
A4:1

Phase	Issues
1. Awareness	Involve directors, managers and employees Wide internal discussions; seminars, conferences, reading, training etc. Participation of trade union To avoid spreading of rumours, pay close attention to communication
2. Decision and general criteria	Identify activities that for strategic reasons must be performed internally Involve leaders to support programme Evaluate legal, financial, technological and political aspects of outsourcing Involve legal department

3. Outsourcing project	Establish criteria for demands on potential supplier Transfer employees if possible Run a project for each area of company that is contracted out Evaluate all involved aspects, not forgetting indirect costs and basic structure
4. Supporting programme	Prepare professional development programme for employees Provide guidance for providers regarding legal, managerial, accounting, commercial, technological and production aspects
5. Evaluation of results	Guidance and help with contracts, services and products which are outsourced Checklist of benefits; economical, administrative and social Quantify and qualify benefits, check results and correct direction if necessary Test quality, productivity and competitiveness after outsourcing

Rothery & Robertson (1995)

Schematic of outsourcing methodology, p 215:



Corbett (1996)

The outsourcing process, summary of article:

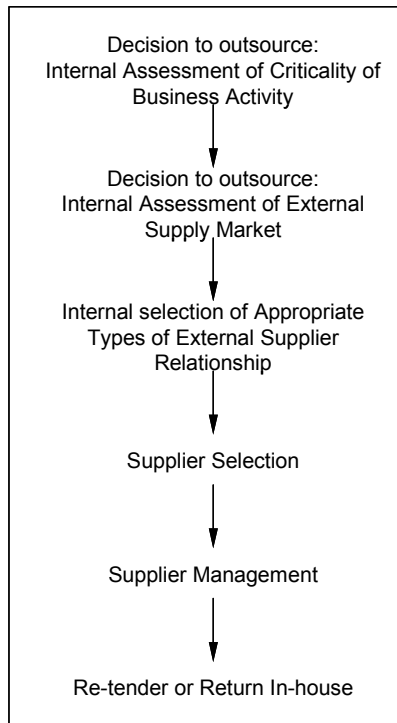
Step	Issues
Strategic analysis	Understand that outsourcing is a tool for organisational change Create understanding of own core competencies and those of potential suppliers Understand what your organisation is trying to accomplish Understand why you are outsourcing
Identify candidates for outsourcing	Identify areas that are not core Identify areas that will render best returns from outsourcing Benchmark against providers and competitors Define scope of outsourcing relationship Define services that will be provided Define which capabilities that will go outside Make sure you are outsourcing to a market with several potential providers Decide on integrated versus selective service provision
Define requirements	Define requirements in clear, complete and measurable terms Describe results you want to achieve and the type of relationship you intend to build with provider Explain current organisational problems and costs for potential supplier Share information, be honest
Select partner(s)	Examine cultural fit, make sure provider shares your ways of approaching problems and managing business Build on existing relationships Use references and reputation to select partner Negotiate reasonable price and performance measures Negotiate tough but fair arrangement, create win-win opportunities
Make transition	Communicate early and often Communicate to all stakeholders Allow time for relationship to mature Report on accomplishments Use all communication means possible for promoting success

Corbett, cont.

Manage relationship	Monitor and evaluate performance Create structures that allow for identifying issues before they escalate, and for resolving them Create management structures that fit new organisational realities Give employees support to help them manage in the new environment
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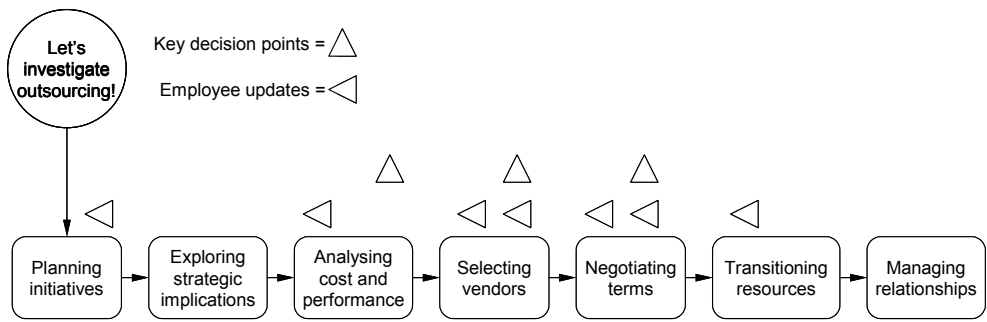
Lonsdale & Cox (1998)

The outsourcing process, p. 7:



Greaver (1999)

Seven steps to successful outsourcing, pp 18-19:

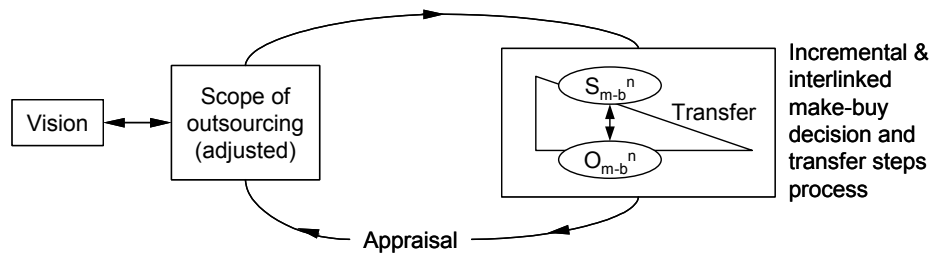


Phase	Issues
Planning initiatives	Assess risks Announce initiative Form project team Engage advisers Train the team Acquire other resources Address issues: - Resource management - Information management - Project management Set objectives
Exploring strategic implications	Understand organisation's: - Visions – Core competencies – Structure - Transformation tools – Strategies Determine: - Decision rights - Contract length - Termination date Align initiative
Analysing costs and performance	Measure activity costs Project future costs Measure performance: - Existing and future - Cost of poor performance Benchmark costs/performance Determine: - Specific risks - Asset values - “Make” total costs - Pricing models - Final targets

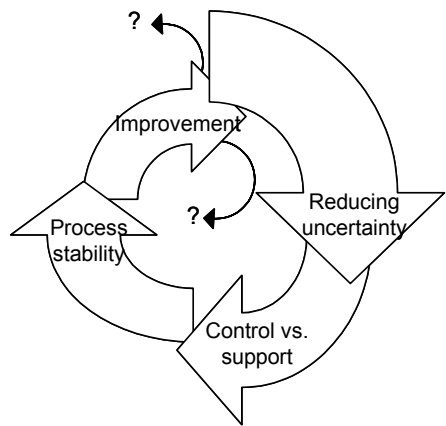
Selecting vendors	Set qualifications Set evaluation criteria Identify providers Screen providers Draft RFP Evaluate proposals: - Qualifications - Costs Perform due diligence Determine: - “Buy” total costs - Short-list providers - Finalist provider - Review with senior management
Negotiating terms	Plan negotiations Address: - High-level issues - Deal breakers Prepare term sheets Negotiate contract: - Scope – Performance standards – Pricing schedules – Terms and conditions Announce relationship
Transitioning resources	Adjust team roles Compare/merge transition plans Address transition issues: - Communication – Human resources – Other production factors Meet with employees: - Organisation – Provider Make offers/termination Provide counselling Physically move
Managing relationships	Adjust management styles Set up oversight council Communicate Define and design: - Meeting agendas – Meeting schedule – Performance reports Perform oversight role Confront poor performance Solve problems Build the relationship

Wasner (1999)

The intraorganisational outsourcing process, p. 84:

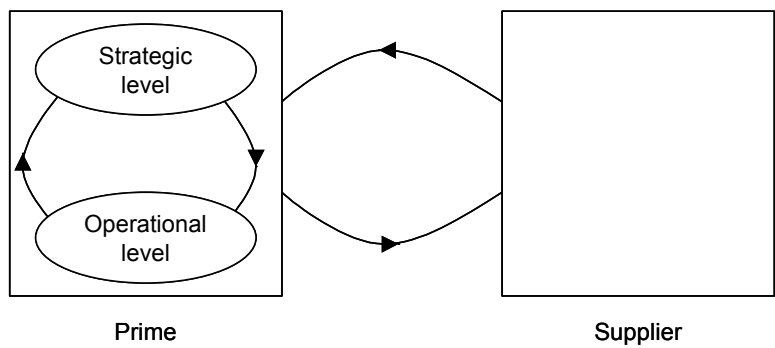


The interorganisational outsourcing process spiral, p. 88:



A4:7

The two interdependent transfer processes of outsourcing, p. 91:



Zhu et al (2001)

Different stages of the outsourcing process, summary of pp 374-377:

Stage	Issues
Planning	<p>Start with a sound business plan</p> <ul style="list-style-type: none"> – Identify all costs, both of current method of conducting business and anticipated costs after outsourcing – Identify other factors to be considered <p>Identify impact outsourcing will have on:</p> <ul style="list-style-type: none"> – Customer service – Community where company operates – Employee benefits – Political consequences
Developing	<p>Develop a sound contract</p> <ul style="list-style-type: none"> – Agreement must be clearly understood by both parties – Both parties should have legal counsels review contract prior to signing – Clearly identify service specification, compensations, terms of payment and escape clauses <p>Make sure business relationship is clear to all parties prior to signing</p> <ul style="list-style-type: none"> – Establish measurable goals and objectives – Ensure both parties benefit from relationship – Maintain mutual respect and willingness to learn – Involve senior management support – Use joint, multi-relationship management approach – Continually track and measure performance and provide feedback <p>Study impact on employee benefits</p> <ul style="list-style-type: none"> – Review all items related to employee benefits – Include intentions as part of business plan <p>Develop an employee separation plan</p> <ul style="list-style-type: none"> – Distinguish separation plan from provider's hiring process <p>Develop outsourcing timeline</p> <ul style="list-style-type: none"> – All activities and critical events should be included – Update as needed <p>Develop a communication plan</p> <ul style="list-style-type: none"> – Necessary for avoiding misinformation and rumour – Implement aggressive communication plan, provide timely, accurate and detailed information – If information is regular, risk of spreading of rumour diminishes – It is better to reveal more than less

Implementing	Develop transition plan – Identify all activities that must be performed to accomplish successful transition Use methods such as brainstorming, e-mail meetings and interviews with affected employees – Revise as appropriate during the process Develop transition checklist – List of all items that must be completed to accomplish transition – develop method to follow up incomplete items
Surviving	Post-outsourcing review – Focus on accomplishments of process, not how process has occurred – Compare objectives of business plan with outcome, both costs and other factors – Make results of review available for all parties, as part of communication plan

Chen & Soliman (2002)

A4:9

A value driven approach to outsourcing using ASP, p. 184:



Phase	Activities	Deliverables
Identification	Identify information needs Define core competencies	Work request form Corporate and IT core competencies
Analysis	Determine decision criteria Evaluate alternative solutions Select the best alternative	Outsource decision criteria/decision tree Weighted scores for alternatives Make or buy decision
Design	Select a service provider Determine client-vendor relationship Prepare service contract	The selected service provider Detailed service contract and SLA

Chen & Soliman, cont.

Implementation	Prepare the technological infrastructure for ASP services Manage internal issues	Complete ASP value chain Prepared organisation
Assessment	Monitor service quality Assess user satisfaction Value analysis	Service quality report User satisfaction report Continuation/termination decision

Appendix 5 Interview guide

The starting point for the process study is Pettigrew's (1990) model Content-Context-Process, and the author's definition of the term *process*:

... a sequence of individual and collective events, actions and activities unfolding over time in context.

(Pettigrew, 1997, p. 337)

The collected data material should thus form a basis for a detailed description of the events, actions and activities of the process, what the content has been and in which context it has taken place.

Content

- ☐ Description of the distribution structure before the process started?
 - ☐ What activities were carried out?
 - ☐ Where?
 - ☐ Who carried them out?
- ☐ How has the structure been changed?
 - ☐ What activities are now carried out?
 - ☐ Where?
 - ☐ By whom?
- ☐ Has personnel, facilities or other resources been transferred to the service provider, or disposed of in any other way?
- ☐ How has the organisation changed?
 - ☐ New interfaces?
 - ☐ New positions / areas of responsibility?
- ☐ How has working procedures changed?
 - ☐ New processes?
 - ☐ New routines / procedures?
 - ☐ Transfer of existing routines / procedures?
 - ☐ Formalisation of previously informal routines / procedures?
- ☐ Information systems
 - ☐ Have new systems been installed?

- ☐ Have existing systems been modified?
- ☐ Have interfaces been created / modified?
- ☐ Internal / external systems, exchange between systems?
- ☐ Information for running operations
 - ☐ What information is used and of what kind?
 - ☐ Sources of information?
 - ☐ Handled by systems?

Context

- ☐ Which are the driving forces behind the changes?
 - ☐ Cost reduction?
 - ☐ Service improvements?
 - ☐ Structural change?
 - ☐ Focus on core?
 - ☐ ...
- ☐ What does the flows in the system look like?
 - ☐ Volumes?
 - ☐ Frequencies?
 - ☐ Uncertainties / variations?
- ☐ How was the outsourcing decision initiated?
 - ☐ Strategic decision, top-down?
 - ☐ Within business unit or other body in the corporation?
 - ☐ Incremental development, natural response to other developments?
- ☐ Prior experience?
 - ☐ Other changes?
 - ☐ Other outsourcing? (e g manufacturing, IT...)
- ☐ Environmental factors?
 - ☐ Laws and regulations?
 - ☐ Market demands?
 - ☐ Competition?
 - ☐ Suppliers?
 - ☐ ...
- ☐ Other information about the company
 - ☐ Geographical coverage?
 - ☐ Part of larger corporation / single company?
 - ☐ Position in the value chain? (raw materials, finished goods...)

- ☐ Characteristics of products and production?
- ☐ ...

Process

- ☐ Project?
 - ☐ Has the change been driven in form of a project?
 - ☐ Several sub-projects?
 - ☐ Project leader, participants etc?
 - ☐ Preparations, analyses, carrying out, termination, follow-up?
- ☐ Meetings
 - ☐ Participants?
 - ☐ Who sets the agenda?
 - ☐ Who is the “driving force”?
- ☐ Decision making
- ☐ Formal / informal?
- ☐ Hierarchical level?
- ☐ Documentation?
 - ☐ What?
 - ☐ How?
 - ☐ By / for whom?
- ☐ Information sharing?
 - ☐ To whom?
 - ☐ What?
 - ☐ How?
 - ☐ Why?
- ☐ Involvement in process
- ☐ Who have been involved?
- ☐ Hierarchical level (formal status / position)?
- ☐ Individuals / departments / companies?
- ☐ Internal?
- ☐ External (consultants, suppliers, customers...)
- ☐ When?
- ☐ Why?
- ☐ Relationships?
 - ☐ Formal / informal?
 - ☐ Evolution?

- ☐ Temporality
 - ☐ Time taken for different activities, actions, events?
 - ☐ Sequence / order?

- ☐ Data collection and analyses?
 - ☐ By whom?
 - ☐ How?
 - ☐ What information has been gathered / used?
 - ☐ For what purposes?
 - ☐ Cost assessments?
 - ☐ Service assessments?
 - ☐ ...
 - ☐ “Before, during and after”?

- ☐ Service provision starts, and then...?
 - ☐ Follow-up / evaluation?
 - ☐ Development?
 - ☐ Problems?

Unsorted

- ☐ Money
 - ☐ Who pays for what?
 - ☐ Budgeted costs?
 - ☐ Unforeseen / non-budgeted?
 - ☐ Who has set the budget?
 - ☐ For the transition / implementation?
 - ☐ For ongoing operations?
- ☐ The co-operation after implementation / transition?
 - ☐ Improvement efforts?
 - ☐ Incentives?
 - ☐ Problems?
 - ☐ Co-operative environment?
 - ☐ Decision making?
 - ☐ ...
- ☐ Contract?
 - ☐ Time span?
 - ☐ Division of responsibilities, strictly stated or based on mutual trust?

Appendix 6 Key of abbreviations

Name	Abbreviation
Shipper	Shipper
Swedetown	Swedetown
Subsidiary	Subsidiary
Competitor	Competitor
Vice President Operations	VPO
Operations Development Manager	ODM
Project Leader	PL
Project Manager Operations Development	PM
Logistics Manager	LM
Distribution Support	DS
Former Warehouse Manager	WM
Former Warehouse Worker	WW
Subsidiary Manager	SM
Subsidiary Logistics	SL
Logistics Consultant	Logicon
ERP System Consultant	ERPsyscon
ERP System	ERPsys
Provider	Provider
Dutchtown	Dutchtown
Business Development Manager Europe	BDM-E
Business Development Manager Sweden	BDM-S
Former Site Manager Dutchtown	F-SM-D
Site Manager Dutchtown	SM-D
Carrier	Carrier
TPL-A	TPL-A
TPL-B	TPL-B

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