Improving Customer Service through
Just-in-Time Distribution
Fitting into the customer’s service offer in case of
ELECTROLUX LAUNDRY SYSTEMS

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Abstract

The international environment today has been undergoing unprecedented change and many companies are seeking new ways to stand out from the competition by sustaining their competitive advantage. Internationalization and firms’ consolidation increase competition in the dynamic marketplace. Companies are no longer staying competitive simply through focusing on product quality and pricing as customers are becoming more high-demanding related to customer service offer. This issue directs the companies’ main focus today to address the customer needs in the ever-changing environment.

In order to be the winners in the marketplace, timing and superior customer service are becoming the keys to attain competitive advantage for a company. Time-based competition is an important issue that many companies are facing currently as customers are becoming more time-sensitive and time-oriented in terms of better services, reliability and delivery. To keep up with the changes in demand from customers, it is important to satisfy customers’ objectives and needs in order to provide superior customer service, thus, establish good relationship with them.

In the ever-changing and dynamic business environment company needs to adapt and exploit the changes in order to meet the new challenges in the marketplace. It is crucial for the company to respond to changing needs of existing customers and seeking to serve new customers externally. The ways to renew the customers’ services and how they are delivered are critical capabilities for many companies to acquire nowadays. This leads to increasing interaction between marketing and logistics where logistics is considered a platform for supporting new strategic moves on the market.

This master thesis originates from a need to research the links between customer service improvement and Just-in-time distribution in order to sustain competitive advantage. We propose to extend the Just-In-Time concept to incorporate a customer perspective, which results in changes the warehousing, ordering and delivering routines. Subsequently, this creates timing ability as well as coordination of information and material flows through timely decisions, which are difficult for competitors to emulate.

Based on our analysis and conclusion, companies are recommended to shift from the traditional production-oriented to market-oriented focuses through incorporation of customers’ perspective into the value chain. To deploy this, companies should start from the customer end and understand customers’ needs and establish mutual beneficial relationships with customers. Long-lasting business relationships ultimately determine the success of the company. Furthermore, we conclude that successful learning to change the routines requires time for the transformation of traditional delivery practice to perform direct deliveries activities. They are based on the common understanding of the tasks and rules as well as common codes of internal coordination processes.

**Keywords:** Electrolux Laundry Systems, Just-in-time distribution, Relationship marketing, Dynamic capabilities, Competitive advantage
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1 Introduction

In this chapter the background of the topic and the discussion about research problems of the thesis are introduced as well as the purpose and delimitations of the study. They will be described and examined in order to enhance the understanding of our intention for the research and its boundaries. In the end of this chapter the case company Electrolux Laundry Systems is presented. Finally, a chapter overview provides an outline of the master thesis and its structure.

1.1 Background

During the last 30 years companies around the globe have been adopting JIT practices as they seek to attain and sustain competitive advantage (Fullerton, 2003). It has become a way of doing business, which emphasizes excellence in a manufacturing company through the continuous reduction of waste and reduction of inventories as well as consistent improvement in productivity. In the meanwhile, one of the most important areas such as improving customer service has, actually, been untouched for a long time.

The master thesis covers the topic of how Just-In-Time (JIT) distribution could be successfully implemented to improve customer service. In today’s environment customers are becoming more demanding in terms of better service, including reliability and faster delivery. The topic of master thesis is important because JIT efforts alone have fostered undeniable improvements in manufacturing efficiency, but from the customer’s perspective they often have failed due to their myopic focus on the factories (Holweg and Miemczyk, 2002).

It is significant in the dynamic global marketplace characterized by intensifying competition because achieving competitive advantage requires from the MNC to shift the company’s focus to a customer perspective with servicing the needs of downstream channel members (Claycomb, Dröge and Germain, 1999) and an integration of all organizational structure in this process. An underlying reason for the importance of the chosen topic lies in providing superior customer service which is the main foundation for a sustainable competitive advantage.

A following reason to why this topic is important is the fact that Just-in-time distribution provides the mechanisms for integrating the various activities across the supply chain, thus improving companies’ performance and relationships with customers. This fact is also highlighted by understanding the individual customers’ needs and objectives to be able to support the customer in meeting objectives, therefore, to reach good customer satisfaction and maintain long-term relationships between the organization and its customers.

It becomes valuable for the organization to learn more about the extension of JIT philosophy to the customer perspective and its influence on the performance of organization because the adoption of Just-in-time distribution helps the MNC substantially improve information
and material flow and communication throughout the supply chain to perform value-added activities. This in turn results in strengthened customer/manufacturer links.

The customer perspective involves looking beyond the traditional logistics function and fitting the Just-In-Time distribution into a broader system which starts with a customer service. Integrated problem-solving initiatives of a JIT distribution concentrate on improving customer service and facilitating timing in product distribution to customers result in greater customer satisfaction.

1.2 Problematization

Since the implementation of the information logistics strategy in 1996 Electrolux Laundry Systems (ELS) has started the initiative to further integrate the sales and production companies. It involves change in various routines, such as forecasting, order taking and stock keeping. However, nowadays all the processes and operation in the company is mostly concentrated on production. For many years ELS has been considered a production oriented company. Lack of constant improvement of customer service and lack of integration of customer perspective into the organizational value chain affects customer satisfaction. It is not so easy to change the perspective to the customer by implementing JIT distribution because ELS has to change the whole scope and to switch the whole way of working and how they treat the customer.

The other problem today lies in the issue that the information in the system is not clear when a customer receives an order confirmation. Sales people are not so much aware of the situation with classification of machines in warehouses that logistics can deliver in terms of days and hours. It leads to customer frustration and confusion over the situation when he is ordering a washing machine. Therefore, if the information in the system is not correct it creates problems related to timing transfer of information to customers about lead time and delivery accuracy. Failing to provide accurate information could mean losing a link to the customer, with effects on customer loyalty and customer satisfaction. This understanding is important because the relationship marketing view is that the customer gives loyalty in exchange for their perception and expectation.

Implementing JIT distribution is difficult due to the misunderstanding and misinterpretation of the core of the JIT concept by local sales companies in Western and Southern Europe. The central direction of this new JIT concept includes closing local warehouses, sending orders directly from the customers and direct delivery to the customers. However, each local sales company has its own way to work. They are used to the traditional routines such as stock keeping and order taking. Therefore, local sales people are reluctant to accept the new routines where many of the activities will be controlled centrally in the Swedish office. The local sales companies do not have clear goals and vision of the JIT concept and thus it creates a conflict between localization and centralization. Such misunderstanding leads to lack of
trust and support between actors of the whole supply chain. Everyone starts to blame each other or shift the responsibilities on other actors’ shoulders. Consequently, this goes against the company’s objectives and affects overall organizational efficiency and customer service level which might have a negative effect on financial performance.

Challenges when implementing JIT in terms of customers' perspective are related to the misunderstanding of customer needs and their perception of service as well as customer current concerns. The current problems related to inaccurate information handled from the beginning about the delivery of the products to the customer. It leads to that the customer does not receive a product on-time. Sales people sometimes make promises to the customers and ELS cannot fulfill them from the beginning. This issue generates impropriety through the whole supply chain. Failing to understand this issue could create a conflict between the customers and the production unit. This affects customer relationships with the company as well as customer purchasing behavior.

1.3 Research Problem

The competitive focus of Electrolux Laundry Systems is based on the improvement of customer service. Therefore, the introduction of the Just-in-time (JIT) distribution process starts with the customers’ needs in order to fit into the customer’s service offer. The research problem also covers the issue of centralized customer controlling from the production unit via implementation of a Just-In-Time (JIT) distribution system. This is necessary to achieve sustainable competitive advantage in the complex environment of internal and external actors. In that aspect the issue of sustainability is dependent on the improvement of real-time information flow, safeguarding the information from customers and close interaction with customers. Considering the abovementioned issues, a major research problem could be formulated:

Main Research Problem:

How to improve customer service through Just-In-Time (JIT) distribution?

To analyze this main problem, three sub problems are formulated.

What is perceived by customers as service?

In order to answer this sub problem, we will find out and describe ELS customer and the customer’s situation. We will investigate current customer’s situation in terms of needs and service perception as well as current concerns.
INTRODUCTION

How can customer service perspective be incorporated into traditional JIT concept?

To answer this question we will define what the traditional JIT concept is. Furthermore, we will describe how the JIT concept can be shifted into a customer perspective. We will describe how just-in-time distribution could be developed to fit into the customer’s service offer in the case of ELS.

We will illustrate a mapping of the just-in-time distribution process that connects ELS with the customers. We will discuss how JIT activities are utilized via the actors of the whole supply chain.

What changes in routines and competences are required in new JIT process?

To answer this question we will investigate the changes in delivering, ordering and stock-keeping routines. We will also focus on how the company adapts to the new JIT process by creating function competences to address the customer needs of the changing environment.

On the basis of the solutions to all the above sub problems, a conclusion will be made for the best possible implementation of Just-In-Time (JIT) distribution into ELS perspective for customer service improvement. Therefore, the abovementioned sub problems will be investigated in order to solicit the right solution to the main research problem of the thesis.

1.4 Purpose

The overall purpose of the thesis is to develop a framework for improving customer service through Just-In-Time (JIT) distribution in order to enhance ELS competitiveness. Our primary research purpose is to evaluate the importance of customer service for a MNC.

Having framed the main research purpose, we would like to identify four sub purposes:

1. To describe what services ELS offers to customers and what is perceived by customer as service as well as relationship characteristics. We will also describe the ‘state —of — the art’ regarding the JIT concept and the integration of a concept into ELS based on customer needs.

2. To analyze new JIT process mapping in terms of information and material flow as well as local sales companies’ functional competences and its impact on company’s delivery performance.
3. To provide the case company with a number of practical suggestions and solutions regarding JIT distribution and relationship practices for customer service improvements.

The research will be conducted from local sales companies’ and customers’ perspective to better describe and realize how ‘things happen’ in the countries of France, Spain, UK, Germany, Finland and Sweden as well as maintain company’s potential for long-term sustainable competitive advantage in those markets.

1.5 Delimitations

Taking into consideration the issues of limited time and resources, the boundaries of the research scope are narrowed to:

1. Investigating the Just-In-Time (JIT) distribution concept from a customer perspective and focusing on information flow related to order handling aspect and material flow related to finished goods and spare parts.

2. Focusing on the process of implementing the Just-In-Time distribution into current logistic strategy but not on the strategy development issue itself.

3. Focusing on production units in Sweden, France and Thailand, local sales companies and customers as major actors in the Just-In-Time distribution implementation process, excluding the network of suppliers.

4. Narrowing the scope of local sales companies to Spain, UK, Germany, France and Finland which are the most important ones in terms of implementing a Just-In-Time distribution concept.

5. Emphasizing on the needs and preferences from the scope of customers through material and information flow mapping between customers and sales companies.

1.6 The Case Company

1.6.1 Electrolux Laundry Systems (ELS)

This thesis aims to provide senior executives of ELS with a detailed investigation of the mapping of Just-in-Time distribution at each local sales company as well as their understanding of new concept. It also provides an investigation of customer situation and their perception of that concept for the best possible solutions and high-quality assessment of new logistics initiative and set-up.

Electrolux Laundry Systems (ELS) is a part of the Electrolux Professional group, which also contains products for professional kitchens. Besides the professional part, Electrolux also produces and sells products for the private households covering the three areas: Kitchen, Laundry and Floor-care.
The Electrolux group is selling products to customers in more than 150 markets every year, and in the fiscal year 2007 the entire group had sales of SEK 105 billion. The professional products constituted 7% in 2007, whereof 5% was based on the Food-service equipment-sector and 2% on the Laundry equipment sector. The three main customer groups of the professional laundry systems are tourism, healthcare and prisons.

ELS has manufacturing entities in France, Sweden and Thailand and apart from this, 19 national sales companies around the world. These manufacturing entities and sales companies house approximately 1280 employees. The head-quarter of ELS is located in Ljungby, Sweden.

The manufacturing entity in France employs 210 people and has specialized in production of barrier washer extractors (a main component for the washing machine), bed-type ironers and cylinder-type ironers. In Thailand 160 people are employed, here the main focus is production of tumble dryers and extra-spin washer extractors (a main component for the washing machine). The division in Sweden is divided in a production unit, consisting of 380 people, and a sales- and service organization which consists of 70 persons.

Figure 1.1: Electrolux Laundry Systems Manufacturing Plants
(Source: ELS presentation, 2007)

1.6.2 The Logistic Center in Ljungby (LCL)

The Logistic Center in Ljungby (LCL) is an essential part of the ELS infrastructure, offering products and logistics solutions in promised time and with focus on cost and quality. LCL is servicing 21 group companies and 120 importers in more than 90 countries and delivers approximately 1,800 order lines/day being Quality- and Environmental certified and Authorized Economic Operator (Customs and Safety). The inbound logistics is responsible for
the quality of supplying finished products and spare parts — while the outbound is responsible for fast delivery and order processing. Spare parts are divided into vital parts, commercial parts and other parts. The first two are always in stock and delivered to customer within 24 hours. What concerns finished products they are divided into A, B and C products. A-products should be delivered in 24 hours from logistic center, B-products in 10 days from factory and C-products on demand from a factory or supplier. In the figure 1.2 the location of ELS warehouses is shown from which the products are delivered to customers.

Figure 1.2: Location of warehouses (Source: ELS presentation, 2007)

A more customer–oriented strategic target in outbound logistics has resulted in the Order-to-Payment Process (OTP) consisting of several sub-processes: forecasting, order entry for registration customer orders, production program planning, capacity calculation, purchasing, goods reception, storage, production, stocking finished goods. The OTP process is a vital component of infrastructure by converging the organizational, geographical, communicational boundaries between suppliers and end-customers. With a prompt and efficient handling of customer orders the process aims to achieve higher customer satisfaction.

A new logistic initiative is based on the incorporation of Just-In-Time distribution into a current logistic strategy. Its main aims are to increase customer service level and to decrease costs related to overall stock level, measured as tied-up capital which has remained on a level of about 80 million SEK annually.

From the logistic side the scheme of the process has following changes: the logistic section of local sales companies includes no stock to be kept in local warehouses. All finished goods are delivered directly from the factories to final destinations. Customers, dealers and local sales companies send direct orders via WEB and end-users can track the goods status through the web platform. Detailed logistic strategy is illustrated as below:
It is believed the logistic strategy based on Just-In-Time distribution will create a “win-win” situation leveraged into better decisions, greater coordination of information flows, lower total cost to ensure long-term competitive advantage.
1.7 Outline of the thesis

The figure below shows the outlined our thesis.

- Chapter 1 - Introduction
- Chapter 2 - Methodology
- Chapter 3 – Theoretical Framework
- Chapter 4 – Case Study
- Chapter 5 - Analysis
- Chapter 6 - Conclusions
- Chapter 7 – Recommendations and Suggestions for further research
2. Methodology

This chapter aims to describe and examine how we have conducted our research. It contains a discussion of various research methods. We describe a scientific approach based on the abductive methodology and a research strategy using case studies. Subsequently we discuss our data collection for primary and secondary information regarding the relevance of the references used, followed by a discussion of the quality of the research linked to the internal and external validity and the reliability of the research. As a final point in this chapter, we illustrate the conduct of our research in a research model.

2.1 Scientific Approach

According to Yin (2003), there are three prime approaches for conducting research: exploratory, descriptive and explanatory. We use a different combination of these approaches in different circumstances. At the beginning, we use the exploratory approach to initially identify and define the research problems. We apply this approach by starting to look at theoretical literature and conducting an interview with people in the ELS Logistic department in Ljungby, Sweden in order to have a better understanding of the current logistic situation. It helps us to further explore and examine the research problems. Second, we use descriptive approach when describing events connected to the study according to the existing theory. The analysis based on the theoretical framework and the empirical findings based the interviews with ELS have been the areas where the descriptive approach was applied. Finally, after the collection of evidence we use the explanatory approach to explain the interlinkage between interacting factors and analyze the results of these factors. We use the interaction between value chain actors to explain the information and material flow as well as relationship characteristics resulting in customer satisfaction.

2.1.2 Research Approach

A research approach is defined as the path of conscious scientific reasoning (Peirce, 1931). In order to construct our research process framework, we apply the abductive approach. This is a mixture between the inductive and deductive approaches which forms the basis for discovering hypothetical patterns during the research process. The inductive approach is a theory development process based on the real-life observations of the research phenomenon which will mainly be done during the analysis and in the findings. The deductive approach starts from the established-theory and generalization and is used when explaining a specific case or event based on the theory (Dubois and Gadde, 2002). We use this approach in the theoretical framework and when making conclusions and recommendations.

Dubois and Gadde (2002) state that this particular method allows the researcher to move between empirical data and theoretical models. The benefits of applying an abductive approach lie in matching the empirical evidence regarding JIT distribution with the theoretical framework and expanding knowledge regarding the subject of customer service improvement through JIT. At the beginning, we start a panoptic and extensive searching over the journals and books to locate suitable theoretical concepts: JIT distribution, relationship marketing and dynamic capabilities. Afterwards, we combine the theories and develop a personal research model to solve the problems derived from the investigation of our case company. During the research process, we acquire more new
knowledge by going back and forth between the empirical data and the theoretical models. Thus, this approach enables us to continually reinterpret empirical data and the theoretical framework and to discover new approaches to thoroughly investigating the current situation in our case company. Therefore, the abductive approach is a good combination for guiding us to find a suitable framework between empirical observations and the established theories.

2.1.3 Systematic Combining methodology

To further explain the abductive approach, systematic combining is examined. Dubois and Gadde (2002) say that systematic combining is a process where theoretical framework, empirical fieldwork and case analysis evolve simultaneously, and it is particularly useful for further developing existing theories. They further discuss that this methodology includes two processes: Matching and Direction and redirection.

Matching is about going back and forth between framework, data sources and analysis. This implies that the researchers go from one type of research activity to another and between empirical observations and theory. This enables the expansion of the understanding of both theory and empirical phenomena. (Dubois and Gadde, 2002) On the other hand, direction and redirection is a critical process which enables researchers to discover new spectra and ideas concerning the research problem. Such new information helps verify and redirect the researchers into the correct focus. It is an important feature for achieving matching (Dubois and Gadde, 2002). In our case, the new information from the interviews gave us a new dimension of understanding of how to improve customer service, which is the main focus of our research study. An example of such a dimension can be the issue of flexibility in customer delivery solutions, which should be understood more thoroughly in order to improve customer service.

Dubois and Gadde (2002) argue that in systematic combing, confrontation between theory and the empirical world is continuous through the research process. The process developed is directed by another confrontation which is between the framework and the evolving case. The advantage of applying systematic combing is that it is a flexible methodology to identify unanticipated issues that may be further discovered during the research process. It is a flexible method to allow researchers to add new models or concepts when needed.

2.2 Research Strategy

After choosing the proper research approach and method, it is vital to choose the right research strategy to conduct our study. According to Yin (2003), there are five types of research strategies:

- Experiment
- Survey
- Archival analysis
- History
- Case study
To choose the right type of strategy, Yin (2003) claims they are each mainly based on three conditions: types of research questions, extent of control over actual behavioral events and degree of focus on contemporary events as opposed to historical events. Each type of strategy has its own characteristics and there are both advantages and drawbacks of each strategy.

In our research study, we examine a contemporary event, i.e. the implementation of ‘Just-In-Time’ distribution, and the case is real and specific. We have chosen case study as our type of research strategy because we want to learn and understand such a phenomenon study within a real-life context. The case study strategy is important for us in order to gain a holistic view of the actors and activities to be included in the case company. In addition, our research questions mainly focus on 'how' questions within the main research question: ‘How to improve customer service through JIT distribution’. This condition is one of the main ones for choosing the case study strategy (Yin, 2003).

Dubois and Gadde (2002) argue that case studies provide unique means of developing theory by utilizing in-depth insights of empirical phenomena and their contexts. The case study involves the detailed examination of the phenomenon within its real-life context. The aim here is to provide depth of analysis, which includes not only the phenomenon itself but also the context in which it is located. According to Yin the case study methods give attention to the intertwining of phenomenon and context, however he does stress that such detailed examination can be applied only within the specified boundaries of the case. Merriam (1998) also argues that case study is designed to gain in-depth understanding and can accommodate a variety of disciplinary perspectives. Furthermore, Yin (2003) claims that the unique strength of case study is to handle many varieties of evidence such as documents and interviews. During the research process, we gained in-depth insights of the empirical phenomena occurring in the case company and this will be further described in the chapters of empirical findings. This shines as one of the strengths of case study, which includes direct observations and interviews, because it is possible to work with a great variety of evidence. However, the amount of evidence should be carefully treated in order to avoid biased evidence.

Therefore, we consider the case study as being the adequate approach to be utilized as our research strategy. Using this research strategy is suitable for increasing the understanding of ELS people’s actions and practices in reality and their perception and contribution to the new transportation concept, which can be considered a practice undergoing change. Results obtained from this practice can also be applied to other firms in production industries which makes the case study not only suitable for the needs of the studied case company.

### 2.2.1 Case Study Design

There are different approaches regarding case study design. Yin (2003) has a deductive approach while Merriam (1998) has an inductive approach. We employ the combination of these two approaches in our case study design in order to utilize the benefits derived from both approaches.

Moreover, Yin (2003) claims there are four types of case study design as below:

1. Single case with holistic nature
2. Single case with embedded nature

3. Multiple cases with holistic nature

4. Multiple cases with embedded nature

As per definition of Yin (2003), our case study is a single case design because we are studying one specific company, namely Electrolux Laundry Systems. A case study can be furthermore divided into embedded and holistic. As in an embedded case study the analysis is concerned with more than one unit the nature of our single case is embedded, since we have been studying different units within the company. Sample units in our single case comprise the local sales subsidiaries in the United Kingdom, Germany, Finland, France and Spain; dealers and the Swedish head office. These multiple sample units are primary data sources that are capable of giving answers to the research questions.

Therefore, this study has been identified as a single case embedded design, as illustrated below:

![Figure 2.1: Case study design (Source: own)](image)

### 2.3 Research Method

When performing research, it is crucial to choose a proper research method. There are two main types of research methods: quantitative and qualitative. Creswell (2003) claims that the quantitative method is an approach in which the investigator primarily uses positivist claims for developing knowledge and employs inquiry strategies such as experiments and surveys, and collects data on predetermined instruments that yield statistical data. The researcher needs to use closed-ended questioning and focuses on numeric data.

On the other hand, the qualitative method is an approach that is primarily based on the investigator’s participatory perspective. It uses strategies of inquiry such as narratives, phenomenology, ground theory studies or case studies. The researcher collects open-ended, emerging data with the primary intent of developing themes from the data. Norman (2005) defines qualitative research as a situated activity that locates the observer in the world. That means the
researcher can generate both subjective and objective information from the research area. It involves the studied use and collection of a variety of empirical materials such as case study and interview that describe the routine and problematic moments and meanings in individuals’ perceptions. Moreover, Merriam (1998) also claims qualitative research is an approach that focuses the process and phenomenon as a whole and the meaning interpreted by the researcher’s perception. The main concern is to understand the phenomenon of interest from the participants’ perspectives, not the researcher’s.

As we neither focus on numeric data nor aim to quantify the data we collected from the research study, we decided to choose a qualitative method so that we can get more in-depth insights originated from individual evaluations of the current situation through the interviews in ELS. This way, we can create a deep understanding of a specific case and how various factors such as relationship characteristics and flows of information and material within our study are interlinked.

2.4 Data Collection and Analyses

Regarding data collection, Merriam (1998) states there are three techniques of collecting data in qualitative research: interviewing, observation and document analysis. Yin (2002) also claims there are six commonly used sources of evidence in case study researches that can be identified and they are illustrated in the following table:

<table>
<thead>
<tr>
<th>Source of Evidence</th>
<th>Strengths</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>• Stable – can be reviewed repeatedly</td>
<td>• Retrievability – can be low; biased selectivity if collection is incomplete</td>
</tr>
<tr>
<td></td>
<td>• Unobtrusive – not created as a result of the case study</td>
<td>• Reporting bias – reflects (unknown) bias of author</td>
</tr>
<tr>
<td></td>
<td>• Exact – contains exact names, references, and details of an event</td>
<td>• Access – may be deliberately blocked</td>
</tr>
<tr>
<td></td>
<td>• Broad coverage – long span of time, many events, and many settings</td>
<td></td>
</tr>
<tr>
<td>Archival Records</td>
<td>• Same as above for documentation</td>
<td>• Same as above for documentation</td>
</tr>
<tr>
<td></td>
<td>• Precise and quantitative</td>
<td>• Accessibility due to privacy reasons</td>
</tr>
<tr>
<td>Interviews</td>
<td>• Targeted – focus directly on case study topic</td>
<td>• Bias due to poorly constructed questions</td>
</tr>
<tr>
<td></td>
<td>• Insightful –</td>
<td>• Response bias</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Inaccuracies due to poor</td>
</tr>
</tbody>
</table>

14
Table 2.1: Six sources of Evidence: Strengths and weaknesses (Based on Yin, 2003)

As we can see from the above table, there is no single source which possesses any definite competitive advantage over the other sources because there are both strengths and weakness of each source. The researcher should use as many sources as possible in order to have a good case study. In our research study, we use mainly documentation and interviews. Yin (2003) argues that documents play an explicit role in any data collection in doing case studies. Documentation sources such as the internal presentations as well as sales companies’ internal reports are important in our research study because they provide detailed and specific information on the company internally.

**2.4.1 Types of data**

Data collection includes primary and secondary data or a combination of two types. In our research we use the combination of primary and secondary data to complement and validate each other. Primary data was collected through interviews where we asked questions and investigated the sales countries’ environments and ways of doing business. These indicators can be important for understanding the context of the answers and the conditions in which sales companies are currently working. For example, in Spain we investigated how the respondents were using the new ordering system and the current stock-keeping conditions observing the warehouse. These factors led us to understanding the ‘local context’ of their answers.
In the thesis the primary data has been collected through qualitative interviews conducted with logistic executives in Electrolux Professional Laundry Systems, country sales managers and local dealers in the countries of UK, Finland, Germany, France and Spain. Merriam (1998) states this allows researcher to respond to the situation at hand and to the new ideas on the topic. We also used interviews (phone and face-to-face interviews) because they were essential sources to collect data as well as to provide deep insight for our research study. In case study, interviews are open-end structure and objective.

It is important for a researcher to manage the flow of the interview (Fisher, 2004) and probing is a crucial technique. We used probing technique during the interviews because this is the technique to ask for more details and clarifications continuously (Merriam, 1998). Fisher (2004) also claims the researcher can control an interview through probing an idea expressed earlier in the interview and also before the last utterance. By using probing technique, we asked for more concrete examples after a prior question. In this way we collected more information by going deeply to the question. For example, we asked the questions such as: What kind of difficulties did you encounter before? Can you give us an example?

The first interview was conducted in February 2009 in Ljungby with the head-office executives responsible for logistics of Electrolux Professional Laundry Systems which provided insights to a research subject matter. We received answers to a number of questions in order to understand the starting point of the current logistic strategy and its current targets and suggest informants for further supporting evidence. To obtain the most suitable knowledge about the research subject our informants have been suggested to be sales country managers and administration, exclusive and non-exclusive dealers and end-customers. Therefore, the first interview enhanced our general understanding of the new transportation concept from a logistic side. Afterwards phone interviews were conducted with country managers and dealers in the countries of Finland, UK and Germany. These interviews had the purpose to understand the local countries’ processes related to new transportation concept and their perception of current situation. We asked the questions in an unbiased and objective manner so as not to create defensiveness of the respondents. One of the drawbacks of using phone interviews was that interviewees did not have enough time to answer all the questions, sometimes because of the busy schedule. However, all the respondents were paying attention to the questions because of the importance of the new transportation concept for them.

In early May 2009, we made personal interviews with sales administration and dealers in France and in Spain. The data was gathered from those who were directly responsible for, and involved with, logistics activities at the sales companies for stock-keeping, delivering and order handling, sales and marketing activities related to local market situations as well as technical support activities. These interviews were of an unstructured character which included formulated questions defined beforehand to guide the interviews instead of direct
structured questions and therefore the interviews involved a lot of discussion and not only questions and answers as in a structured interview (Merriam, 1998).

Secondary data is not necessarily case-specific. The secondary data is useful for gaining a general understanding of a subject and can be divided into internal sources and external sources (Kinnear and Taylor, 1991). The internal sources include data that has been published within the case-company, while the external sources do not necessarily have direct relation to the case company.

In this research internal secondary data has been gathered in the form of company internal materials, corporate websites, electronic articles, and books. It includes the Annual Reports, ELS presentations and the Training of ELS logistics materials. This material has been helpful to get deeper into the research subject on the initial phase. However, the understanding of the specific topics could not be achieved with the usage of primary sources. For the theoretical framework secondary sources have been useful to understand the topics of JIT distribution, Relationship marketing and Dynamic capabilities. These sources increase validity and enhance reliability.

2.4.2 Data Analysis

Regarding data analysis, there are two approaches claimed from Merriam (1998) and Yin (2003). Merriam (1998) argues that researcher needs to classify the collected data into different categories in order to develop models and theories while Yin (2003) states that the researcher 'play with the data' until meaning occurs. According to Merriam (1998, 178) data analysis is considered a complex process of consolidating, reducing and interpreting the gathered information through constant going back and forth between concrete bits of data and abstract concepts, inductive and deductive reasoning, between description and interpretation. For a case study research Merriam suggests three basic levels for conducting the analysis. The first level includes the topical sorting, organizing and presenting the data in a descriptive manner. In the next level the analysis moves from the description to the more abstract category construction which is the classification of data into groupings - themes. The final third level involves making inferences and generating theory. Yin ascribes to “play with the data” until meaning occurs. Our approach was to use the theoretical framework and the empirical data to analyze the meaningful information that was collected. The ability to 'play with the data' between both sections allowed us to formulate adequate meaning when performing our data analysis. It also encouraged to utilize the methods of compare and contrast when drawing out conclusions.

2.5 Quality of Research

The quality of the research is critical for the researcher in terms of the validity and reliability. This affects the trustworthiness and creditability of the research. Validity emphasizes
whether the developed framework can represent the reality and how the data and theory are connected.

Yin (2003) states there are four aspects to establish the quality of the research: constructs validity, internal validity, external validity, and reliability. Different tactics are used in each aspect in order to enhance the quality. The purpose of this part is to account for the validity and reliability of this thesis in order to let the reader know to which extent the findings can be trusted.

2.5.1 Construct validity

Construct validity means to establish correct measures for the concepts being studied. It is important to see if the concepts match each other (Yin, 2003). Yin (2003) introduces this type of validity during the data collection and composition process. It refers to the selection and composition of correct theoretical constructs investigated in the study. In order to enhance construct validity during the research, Yin (2003) suggests the following three tactics:

- Use multiple sources of evidence
- Establish chain of evidence
- Use key informants to review draft case study reports

In our case, we have selected three theoretical constructs which are the three building blocks of our theoretical framework in our thesis: just-in-time distribution, relationship marketing and dynamic capabilities. We account for these constructs because they consequently lead us to answering our sub questions and finally help to answer the main research question related to customer services improvement through just-in-time distribution. In our case, the existing and approved theoretical concepts and models of JIT with customers (Claycomb et al., 1999), the model of demand chain management (Heikkilä, 2002), the model of capability formation and performance (Zahra et al., 2006) were used as a framework upon which data was matched and collected. When choosing our framework for the analyses of customer needs on service we also took into consideration the qualitative performance measures that attribute customer satisfaction on the services received introduced by Christopher (1994) and the creation of perceived customer value introduced by Kotler (2000). We decided to choose the relationship marketing approach as a ‘bridge’ that needed to be established between the JIT distribution and Dynamic Capabilities theoretical constructs. Additionally, triangulation was used to gather data from many sources, thus acquiring higher validity.
2.5.2 Internal validity

Merriam (1998) describes internal validity as dealing with the issues of how research findings match reality meaning congruence of findings in relation to reality. Thus, whether the findings actually capture the reality. Therefore, the higher the internal validity, the more strategically important the conclusions and recommendations of the study would be for the case company.

In qualitative research, it is important that the researcher uses the following six strategies to enhance the internal validity (Merriam, 1998). It is significant that the researcher concerns internal validity when providing recommendation to the case company.

1. Triangulation
2. Checking interpretation
3. Long-term observation/repeated observations
4. Peer examination
5. Involving participants in all phases of the research
6. Clarifying researchers' biases and assumptions

To enhance the internal validity of our research, we deploy triangulation method by using multiple sources of data (primary and secondary) internally and externally and also tried to maintain a chain of evidence. Therefore triangulation refers to the usage of multiple investigators, sources or methods to confirm the findings and to validate case study material. We deployed triangulation after conducting interviews and interpreting the results with the consultation of tutor to get an external opinion of the interpretation in order to increase the validity. We also used the opinions of other master thesis students conducting the research for ELS in e-commerce field of study to comment on the problematic issues and interview interpretation. By employing triangulation the validity of this thesis has been enhanced.

The ‘explanatory power’ of the theoretical concepts is used in the way that the theoretical concepts of the JIT, relationship marketing and dynamic capabilities framework explain how the JIT distribution can result in improved customer service. It also means that the theoretical concepts need to have analytic value. High internal validity determines logical consistency of the theoretical constructs and the empirical and analytical findings on which they are based. We argue our internal validity is acceptable because the empirical findings reflect customer situation from the local sales company point of view in the country of France, but not from the customer, and making our perception and conclusion of the situation single-sided .The validity could also be higher if we could collect more information from more respondents, especially from the local customer side.
2.5.3 External validity

External validity concerns the extent to which the empirical findings in one study can be general enough and applied to other situations or case studies. It concerns the extent to which the research study is generalizable. Generalizability is a critical issue related to external validity. The higher the external validity, the higher the generalizability is.

Merriam suggests relevant strategies for enhancing the possibility of generalization of a single case study: rich description which requires enough description provided by the researchers; typicality or modal category which describes how typical the phenomenon studied is; and multisite designs.

The abovementioned strategies allow the readers to make comparisons related to their own situations. We provided a rich description of the analyzed issues such as local customer situation, relationships and the flows of information and material between different actors. Thus, the readers can compare their situations with our research and transfer the case situation to the own ones. Through investigating the typicality readers make comparisons of their specific problems to research problems. The generalizability is high if delivery time is a major concern for the customers because the issue of delivery time is of vital importance in our case study. A multisite design is applied to a wider range of readers.

To some extent, these strategies have not been utilized completely in this thesis as the purpose of this study is to solve a specific problem of a one single case company and the recommendations might not be applied to other companies. The research findings can be applicable for the big industrial and multinational companies which have international experience and consider the issue of delivery time to be important. Consequently, the level of external validity is considered acceptable.

2.5.4 Reliability

Reliability refers to the extent to which the research findings can be replicated as well as the consistency of the findings (Merriam, 1998). Yin (2003) also argues the objective of reliability is to reduce the errors and biases in the research study. However, human behavior is natural and non-static and thus might change over time.

To enhance the reliability, we use audit trial which requires the researchers to explain in details how data was collected, categories derived and how decisions were made throughout the inquiries (Merriam, 1998). However, some factors could affect the reliability of the research study. During the interviews with the German respondents, we conducted interviews in German and translated the interviews from German into English. This can affect the reliability as some information could be lost in translation. Some of the respondents did not speak English very well, thus, misunderstood some questions since many of our interviews were in English. We overcame this problem by explaining the questions very clear and reformulating the questions when the respondents did not
understand clearly. This issue assisted the interview processes to avoid the issue of misunderstanding.

In order to avoid confusion, we conducted phone interviews together as well as with master students who are doing the research for ELS in e-commerce as the questionnaires complement each other. In order to minimize the biases of the interview interpretation and to ensure the common understanding of the current logistic situation we consider the presence of tutor in the interviews in France and in Spain to be important. If any doubts aroused, re-contact of the respondents was used for clarification and reformulation of our pre-attained thoughts. We kept our research in high transparency and transcribed the data into written manuscripts in order to reduce errors.

2.6 Ethics

Being researchers, we concern the ethics of the research study and therefore we provide accurate information in our study. We took away the bias and perform objective manner throughout our research study in order to give a true picture for the readers. We concern privacy and confidentiality and sensitive data was not used. We asked our respondents’ permission to record the information before tape-recording. We use the valuable internal information only for research purpose and we our eyes only of the information we received.

2.7 Methodology summary

We have chosen the case study as our research strategy in order to gain in-depth understanding of the specific phenomenon in our case company, ELS. Moreover, we have chosen qualitative research as our research method in order to understand the phenomenon and current situation of the logistic issues in ELS. We employ the adductive approach to guide us to find a suitable framework between empirical observations and the established-theory. By using systematic combining, we have matched the empirical data and theory by going back and forth between framework, data and analysis. Furthermore, we use a single-embedded case study design so as to have a deeper understanding while it still provides us a more holistic view of the studied research problem.
Methodology

Theoretical Framework

Phase 1
- Subproblem 1: Customers perception of Service
  - Purposes: Describe local customer needs and what is perceived by customer as service

Phase 2
- Subproblem 2: New JIT process mapping
  - Purposes: Analyze information and material flow process via JIT distribution

Phase 3
- Subproblem 3: Changes in routines
  - Purposes: Provide solutions via creation new competences how to improve customer service through JIT distribution

Main Research Problem

Case study

Analysis

Conclusions

Recommendations

Customer expectations of current service improvement

Just-In-time distribution implementation at manufacturers’
Figure 2.2 Research process model (Source: own)

The developed research process model outlines our research process of the thesis. The main research problem springs from two main problematic issues: JIT distribution implementation and customer service improvement.

The first phase aimed at creating in-depth understanding of the current ELS customer needs and how ELS serves its customers. During this stage interviews were conducted with local customers. As the assessment of impacts of JIT implementation from a customer perspective it was decided to focus mainly on order handling process, information and materials flow processes and service aspects.

In the second phase, a process mapping was illustrated to gain a complete understanding of the current information and material flow process between local sales companies and production units. Interviews were conducted with the major sales companies in Europe. As the assessment of impacts of JIT implementation from a customers’ perspective it was decided to focus mainly on relationship between production units, local sales units and customers as well as information and material flow perspectives.

In the third phase, the data gathered from the interviews with customers and local sales companies was used to understand how the changes of routines can create new competences for the company through JIT distribution.

As it was mentioned all three research stages were complemented with semi-structured interviews. We gather the information and present in the part of empirical findings. Analysis will be combined with findings and the personal research model we have created. Based on the empirical findings and analysis, conclusions and recommendations are provided to our case company on how to improve customer service via implementing JIT distribution.
3. Theoretical framework

In the theoretical framework we present three chapters of our research. The described theories and models consist of three building blocks: JIT Distribution, Relationship Marketing and Dynamic Capabilities. They aim at structuring the final appropriate model for analysis. We begin with JIT Distribution as the general framework for analyzing how JIT is developed to fit into the customer’s service offer. Then we proceed with detailed theoretical framework for analyzing the relationship of major actors— the customers, local sales companies and production units – in order to identify the role of relationship perspective for customer service improvement and sustain mutually beneficial relationships. Finally, we use the theoretical framework for dynamic capabilities to understand how a company could implement JIT successfully in order to address customer needs and to sustain competitive advantage in ever changing environment.

3.1 JIT Distribution

In this chapter we will describe the evolution of Just-in-time (JIT) distribution from production perspective to service production perspective. It shows why we start with the customers’ needs in Just-in-time (JIT) distribution. Further on, we will describe how to integrate all aspects of the chain’s activities to provide superior value to customers through mapping the information and material flow process in a demand chain and value chain. It shows how JIT is developed to fit into the customer’s service offer. Therefore, we discuss the changes throughout the supply chain as well as the consequence of shifting JIT into a customer perspective.

3.1.1 The evolution of Just-in-time (JIT) distribution

3.1.1.1 Production perspective of JIT distribution concept

During the last 30 years there has been an evolitional transformation of company’s supply chain performance as efficiency improvements were enacted. Manufacturers found they could no longer maintain large volumes of production and cost efficiency of the production processes. Thus, it resulted in reduction of product cycle time and created sufficient systems to avoid substantive waste. Just-in-time (JIT) has been the name commonly used to describe a manufacturing system where necessary parts to complete finished products are produced or delivered at the assembly site as needed (Wafa and Yasin, 1998). The term JIT has gradually developed from a specific practice to be implemented on the factory and with suppliers to a philosophy of management that is aimed at continuous improvement in productivity through the continuous reduction of waste and reduction of inventories. (White and Prybutok, 2001; Vokurka and Lummus, 2000).
JIT derives various inventory levels for optimum materials requirements and maximizes long-term efficiency by focusing upon inventory management in the short-run (Erdem and Swift, 1998). Implementation of JIT concerns the company’s production function from two unique perspectives:

1) It provides a method for deriving optimum materials requirements and inventory levels in production process;

2) It maximizes long term benefits by accepting short term dis-economies.

JIT distribution from a production perspective considers time which takes a product to be completed as a combination of motion and work (Schniederjans, 1993). The activities such as materials handling, transporting, preparing, and counting make up motion time and need to be eliminated. Other activities such as fabrication and assembly add real value to the product and make up work time. In production, these activities are of vital importance to pay attention to as they make a product worth purchasing by customers.

In the last decades many companies around the globe have been adopting JIT practices as they seek to attain and sustain competitive advantage (Fullerton, 2003). Chong, White and Prybutok (2001) state that the longer the JIT system is in place more benefits are achieved, and the greater the extent of JIT implementation the greater the success of the company is achieved. In addition, JIT is “designed to produce a high volume of output with fewer resources ..., but with the ability to accommodate more variety than traditional systems” (Stevenson, 2005).

The focus to achieve both higher standards of productivity and higher quality made JIT well suited to remain the dominant strategy for many manufacturers since late 1970s. Ultimately, it results in reductions in total manufacturing costs with corresponding improvements in profitability. However, in today’s’ environment customers are becoming more demanding in terms of variety, better quality and service, including reliability and faster delivery. Undoubtedly, JIT benefits a certain functional production areas of the organization. In the meanwhile, one of the most important areas such as exceeding customer service has, actually, been untouched for a long time. The process that brought finished products to customers was characterized by inefficient optimization of resources caused by transactional business relationships (i.e., adversarial as opposed to cooperative) which eventually affects customer value.

Nowadays the general focus of implementing JIT internally with production and upstream with suppliers is passing away as the satisfaction of both internal and external customers becomes increasingly important (Claycomb, Dröge and Germain, 1999; Bovet and, Sheffi 1998). The JIT is going beyond optimizing performance at a company and elimination waste in upstream exchange with suppliers. It shifts company’s focus to serve the customer needs and integrate all organizational structure in this process. In the next part we will define JIT
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distribution from a customer perspective. We will also discuss the JIT distribution playing a
critical linking role between a manufacturer and customer.

3.1.1.2 Customer perspective of JIT distribution concept

Claycomb, Dröge and Germain (1999) define JIT with customers as a use of integrated
problem-solving initiatives of a JIT philosophy concentrating on improving quality and
facilitating timing in supply and distribution to external customers.

Juran and Dershin (1999) use the term timing as a customer metrics in terms of supply chain
delivering orders at the time needed for customers. Delivery timing is a key in order to meet
customer demands. Clinton and Vecchio (2002) related timing to delivery, schedule changes,
design changes, customer needs, and requirements for simultaneous efforts. It involves
specialized technologies and expertise, and facilitates simultaneous achievement of
objectives within a limited timescale. Thus, timing appeared to be a critical component of
customer service. To capture the timing dimension, Holcomb et al. (2004) suggest that
timely supply chain data should be available for making decisions to achieve two significant
objectives: improve customer service and improve operating efficiencies.

Heizer and Render (2004) states JIT as a “philosophy of continuous and forced problem
solving that supports lean production driven by the ‘pull’ of the customer’s order”. Ahmad,
Schroeder and Sinha (2003) highlight that JIT links the customer with the production system
with the ability to respond to changes in customer need. Thus, the main objective of JIT with
customers is to satisfy the customer by delivering the right goods or services in the right
quantities at the right times while minimizing total process costs by eliminating all kind of
waste from the whole supply chain (Claycomb, Dröge and Germain, 1999). The “right
product” means that a customer gets a product not only that confronts specifications but
also on the associated value-added services as well as the processes that produce these
services. This could be translated into an integration of the all organizational structure in the
process of producing value-added services for a customer.” In the right quantities at the
right times” means that customers get exactly what they want or need at the exact time
they want or need it. Right-time is based not when the transactions are entered but when
they go through the final process to produce right-time decision support (Connor, 2009).

Precise quality and timing are derived from customer demand. These aspects also include
suppliers to take the right decisions about inventory replenishments and information sharing
about product flow. Precise quality and timing are related to on-time delivery including
diminishing inventory at the every point of supply chain. Therefore, JIT promotes conditions
necessary to manufacture high-quality products to meet customer demand with reduction of
inventory and high level of productivity. It improves customer service changing the
circumstances that cause a waste to exist (Chapman and Carter, 1990).
As a manufacturer produces and delivers items at the rate required by the customer at the precise time required, a customer is no longer dissatisfied by the defects of waste time, money and inventory. According to this aspect we could consider JIT a time-compression and customer-oriented strategy. It allows a multinational company to compete on waste elimination by taking time and inventory out of the entire system and deliver appropriate products with a fixed time frame as customers’ need arises. Thus, producing value-added services which implies continuous supply chain improvements with a goal to satisfy customer needs.

If consider JIT distribution with customers, the relationship between JIT with customers and each of the organizational structure should be looked upon both internally and across boundaries. The coordination and integration of the company’s structure as a single entity as well as recognizing the service level requirements of final customers are of vital importance for successful development and integration of JIT with customers. Claycomb, Dröge and Germain (1999) collected data from a sample of 200 manufacturing members of the Council of Logistics Management to investigate the relationship between JIT-with-customers, organizational structure and performance outcomes. In the model below authors examine the potential effects of the selected control variables on the direct links between JIT with customers and the outcome variables.

Figure 3.1: A model of factors associated JIT with customers (Source: Claycomb, Dröge and Germain, 1999)

The authors’ framework in the Figure 3.1 identified four dimensions of organizational design: formalization, decentralization, integration and specialization.

First of all, formalization is the extent to which work processes of the firm are standardized. There are three dimensions in the formalization:

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- Formal internal control: It refers to monitoring performance based on internal records in the organization.

- Formal benchmark control: It refers to comparing performance to industry standards or competitors.

- The strategic formalization of the logistics function: Strategic formalization is concerned with whether the logistics function has a formal, written mission and strategic plan in the organization.

Both the internal control and benchmark control dimensions are related critically to the firm's formalized performance control system and these controls increase when JIT with customers increases. The strategic formalization of the logistic function provides the foundation for the above-mentioned control systems with the planning documents. Formalization is connected with formal performance measurement to provide better customer service.

Decentralization refers to the hierarchical location that has decision making authority. The organization is centralized when the decision making is decided by top levels. Three decentralization aspects are further examined to assess whether JIT with customers is associated with the delegation of decision making authority

- Scheduling decisions such as priority of orders and delivery dates to customers.

- Strategic decisions such as distribution service levels and the location and number of factories and warehouses.

- Marketing decisions such as pricing and promotion.

JIT with customers is related differently to each of the above aspects of decentralization. The scheduling and strategic decisions become centralized if the level of JIT with customers is high, whereas marketing decisions maybe decentralized in the organization due to the degree of inter-functional coordination.

Integration refers to collaboration between departments and lateral communication throughout the organization. The focus is on the use of integrative mechanisms and logistic strategy integration. JIT with customers is related to these two types of integration. When the inventory buffers are reduced, it requires interdepartmental collaboration and coordinates all the functional activities throughout the organization.

Last but not least, specialization is the degree to which organizational tasks are subdivided into separate jobs. It concerns the number of specialists in the logistic department and who direct their efforts to narrowly defined activities sets. When the level of JIT with customer is high, the involvement of JIT activities increases and the organization structures became
more specialized. The specialized staff has to ensure the smooth transfer of production plans or sales forecast from the customers and to perform additional value-added activities.

As the ultimate goal of JIT implementation is to improve competitiveness, JIT with customers is associated with two kinds of performance: efficiency and financial performance. Efficiency is examined in terms of amount of outbound inventory on hand. Reduction of inventory is a result of JIT practices and a measurement of overall improvement and performance of the system. The financial performance implications of JIT include gains in revenues and reductions in costs resulting in increased profitability.

From the above model, three contextual variables may influence the direct links between JIT with customers and organizational design and performance. They are firm size, production technology and executive tenure.

Concerning firm size, the larger the firm, the more specialized the organizations becomes as the firm tend to focus more on coordination or integration through subdividing tasks. The second variable is production technology which refers to the manufacturing processes. The choice of production technology may influence the amount of finished goods inventory on hand because finished goods inventory tends to be lower when a custom manufacturing process is used compared with a mass production process. The final variable is executive tenure which is related to the level of stability of organizational structures. The longer tenures of team members, the greater the social interaction and coordination. (Claycomb, Dröge and Germain, 1999)

Thus, we start with the customer service perspective in Just-in-time (JIT) distribution because customers’ perspective has always been put aside while manufacturers have been focusing on production processes. In the today’s environment customers are becoming more demanding in terms of service. Delivery timing has become a key in order to meet customer demand meaning to deliver orders at the time needed for customers. Therefore, timely supply chain information is important to achieve two significant objectives: improve customer service and improve operating efficiencies. According to this aspect we consider JIT with customer a time-compression and customer-oriented strategy which produce value-added services with a goal to satisfy customer needs.

3.1.2 Starting with the customers’ needs in JIT (JIT) distribution

In this section we will discuss the evolution of supply chain management into demand chain management and discuss the mapping of information and material flow processes in a demand chain and value chain. We also describe performance measures based on customer service level.
3.1.2.1 Evolution of supply chain management (SCM) concept

The JIT movement of 1980s evolved into SCM in 1990s (Giunipero et al., 2005) and it is an integral part of supply chain management (SCM) today. The wide focus on SCM has not led to a lessening of importance for JIT practices. Both JIT and SCM encourage reducing the number of suppliers, building relationships for the long term, conveying critical information on both long and short-term production plans to maximize company’s effectiveness (Vokurka and Lummus, 2000). However, a key difference between JIT and SCM lies in the perspective. SCM perspective is broader than the perspective of JIT. SCM adopts a systemic view of the supply chain. The “integrated” philosophy of SCM is complemented by the activity-based philosophy of JIT. JIT may benefit certain functional areas of a company through optimization of inventory, while other non-targeted functions of a company are not touched upon. SCM in going beyond optimizing performance at a company and integration operations and elimination waste at suppliers, suppliers’ supplier, customer, customer’s customer (Vokurka and Lummus, 2000).

Generally supply chain is viewed as a set of relationships wherein a number of various business entities work together to perform the procurement of raw material, its transformation into intermediate and end-products for the customers (Ganeshan, 1999). It is traditionally characterized by forward flow of materials and a backward flow of information.

Tracey et al. (2000) highlight the importance of management relationships across the supply chain which requires higher levels of communication, mediation, and compromising. The authors point out that involving supply chain actors in decision-making presents the opportunity for an exchange of ideas and information that leads to better results for the manufacturer.

As a result, there is a great interest in the supply chain literature in the coordinating mechanisms connected with systems that facilitate supply-chain integration and coordination, especially with respect to connectivity (Mukhopadhyay et al., 1997). Handfield and Nichols (1999) define the content of supply chain management managing the flow of materials developing and maintaining supply chain relationships with both customers and suppliers. Anderson and Lee (2000) highlight the importance to include restructure organizational relationships across supply chain partners. Surana et al. (2005) highlight the need to develop coordination systems that leads towards adaptive, flexible and coherent collective behavior in supply chain. At the same time, researchers in the supply-chain area have noted the importance of considering cultural, organizational, and path dependence challenges in attaining shifts, such as those needed to bring about customer service (Lewis and Suchan, 2003).

SCM can be analyzed as an integration of key business processes from end user through original suppliers that provide products, services, and information that seeks to integrate all aspects of the chain’s resources to provide superior value to customers (Lambert and
Cooper, 2000; Lambert, 2004). Therefore, effective SCM can be considered a capability that can help solve the problems inherited by modern manufacturing organizations and contribute to high effectiveness, i.e. customer satisfaction (Tracey et al., 2004).

3.1.2.2 Supply chain driven by customer needs

The evolution of SCM shifts the focus driven by supplier needs to adapt its offering to a wide variety of customer situations and needs (Heikkilä, 2002). Understanding the customer’s situation and need together with the right offering contributes to good co-operation, which further leads to supply chain efficiency and high customer satisfaction. A number of researchers suggest that better company’s performance can be achieved by consolidating customer and supplier bases, removing unnecessary steps in the chain, speeding up information and material flows, and creating long-term partnerships with major customers. This puts emphasis on the customer needs and adopts this aspect as the starting point for supply chain management giving the supplier access to the customer’s real demand data (Heikkilä, 2002). Vollmann et al. (2000) suggest using the term demand chain management instead of SCM.

Demand chain management integrates customer real focus into logistics operation by exploring how to build lasting customer relationships and how to deliver value into customers’ operations. Waters (2003) defines a demand chain management as a combination of supply chain management and marketing, based on mapping the customers’ demand and decision chains. He points out that mapping the demand chain offers opportunities to differentiate the value offering and adapt to wishes at different levels in the demand chain. The figure 3.2 shows the contact with customer to be taken on at least four different levels.

1. Deliver to order
2. Pack to order
3. Make to order
4. Source to order

Figure 3.2: Definition of the customer order point (Source: Waters, 2003)
In this model the author points out that moving a customer order point upstream means increasing lead times. This has to be compensated by moving downstream in the demand chain which means by getting early information from the customer. The early information creates a necessary time gain and allows the supplier to reduce inventory without decreasing customer service. The number of stock points may be reduced, and transportation and purchasing may be performed more efficiently. Thus, creating opportunities for the improvement of supply/demand chain. In this context we are moving the supplier’s customer order point from “deliver to order” to “make to order”. This step is considered necessary to improve profitability.

Demand chain management requires a deep understanding of customer side in terms of product utilization and services to the precise need of individual customers to create customer value. Definition of the ‘right delivery ‘for an average customer is not enough to create customer value . The demand chain for individual customer needs has to be analyzed and synchronized via the whole supply chain.

Hoover et al. (2001) point out that nowadays it is necessary to focus on the customer’s demand chain which helps a supplier to better understand customer purchasing process, and what drives a customer. Demand chain management gives a customer a choice of not only a product variety but also of relationship. To build the right customer relationship a supplier needs to understand the customer purchasing process. In the figure 4 helps to understand each step of the customer’s demand chain.

![Figure 3.3: Go Beyond the Customer Order-Understand Your Customer’s Purpose, Planning, Consumption, and Purchase (Source: Hoover et al., 2001)](image)

In our research we will concentrate our analysis on what drives a customer order and how a customer purchases. The issue of what drives a customer order shows that a supplier needs to respond to changes in customer demand and needs. The last decade has seen increasing market-driven pressures towards customer responsiveness to order (Holweg and Pil, 2004). Hoover et al. (2001) highlight the importance of turning the whole supply chain to customer responsiveness to give detailed information on how the timing of customer order and deliver schedule. He sees this opportunity in creating online bidding for transparent responsiveness when a customer could have an access to the information about price, quality, and
aggregate lead time and assess the delivery accuracy. The issue of timing refers to delivering information at the earliest appropriate time. Based on this, the supplier is not only offering the requested product but also provides transparent process of delivery on schedule giving a customer clear information about product delivery. Thus, the customer benefits from this process. The customer can evaluate the capability of a supplier to deliver to promise and monitor progress when the deal is made. For the supplier a benefit is a more stable demand as well as premium for value-added services. This approach creates conditions for win–win partnerships, i.e. customer–supplier relationships in which close long-term co-operation simultaneously increases the customer value produced by the supply chain and decreases the overall costs of the chain. Success in customer–supplier relationships building requires close co-operation between the two parties at several stages of the building process. The supplier needs to be ready to take on varying roles to deal with the customer depending on the customer’s objectives, own resources, skills and capabilities. It can be expensive for a supplier to change the value offering to a customer, but offering a value in the early demand chain gives a supplier more time to react.

3.1.2.3 Mapping the information and material flow in a demand chain and value chain

As information and material flows together form the structure in a demand chain (Heikkilä, 2002), it seems important to understand the mapping of information flow in a demand chain especially in the fast-growing business environment.

In the model of demand chain management introduced by Heikkilä (2002) shows that relationships characteristics of demand chain actors in terms of quality and quantity of information sharing contribute to reliable information flows across the chain. Two aspects of communication behavior that address the extent to which the information exchanged is effective in a partnership include information sharing, and the level of information quality and participation (Monczka et al., 1998). Information sharing refers to the extent to which critical and proprietary information is communicated to one’s supply chain partner (Mohr and Spekman, 1994). Information quality includes such aspects as the accuracy, timing, adequacy, and credibility of information exchanged (Huber and Daft, 1987). Information participation refers to the extent to which partners engage jointly in planning and goal setting. Dyer (1997) highlights that extensive inter-firm information sharing reduces asymmetric information and results in lower transaction costs.
The model consists of the following five propositions. First, the relationship characteristics contribute to information flows. That means good relationships between the customer and the supplier leads to reliable information flows. Trust and interdependence are established subsequently.

Second, reliable information flows in turn result in high demand chain efficiency. This is because reliable information flows promote good quality of information sharing between actors and this enables better planning for the actors. If the information sharing is not clear, order changes or order delays occur, which eventually affects demand chain efficiency. Good demand chain efficiency is related to good trust as well as the quality of information sharing in the relationship between the customer and the supplier. Successful partnerships are characterized by high trust and high levels of interdependence.

The third proposition states that good understanding of the customers’ situation and needs and good relationship characteristics contribute to co-operation with the customer. This is because in a fast-growing business in the ever-changing business environment, the supplier needs to be able to adapt its offering to satisfy various types of customers. Different customer segments have different situations and needs. Therefore, good understanding of customer needs and good customer relationships increase the continuity expectations, which in turn increase the level of co-operation between the supplier and the customer. Good co-operation between the actors improves the joint demand chain.

The forth proposition is that good co-operation in implementing demand chain improvement contributes to high supply chain efficiency and high customer satisfaction. This is because good co-operation helps to increase the supply chain efficiency and this yields good quality of information sharing and high perceived reliability between the supplier and
the customer. As a result, the customers are satisfied when they receive clear information and support to meet their objectives.

Finally, the fifth one states that high customer satisfaction contributes to good relationship characteristics. That means customer satisfaction helps to build long-lasting business relationships, trust and interdependence.

In our research, we use the model introduced by Heikkilä (2002) to map the information of demand chain actors of a company. We characterize the relationship characteristics of demand chain members in terms of duration of relationship, information sharing and trust. Kumar (et al., 1995) state that trust encompasses two essential elements (1) trust in the partner’s reliability, that is the belief that the partner stands by its word, fulfills promised role obligations, and is sincere, and (2) trust in the partner’s benevolence, that is the belief that the partner is interested in the firm’s welfare and will not take unexpected actions that will negatively affect the firm. We further on investigating how the relationship characteristics contribute to the company’s information flow and efficiency.

Gunasekaran (2005) discusses that manufacturing and logistics operations today are increasingly driven by customer needs, resulted in an increasing importance of demand and inventory information visibility across the supply chain.

Ellram (1994) suggests that the information flow between various members of the system is critical to overall performance. The challenge is establishing necessary coordination linkages to allow for effective information flow. Kwan (1999) suggests that accurate information about the quality and availability of inventory is needed from each unit within the supply chain. Real-time information visibility allows responding to customer needs, thus requiring minimum safety stocks across the supply chain. Information about accurate consumer demand allows a company to identify the most significant issues to satisfy the customer. Thus, satisfying the customer becomes the main goal throughout the value chain. The JIT practice provides the foundation for improving information flows for better customer service resulted in high demand chain efficiency.

3.1.2.4 Performance measures and customer satisfaction

In fact, the SCM concept seeks to optimize and integrate the value chain to create unique competencies, including customer service offer. The concepts of relationship marketing and developments in the supplier and customer networks enabled marketers to take a more holistic view of SCM to offer the opportunity to capture the synergy of intra and intercompany integration and management and to please the customer with timely service and lower inventories (Giunipero et al., 2005). The current interest has sought to include the appropriate performance measures based on customer service level. Performance measures are used to determine the efficiency of existing system by determining the values of the decision variables that yield the most desirable level of performance. Qualitative
Theoretical Framework

Performance measures attribute customer satisfaction and information and material flow integration. Christopher (1994) defines customer satisfaction as a degree to which customers are satisfied with the product or service received. Customer satisfaction is comprised of three elements:

1. Pre-transaction satisfaction: satisfaction associated with service elements occurring prior to product purchase.

2. Transaction satisfaction: satisfaction associated with service elements directly involved in the physical distribution of products.

3. Post-transaction satisfaction: satisfaction associated with support provided for products while in use.

Tracey (et al., 2004) points out that variables such as internal relationships, external relationships, transportation (logistics) and inventory management can be chosen to optimize supply performance measures. Such variables have a great impact on customer satisfaction.

Internal Relationships

Successful supply chain integration requires from a manufacturer effective coordination of internal activities. People aspect is just as, or perhaps more critical than the technology applied. Ultimately, it is the participating organizations’ human resources that make opportunities happen. Potential supply chain partners as a rule must sense trust and information sharing among the firm’s functional units before they will join in the collaboration. Consequently, it is crucial that people at all levels of the organization share information, learn collaboratively across departmental boundaries, and think in terms of entire processes of an organization to become more adaptive. People need to involve into relationship by cultivating an ability to cooperate and jointly contribute to the company’s goals rather than compete with each other. It is vital that managers, including senior executives, function more as participative leaders than as directive ones. Adopting a participative philosophy internally is important because it provides a clear vision of the manufacturer’s goals, cross-functional problem solving, and a cooperative work environment where suggestions can lead to process improvements. Participation of each organizational division in the development and execution of company-level strategy is also important. It supports the manufacturer’s ability to customize its products and services, thus, it supports increased customer satisfaction, and higher performance. Accordingly, it seems reasonable to conclude that internal relationships’ involvement in strategy that is an important dimension of building the cooperative and participatory work environment which is essential to SCM success.
External Relationships

SCM requires a collaborative approach that extends across the functional areas of the manufacturer and also includes outside partners. Establishing close relationships with customers can generate trust that in turn fosters effective SCM. A company benefits from helping its customers to grow their business. Value-added customer execution leads to reduced costs, and fosters responsive delivery and robust information sharing. Supplier decisions based on price do not consider customer value as a premium.

One fundamental category of successful improvement of SCM is what is called “customer-facing” aspects. These are aspects such as delivery performance, order performance lead-time, and production flexibility that capture critical competitive factors from the customer’s point of view. They enable the manufacturer to create a bridge from supply chain operations to customers business. Thus, establishing the basis for adequate long-term business relationship between a customer and a manufacturer. These “customer-facing” aspects are intended to measure customer value directly (e.g., product delivery), or measure how well the company is performing in the areas that promote customer value (e.g., production efficiency).

Transportation (Logistics)

Inbound logistics -- the movement and storage of materials for production, and outbound logistics -- the movement and storage of finished goods to the customer, are critical components of value/supply chain management (Porter and Millar 1985; Mabert and Venkataramanan 1998). Tracey (1998) demonstrated that customer value can be created and firm performance enhanced by optimizing inbound and outbound logistics functions. Proper alignment of logistics with manufacturing can result in lower levels of inventory, higher quality, and lower costs. Logistics boost supply chain optimization via intelligent administration of safety stock, transportation mode, data systems as well as facility location issues effectively assisting in meeting the changing customer demand efficiently.

Inventory Management

Attaining the proper balance between asset management and customer service levels remains at the foundation of company’s successful performance based on customer satisfaction. Firms should provide a physical flow of materials and goods that satisfies their customers. This means that decision-making concerning tradeoffs between asset management and customer service is a continuing part of SCM. Logisticians frequently possess the overall perspective required to make decisions regarding inventory management. Well-managed inventory across the supply chain regarding finished goods simultaneously promotes production efficiency, superior delivery service, and satisfactory firm performance (Tracey 1998). Excellent inventory management is more relevant than the rapid growth of the postponement philosophy. This philosophy means delaying the point of
the product’s final configuration downstream in the supply chain, as close to the customer as efficiently possible. This technique has been found to be effective in reducing supply chain costs while simultaneously improving customer service. Prerequisite to the successful implementation of a postponement format, however, is the careful design of the processes to support it, with superior inventory management being a key component of this philosophy.

Therefore, the evolution of SCM shifts the focus driven by supplier needs to customer needs, thus, using the term demand chain management instead of SCM. This approach increases the customer value produced by the supply chain and decreases the overall costs of the chain by moving the supplier’s customer order point from “deliver to order” to “make to order”. Thus, deliver value into customers’ operations. We consider internal relationships; external relationships, transportation (logistics) and inventory management can be used to optimize supply performance measures based on customer satisfaction:

- Internal relationships support the manufacturer’s ability to customize its products and services, thus, it supports increased customer satisfaction

- External relationships establish the basis for adequate long-term business relationship between a customer and a manufacturer

- Optimizing outbound logistics functions creates customer value via intelligent administration of safety stock, transportation mode, data systems

- Well-managed inventory across the chain simultaneously promotes superior delivery service, and satisfactory firm’s performance.

To sum up, first of all, we have described the evolution of JIT Distribution from traditional production perspective to service production perspective. This means company starts to focus on customers’ needs when implementing JIT distribution in order to improve customer services. Therefore, focusing on downstream JIT (JIT with customer), which is associated with factors of decentralization, formalization, integration and specialization, is a critical issue that need to be addressed on nowadays. Second, we discuss the evolution of supply chain management changed into demand chain management which starts from the customer. Demand chain management helps a company to understand the need for good customer-supplier relationships and reliable information flows as contributors to high supply chain efficiency as well as achieving customer satisfaction. Finally, we examine the demand chain model in order to map the information of demand chain actors and to investigate how the relationship characteristics contribute to reliable information flow and high efficiency. Understanding the customer situation and need contribute to good co-operation between the actors which contributes to high customer satisfaction eventually.
3.2 Relationship Marketing

In this chapter, we will discuss the evolution of the marketing concept and further describe and explain the concepts of relationship marketing (RM). This forms another important building block in our theoretical framework. Relationship marketing is a wide term which aims to create and sustain mutually beneficial relationships.

3.2.1 Evolution of Marketing

In the following section, we will discuss the nature of traditional marketing which is product marketing based on outcome consumption. Thereafter, we will describe how the marketing concept changes when we move to process consumption. We will illustrate such changes by using the marketing triangles, adapted from Grönroos (1997).

3.2.1.1 Traditional marketing – product-oriented perspective

In traditional marketing, the focus is mainly on the physical product itself and the customers consume the outcome of the production process by making use of the product. This is called product marketing and the task is to find out what product features customers are interested in and thus to give promise about such features to the customers by external marketing activities such as sales and advertising campaigns. Hence, the company focuses on the functional features of the product in order to satisfy the customers' interest. Customer only consumes a pre-produced product where appropriate features are present and the role of customers is passive. Grönroos (2007) argues that customers are viewed in terms of markets of more or less anonymous individuals. They take no direct part in the production process which is characterized as a closed process. This situation is illustrated in the following product marketing triangle.

![Product marketing triangle](Adapted from Grönroos, 1997, p.414)

Figure 3.5: The product-oriented perspective: outcome consumption and marketing (Source: Adapted from Grönroos, 1997, p.414)
3.2.1.2 Modern marketing – service-oriented perspective

The rapid change in the global environment puts high demands on companies to quickly adjust to new situations in order to stand out from the intense competition. Customers are becoming more high-demanding and prefer to be treated more individually than before. Grönroos (2007) states that the traditional construct is too restrictive in the context of business-to-business marketing, especially in a service context. The situation changes when the type of consumption is altered. The customer perceives the production process as part of the service consumption, not just the outcome of that process as in traditional marketing of physical goods. The consumption process creates an outcome for the customer, which is the result of the service process. The service process is characterized as an open process and is based on process consumption. This situation is illustrated in the following service marketing triangle.

![Service Marketing Triangle](image)

Figure 3.6: The service-oriented perspective: process consumption and marketing (Source: Adapted from Grönroos, 1997, p.415)

As we can see, the elements in this illustration are different. The most important change is that the product and market elements are replaced by the five groups: personnel, technology, knowledge, customer's time and the customers. Grönroos (2007) claims that many of the people representing the firm create value for customers in various service processes, such as deliveries and customer training. Some of them are directly engaged in sales and cross-sales activities. The company must have competencies to acquire the resources needed and to implement the service process in a way that creates value for customers. This is definitely true considering the marketing situation nowadays. Service marketing becomes valuable in the marketing perspective for situations where consumption can be characterized as process consumption.

Thus, the changes in the global environment forces companies to quickly adjust to new situations where customers are becoming more high-demanding. Customers perceive the production process not just the outcome of that process as in traditional marketing but as part of the service consumption. Therefore, the consumption process creates an outcome
for the customer, which is the result of the service process. Service marketing becomes significant in the marketing perspective for process consumption.

### 3.2.2 New wave of Marketing – Relationship Marketing

The traditional ‘marketing mix concept’ was introduced by Neil Borden in the 1950s and the mix of different means of competitions was labeled the four P's by McCarthy in 1960 (Grönroos, 2007). However, the marketing situation has been changing from time to time and is becoming more sophisticated. Internationalization increases the competition in the marketplace nowadays especially in the mature markets and the increasing global competition offers customers more alternatives than ever before.

Therefore, the traditional view of marketing mix approach is too simplistic and may easily misguide both academics and practitioners. It does not cover all resources and activities that appear in the customer relationships at various stages particularly in services marketing and industrial marketing. Thus, the traditional marketing view may not be true when concerning the services aspect (Grönroos, 2007). Marketing can be considered as revolving around customer relationships and a new paradigm of marketing thinking, i.e. relationship marketing, has become apparent in the early 1980s. Christopher et al. (2002) claim that relationship marketing recognizes that customer service, quality and marketing are closely integrated. It illustrates how the traditional concept does not capture all the key elements which are needed to build and sustain relationships with markets. This understanding is important because the focus of our paper is related to the relationships with customers. As the position of customers takes an important part in the value chain, it is crucial to develop and maintain lasting, long-term customer relationships for companies.

In the scope of service marketing and industrial marketing, this is a shift from traditional marketing towards relationship marketing. Gummesson (2002) argues that the role of traditional marketing 4Ps has shifted to relationship marketing but the 4Ps still remains a supporting role in marketing.

The development of relationship marketing has emphasized the role of services for manufacturers. Grönroos (2007, p.10) defines relationship marketing as follows:

"Marketing is to identify and establish, maintain and enhance, and when necessary terminate relationships with customers (and other parties) so that the objectives regarding economic and other variables of all parties are met. This is achieved through a mutual making and fulfillment of promises."

There are many approaches to business marketing theory. Jansson (2007) states that there are two dominating approaches: the micro-marketing approach and the inter-organizational approach. In our paper, we will focus on the inter-organizational approach.
3.2.2.1 The relationship marketing approach

Business marketing according to the inter-organizational approach is a kind of relationship marketing. (Jansson, 2007, p.37) and the concept of relationship marketing emerged in the 1990s in the industrial marketing literature. Christopher et al. (2002) state that the early work is written by Levitt in 1983 and he focused on the notion that the real value of a relationship between a customer and a supplier occurs after the sale. Afterwards, further work was done by Jackson in 1985 and she argued that building and enhancing long-term customer relationships involves concentrating on a number of things that have to be executed over long periods and in a consistent manner. She concluded that building long-term relationships through relationship marketing should be the preferred strategy for companies.

According to Coote (1994), there are three approaches to relationship marketing: the Anglo-Australian approach, the Nordic approach and the North American approach.

The Anglo-Australian approach emphasizes the integration of quality management, services marketing concepts and customer relationship economics. The Nordic approach emphasizes the interactive network theory of industrial marketing, services marketing concepts and customer relationship economics while the North American approach focuses on the relationship between the buyer and seller within the organization. These approaches are illustrated as below:
THEORETICAL FRAMEWORK

Figure 3.7: The domain of relationship marketing: alternative schools (Sources: Adapted from Coote, 1994)

In our paper, we mainly focus on the Nordic approach which originates in Scandinavia/Northern Europe. This approach considers especially the service context which includes both service firms and service operations of manufacturers. It views marketing as an interactive process. Grönroos (2007) claims that relationship building and management is a vital cornerstone. The concept of relationship marketing is especially relevant for the situations where firms offer their customers solutions that include the provision of both goods and services (Grönroos, 1996; Gummesson, 1995; Sheth and Parvatiyar, 1995). Therefore, it is relevant in our case company as it provides both goods and services to customers.

3.2.2.2 Principles of relationship marketing

Relationship marketing emphasizes a relationship approach to marketing compared with the traditional approach. Jansson (2007) states that the establishment of relationships creates bonds and dependencies between the parties involved. Hence, relationship marketing focuses on the customer and how to satisfy the customer and maintain quality interactions with them. The quality of a relationship has a prime impact on the long-term business relationship with the customer. According to Christopher et al. (2002), there are three principles regarding relationship marketing.

First, it is vital to maximize the customer lifetime value, which is defined as the net present value of the future profit flow over a customer’s lifetime. This means that the company adopts the strategies which focus on retaining targeted customers. Christopher et al. (2002) argue that not all customers are equally profitable and acquiring new customers involves much more costs compared with retaining existing customers. Trust is built when the relationships with customers are thoroughly developed and maintained. Customer loyalty and referrals are created when customers are satisfied. Hence, it is important for the company to devise strategies to enhance the profitability of the customers it targets on. Market segmentation is an important strategy because it provides the opportunity to customize the offer to the needs of targeted segments which have higher potential profitability. It is crucial to understand the existing profitability of customer segments and take action to realize those segments, and consequently improve customer lifetime value. Companies should seek and maintain relationships with these customers in order to create customer loyalty, which will make the customers less likely to turn to competitors.

Focusing marketing action on multiple actors is another principle of relationship marketing. It is crucial to find the right actors to collaborate with in order to create the ability to win or retain customers. These actors include suppliers, employees, distributors and alliance partners in the value chain and they can directly or indirectly affect a business’s ability to retain profitable customers successfully.
Last but not least, the third principle is that it must be cross-functional. This implies that the marketing department is not the only department involves in relationship building but every department within the organization is. This needs to be accompanied by cross-functional working and people understanding that everyone within the business serves a customer internally or externally. For example, the IT department could be involved in relationship building if IT staffs are responsible for designing a user-friendly interface for customers to get easy access to the company information. They would also build relationship with customer during the communication process in order to understand what the customers’ requirements are.

Consequently, we can see relationship marketing challenges organizations internally to support cross-functional change and externally to support long-term relationships with customers and different actors in the value chain. Jansson (2007) also argues that interdependent marketing activities link actors and their competences together.

### 3.2.2.3 Relationship marketing process and outcome

In this section, we will describe and explain how relationship marketing is viewed as a process. We will describe the three key processes of relationship marketing as well as illustrating the concept with a visualization of the theoretical model.

Marketing from a relational perspective can be defined as the process of managing the firm's market relationships (Grönroos, 1996). Hunt and Morgan (1994) defines relationship marketing are all marketing activities directed towards establishing, developing, and maintaining successful relational exchanges. Gummesson (2002) defines relationship marketing is that marketing based on interaction within networks of relationships. This implies the relationship process includes the interactions that form relationships which maybe generating through networks of suppliers, distributors and customers.

The above definitions imply relationship marketing which is seen as a critical process. According to Grönroos' definition, the process moves from identify potential customers to establishing a relationship with them, and then to maintaining the established relationship and to enhance it. Consequently, more business and good references are generated since then.

In a relationship perspective physical goods and products become a part of the process together with other element such as a host of services (Grönroos, 2007). Today customer is more sophisticated and do not only look for product itself, they demand a much more holistic offering from the company. It is crucial that the company need to manage the offering better than the competitors so as to create value for customers. Hence, the product seen as a process or a total service offering and it becomes a service including tangible products and intangible elements such as different types of services.
According to Grönroos (2007), three key processes are addressed: communication, interaction and value.

**Communication**

In transaction marketing, marketing communication is mainly mass marketing and sales are the only direct interactive element of the communication process and the role of customer is passive. On the contrary, a new trend of two-way marketing communication has emerged in relationship marketing. Integrated marketing communications is influenced by the relationship perspective in marketing. The company gets the response or needs from the customers and also gets better understanding of the current market situations by communicating with each other.

**Interaction**

The management of an interaction process is the core of relationship marketing as product does not evolve in an on-going relationship. The relationship approach puts customer processes instead of product at the center of marketing. In this interaction process, a supplier of goods or a service firm represented by people, technology and systems, and know-how interact with its customer represented by everything from single consumer to a group of buyers, users and decision makers in a business relationship.

**Value**

In relationship marketing, the service organization of manufacturing firms does not have products and they only have processes to offer their customers. The process is an open process which the outcome is viewed as a part of the process. Both the process and its outcome have an impact on the perception of the service quality as well as on customer-perceived value.

In the interaction process a value base is transferred to and also partly created together with customers and the ultimate perceived value for them is generating in the customer processes. Therefore, if the company manages to align its resources and competencies successfully with its customers’ internal processes, this value base is turned into customer perceived value in the process. It is critical that company understands this aspect of the customers' value system in the customer value chain in order to create value for the customer.

**The planned communication process of relationship marketing**

In relationship marketing, a two-way or even a multi-way communication is one of the major aspects of marketing communication. Many communication efforts such as a sales meeting or a personally addressed letter are integrated into a planned on-going process (Grönroos, 2007). This planned communication process is illustrated in the following figure:
Figure 3.8: The interaction, planned communication and value processes (Source: Adapted from Grönroos 2000, p.107)

As we can see from the above illustration, the process is shown as a circle which parallels the interaction process, which includes a number of episodes embracing individual acts. The relationship is established when the communication process starts but at some point the relationship maybe broken or terminated. The two-way arrows between the two circles indicate the interaction and planned communication process parallel and support one another. It is risky to only include planned communication process because the negatively perceived acts or episodes in the interaction process easily destroy the good impression of a planned communication effort. For example, a sales meeting creates an expectation from the customer and the company should follow up on this expectation in the interaction process. If the company does not follow up closely with the customer or it makes any mistakes, the initial good impression of the previous sales meeting will be ruined and cannot develop relationship with the customer. Therefore, the integration of the planned communication and the interaction process creates relationship marketing as well as develops customers' perceived value of the relationship.

**Information management**

The change of business environment and the above-mentioned evolution of marketing have led the company to shift its focus from a product-based to a customer-based structure. It is important that company focuses on how to establish, develop and improve customer relations. One of the important tasks is to gather, analyze and to respond to the individual customers' needs through different channels such as sales force, telephony, direct marketing...
and electronic commerce. Having established the channels that can maximize the customer experience, the company can integrate and manage the information from those channels.

Therefore, Payne and Frow (2005) claim the information management process is critical and is mainly related to the collection and use of customer data and information from all the customer contacts. The major elements are: data repository, which provides a company an integrated data store that is capable of relevant data analysis; IT system, which provides hardware and software; analysis tools; and front office and back office applications, which support the activities of interacting between the customers, suppliers and internal operations of the company. This process is important because it provides the ways of sharing relevant customer and other information throughout the company.

3.2.3 Customer Value

Many companies are facing strong competitions in the marketplace and this increases the need to find new ways of differentiating themselves through creating superior customer value. Knowing where value resides from the standpoint of customers has become critical for managers and customer value analysis is a strategic marketing tool to clarify a company’s proposition to its customers. (Ulaga, 2001). This is because customer satisfaction can be achieved by delivering superior value to customers from the company. The higher the levels of customer satisfaction achieved, the greater the levels of customer loyalty and retention as well as stronger competitive position of the company in the marketplace.

Ulaga (2003) states collaborative relationships in business markets are of growing importance to customers and suppliers alike. Customers need to decide whether to invest in a new supplier relationship or to divest from a low-value relationship. Thus, it is important that company need to understand how they can create and deliver value in the business-to-business relationships.

3.2.3.1 Definition of Customer Value

The term of customer value has been discussing for more than 20 years. Zeithaml (1988) argues from a customer's perspective, customer value is defined as the trade-off between the benefits and the sacrifices in a market exchange. This means customer value is the trade-off between what the customer gets relative to what they have to give up in terms of costs or sacrifices.

Anderson et al. (1993) define value in business market as the perceived worth in monetary units of the set of economic, technical, service, and social benefits received by a customer firm in exchange for the price paid for a product offering, taking into consideration the available alternative suppliers' offerings and prices. Therefore, customer value can be described as a subjective perception of the tradeoff between multiple benefits and sacrifices.
Recently, Möller and Törrönen (2003) suggest conceptualizing value in a supplier-customer relationship along three dimensions: the supplier's efficiency function, the effectiveness function, and the network function. The efficiency function refers to the use of resources in a business relationship while the effectiveness refers to an actor's ability to invent solutions that provide more value to customers than existing offers. The network function concerns the potential of value creation in the larger network beyond the supplier-customer relationship. The term customer value has two dominated meanings: customer perceived value and value for the firm (Woodall, 2003). In our paper, we focus on the customer perceived value which means what is the value that customer receive from the company.

### 3.2.3.2. Customer Perceived Value

Kotler (2000) defines customer perceived value is the difference between total perceived benefits and total perceived sacrifice. Customers buy and obtain satisfaction from the company that they perceive offers the highest customer perceived value to meet their demands. Therefore, the value is the difference between total customer value and total customer cost. That is the customers’ perception of total value that prompts the willingness to pay a particular price or sacrifice for a business product or service. The customer perceived value, not the promised value that the company seeks to create will influence customer satisfaction. Therefore it is important to deliver high customer perceived value in order to generate high customer satisfaction. The customer’s satisfaction or dissatisfaction with the product will influence subsequent purchasing behavior. Such behavior affects the customer loyalty and retention. This is crucial when discussing the customer satisfaction in the context of electronic business in the digital business environment nowadays and the process is presented in the following figure:

![Process for e-business value delivery](Source: Kotler, 2000)

- Business activity is where a company seeks to deliver value through its perception of customer expectations in support of its core products/services.
- Value represents a trade-off for the customer between the ‘give’ and the ‘get’ components. The value here is actual value that online companies wish to deliver.
- Customer expectation is whatever they want from the online business, and is formed from past buying experience, friends’ and associates’ advice and marketers’ and
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competitors’ information and promises.

7. Customer perceived value is the difference between total customer value and total customer cost.

8. Customer satisfaction is a function of perceived performance and expectation.

9. Post-purchase satisfaction will be led by high transaction satisfaction.

When customers are disappointed with online purchase – because the products or services did not fulfill the intended needs, did not perform satisfactorily, or were not worth their price – they may attribute their dissatisfaction to the business and this affect the purchasing behavior of the customers.

Grönroos (1997) argues that customer-perceived value can be described as core solutions plus additional services divided by price and relationship costs or core plus/minus added value. From the above, we can see the customer satisfaction and electronic business is fully or partially moderated by customer perceived value.

3.2.4 Customer service for profitability

In order to enhance customer retention, customer service definitely serves an important role. Companies are no longer plan the path for future simply based on marketing’s traditional understanding of customers’ needs.

3.2.4.1. Role of customer service

Christopher et al. (2002) define customer service as the ongoing process of managing the buyer/seller interface to ensure continued customer satisfaction. Customer satisfaction is important in maintaining relationships. Everyone in the company needs to understand that customer service is the total effort that creates perceived customer value, which is the difference between total perceived benefits and total perceived sacrifice (Kotler, 2000). This has explained in the section 2.3.2. Customer service is maintained across functional boundaries and people need to have deep understanding of what drives customer satisfaction.

According to Christopher et al. (2002), the researchers at management consultants Bain & Co, they have found that retained customers are more profitable than new customers with the following reasons:

- The cost of acquiring new customers can be substantial. It may take some years to turn a new customer into a profitable customer.
- Established customers tend to buy more;
- Regular customers place frequent and consistent orders;
Satisfied customers often refer new customers to the supplier. This promotes profit generation as the acquisition cost of these new customers is reduced;

Satisfied customers are more willing to pay premium price for a supplier they know due to the relationship and trust building;

Retaining customers is a way to achieve competitive advantage by making market entry difficult for competitors.

Therefore, customer service is fundamentally important in binding relationships. Marketing is concerned with 'exchange relationships' between the organization and its customers, and customer service and quality are key linkages in these relationships (Christopher et al., 2002). This means the relationship marketing view that the customer gives loyalty in exchange for their expectation. The organization not only gets the product benefits but also the benefits relating to the quality of the experience that customer get in the customer service context. It is challenging that the organization to align marketing, customer service and quality strategies more closely and integrating these three areas help company achieve customer satisfaction and long-term relationships. These three areas are merged and a distinctive focus is given in the following illustration.

Figure 3.10: The relationship marketing orientation: bring together customer service, quality and marketing (Source: Adapted from Christopher, 2002, p.9)

Consequently, keeping the customers means the company can develop close relationship with them. Company gets to know more the requirements of the customers and they will stay when the problems are addressed satisfactorily. This brings profits to the company as the cost of gaining new customers is reduced and sales become more stable.

In sum, we have described the evolution of traditional marketing concept from product-oriented to service-oriented perspectives. This means company starts to focus on services process such as delivery process, which could create value for customers. As the market situation has been changing from time to time and internationalization increases
competition in the marketplace, new paradigm of marketing thinking has brought out - relationship marketing. Relationship marketing recognizes that customer service, quality and marketing are closely integrated and it captures all the key elements which are needed to build and sustain relationships. The position of customers takes an important part in the value chain and it is crucial for company to develop and maintain long-lasting relationships with customers.

Subsequently, we examine the three principles of relationship marketing: maximize the customer lifetime value, focus marketing actions on multiple actors and cross functional involvement as well as process of relationship marketing. Finally, we discuss the perceived customer value which is the differences between total perceived benefits and total perceived sacrifice. That is the customers’ perception of total value that prompts the willingness to pay a particular price or sacrifice for a business product or service.

3.3 Dynamic Capabilities

In this chapter, we will discuss the evolution of dynamic capabilities that provides a link from customer value creation to sustainable competitive advantage. To further discuss the link we will describe the role of organizational processes and functional competences to develop ‘learning-how’ activities. We will further explain the importance of dynamic capability for the company’s success in terms of enabling an organization to redeploy existing resources to create customer value through modifying routines, new combination of competences to address customer needs in a changing environment.

3.3.1 Evolution of Dynamic Capabilities

Under ever-changing and dynamic business environment, competitions become intensified in the marketplace. As markets become more globally integrated and new forms of technology and competition arise, company need to adapt to and exploit the changes in the business environment.

To prosper and stand out from the fierce competitions, it is crucial that companies develop dynamic capability to create and modify the traditional ways and routines. The ways to renew the product/services and how they are delivered are critical capabilities for many companies to acquire nowadays.

The concept of dynamic capability originated in the strategy field and it has formed a dominant perspective by Teece, Pisano, & Shuen (1997). The authors state that the term 'dynamic' refers to the capacity to renew the competences so as to achieve congruence with the changing business environment; certain innovative responses when time-to-market and timing are critical, and the nature of future competition and markets difficult to determine. This means certain innovative responses are required when the nature of future competition and markets are ambiguous.
The term 'capability' emphasizes the key role of strategic management in appropriately adapting, integrating and reconfiguring internal and external organizational skills, resources and functional competences to match the requirements of a changing environment. Therefore, dynamic capability concerns change and firm’s capabilities.

Dynamic capabilities have emerged from an extension of the resource-based view (RBV), which suggests that each organization possesses a different profile of tangible and intangible resources and capabilities that are the critical sources of the firm's profitability. Firms with superior systems and structures are profitable because they have lower costs and offer a higher quality of product/services compared with the competitors in the marketplace. However, RBV has not explained how and why certain firms have competitive advantage in situations of rapid and unpredictable change. It emphasizes the selection and combinations of resources and this is not enough to support competitive advantage over a longer period.

Hence, Teece et al. (1997) extend the RBV to dynamic markets and claim that dynamic capability is the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. This builds on the notion of core competencies but focuses on the role of management in building and adapting these competencies to address rapidly changing environments. With dynamic capabilities, firms leverage and reconfigure their competencies and assets in ways that are valuable to the customer but difficult for competitors to imitate. This leads to sustainable competitive advantage in the rapid changing business environment.

Subsequently, more discussions have been carried out related to this construct. Eisenhardt and Martin (2000) argue that the model of Teece et al. (1997) did not consider the factor of industry structure. When markets are moderately dynamic, the framework works well in a stable industry structure and change is predictable. Dynamic capabilities rely heavily on existing knowledge and therefore are routine and highly complex. In contrast, the model does not work well in high-velocity markets where the industry structure is unstable and change is unpredictable. Dynamic capabilities rely more on new knowledge and therefore are much more adaptable and simple. The dynamic capabilities view stresses the reconfiguration of existing resources into new functional competencies. The stability of dynamic capabilities breaks down in high-velocity markets, where the strategic challenge is maintaining competitive advantage when the duration of that advantage is unpredictable. Thus, the patterns of dynamic capabilities vary with market dynamism which is a critical issue to be considered.

Eisenhardt and Martin (2000) further state that dynamic capabilities are the organizational and strategic routines by which firms achieve new resources combinations as markets emerge, collide, split, evolve, and die. Grant (1996) also states that dynamic capabilities are the antecedent organizational and strategic routines by which managers alter their resource base—acquire and shed resources, integrate and recombine them to generate new value-
The importance of dynamic capabilities is their ability to create new options.

Helfat and Peteraf (2003) argue that the focus should be on the relationship between resources, routines and capabilities. Both resources and capabilities may evolve and change over time and thus dynamic capabilities involve adaptation and change of resources or upon the routines which enable resources to be reconfigured. Operational capabilities or routines are geared towards the operational functioning of the organization. Dynamic capabilities are dedicated to the modification of operational routines (Easterby and Prieto, 2008).

Evolution of firm’s dynamic capabilities can also be understood as change processes developing at two levels: a micro-evolution and macro-evolution (Rindova and Taylor, 2005). The authors define micro-evolution is connected with enhancing internally firm’s management capability in terms of recruiting skillful employees and redefining responsibilities at different levels of the organizational hierarchy; while macro-evolution is related with the development of new competences in order to respond to changing needs of existing customers and seeking to serve new customers externally. These processes are driven by changes in the perceptions of managers about what is necessary to succeed and what competences are required to respond to the changes in the market.

Eventually, learning capabilities facilitate the creation and modification of dynamic capabilities and this emphasizes the role of learning (Zollo and Winter, 2002). Zollo and Winter (2002, p. 340) define dynamic capabilities as follows:

"A dynamic capability is a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness".

Therefore, dynamic capabilities arise from learning and they constitute the firm’s systematic methods for modifying operating routines (Zollo and Winter, 2002). Dynamic capabilities are the result of learning to shape operational capabilities and the process of learning is a critical element in the creation and renewal of dynamic capabilities.

3.3.2 The role of organizational processes

Dynamic capabilities can be viewed as embedded in routine organizational processes aim to affect changes. The sub-processes that constitute dynamic capability can be classified as routines for variation, selection, or retention, which lead to the evolution of the system (Zott, 2003).

The dynamic capabilities see competitive advantage stemming from high-performance routines operating inside the firm, shaped by organizational processes. Because of ‘soft’ assets like organizational experience, distinctive competences and capabilities generally cannot be acquired; they could be constantly developed and build.
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The capabilities approach introduced by Teece et al. (1997) suggests that if a company looks inside itself, sooner it will find new business opportunities. It places emphasis on the internal processes that affirm utilizes, as well as how they are deployed and how they will evolve. The approach states that new opportunities arise from how a company could develop its internal organizational and managerial processes to deploy and redeploy its assets in a changing market environment. Teece et al. (1997) state that dynamic capabilities describe the level of flexibility of the firm’s competence structures in response to business environment shifts. This approach emphasized the development of managerial capabilities, difficult-to-imitate combinations of organizational, functional skills to be integrated in the process development, such as JIT distribution.

When creating the dynamic capabilities framework, services is produced by the firm based on utilizing the competences that it possesses. The performance of a firm depends on its organizational competences, while they refer to activities which constitute organizational routines and processes. Firm capabilities need to be understood mainly in terms of the organizational processes which support productive activity. Several classes of factors that help to determine firm’s dynamic capabilities and were organized in three categories: processes, positions and paths (Teece et al., 1997) In our thesis we will mainly concentrate on organizational processes which includes three roles: coordination/integration (a static concept); learning (a dynamic concept); and reconfiguration (a transformational concept).

These organizational processes that refer to how things are done in a company and its current routines and practices help to understand the firm’s dynamic capabilities and its competitive advantage. They encompass the company’s competences, thus helping to distinguish how to develop them in a way that could be difficult to imitate.

Coordination/integration aspect of organizational processes refers to special organizational routines which include routines for gathering and processing information as well as for linking customer experiences with suppliers (Garvin, 1994). The work of Clark and Fujimoto (1991) illustrates the role played by coordinative routines. The differences in coordinative routines and capabilities seem to have significant impact on such performance variables as development cost, development lead times, and quality (Teece et al., 1997). Furthermore, Clark and Fujimoto suggested that routines related to coordination are firm-specific in nature. In fact, Quinn and Dutton (2005) notably argued that “coordination is the process people use to create, adapt, and re-create organizations”. Crowston (1997) states that coordination capability reflects the ability to manage tasks to create new ways of performing a desired set of activities by effectively allocating resources, assigning tasks, and synchronizing tasks and resources. In sum, coordination capability captures how effectively coordinating activities are achieved.

Learning aspect refers to enable tasks that can be performed better and quicker within organization. It also requires common codes of communication and coordination of processes. Reconfiguration refers to the need to accomplish the necessary transformation of
internal and external processes to adopt the best practice. In the context of a company learning has key characteristics. First, it involves organizational and individual skills. Learning processes are social and collective. They occur because of joint contributions of every individual to the understanding of complex problems. Second, learning is generated by company’s activities resided in routines which are patterns of interactions that represent successful solutions to particular problems (Teece et al., 1997).

Reconfiguration refers to the need to accomplish the necessary transformation of internal and external processes to adopt the best practice. Pavlou and Sawy (2005) examine dynamic capabilities in a context of a New Product Development (NPD) that includes both dynamic capabilities and functional competencies. The context of NPD states the importance to sense the environment to gather market intelligence on customer needs. Authors distinguish between dynamic capabilities and functional competencies. Functional competencies are defined as combinations of resources that enable accomplishing a given task such as to perform operational activities (e.g., logistics and manufacturing). Dynamic capabilities, on the other hand, are the ability to renovate functional competencies. Pavlou and Sawy (2005) discuss the issue of reconfiguration proposing a set of four enabling processes that drive reconfiguration -sensing the environment, learning, coordinating activities, and integrating resources. They also state that reconfiguration must be guided by an understanding of customer needs and market trends.

Pavlou and Sawy (2005) define reconfigurability as the ability to execute the process of deploying superior new configurations of functional competencies that better match the environment. This issue is in terms of achieving product effectiveness while maintaining process efficiency which is the link to firm profitability (Kusunoki, Nonaka, and Nagata, 1998; Henard and Szymanski, 2001). It also refers to the timing and efficiency by which existing resources can be reconfigured (Pavlou and Sawy, 2005). Zott (2003) discusses the issue of timing in dynamic capability deployment that is dependent on the cognitive biases of managers that cause them to make decisions at different points in time. Teece et al. (1997) observe that it is important for firms to scan the environment, to evaluate markets and competitors, and to quickly accomplish reconfiguration and transformation ahead of competition. Eisenhardt and Brown (1999) pointed out the necessity to quickly reconfigure resources into the right chunks at the right scale to address shifting market opportunities. Thus, timing appears to be an important characteristic of dynamic capability, especially highlighting the importance of timing for gaining and sustaining competitive advantage through taking fast action.

Adner and Helfat (2003) estimate time-varying corporate effects to be associated with corporate-level managerial decisions. Important aspects of corporate strategy involve decisions, which reflect the need for changes over time. Thus, dynamic managerial capabilities help company integrate and reconfigure organizational competences in response to changes in the external environment. These changes over time involve decisions by
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corporate managers that are dependent upon information from divisional managers in order to make decisions.

Therefore, new opportunities arise from how a company could develop its internal organizational and managerial processes to deploy and redeploy its assets in a changing market environment. These processes include three roles: coordination, learning and reconfiguration and show companies’ current routines and practices. Thus, they encompass company’s competences, helping to distinguish how to develop them in a way that could be difficult to imitate.

3.3.3 The role of functional competences

Pavlou and Sawy (2005) state that dynamic capabilities would enable an organization to redeploy existing outdated competencies to build superior products through innovative functional competencies that better match emerging market and customer needs. Functional competencies that refer to customers correspond to inside-out and outside-in competencies. For instance, inside out competencies are activated by knowledge related to customer requirements. It includes assessing customer needs and executing customer programs. It also includes proficiency in managing sales and distribution channels (Urban and Hauser 1993).

The evolution of the studies about dynamic capabilities draws the attention of managerial role in the development of dynamic capabilities. Rosenbloom (2000) provides evidence that if the top managers can recognize the changes in the market environment, then they can make the corresponding changes in organizational processes. Rindova and Taylor (2005) discuss the importance of companies’ specific competences versus organizational routines as well as the role of management team to be a source of flexibility. These help to understand on which process rely dynamic capabilities for managing change. Different organizations focused on different aspects of management and organizing in order to upgrade their management capability. Upgrading management capability is highly associated with greater level of interaction between top management teams, more joint problem solving, and transferring a great level of responsibility for strategic decision making to the next level of management. All these activities lead to structural reorganizations and redefinition of responsibilities. The observations suggested that organizational structure is used to reconfigure competences that a firm used to compete on a market place. Rindova and Taylor (2005) argue “market competences” are the competences that enable firms to serve different customer needs. All the firms developed their dynamic capabilities with the change in their market competences. This enables companies to serve new customers or to offer them new services.

Therefore, based on the above-mentioned roles of organizational processes, we use them in the context of creating favorable process innovations to better match customer needs, while allowing outdated or less promising processes to expire. According to Helfat and Peteraf
Dynamic capabilities need to be well-targeted and deployed in order to achieve strategic goals for the company. Therefore, the management of these capabilities is critical in gaining organizational performance-related benefits (Zahra, Sapienza and Davidsson, 2006).

Zahra et al. (2006) developed a model of dynamic capabilities of the various activities associated with the formation of dynamic capabilities and their effect on a company’s performance as shown in the below illustration.

Figure 3.11: Model of capability formation and performance (Source: Zahra et al, 2006)

From the above model, we can see the starting point is from the entrepreneurial activities, defined as those activities that centre on the identification and exploitation of opportunities. Figure 3.11 describes entrepreneurial activities as influencing the selection of resources and skills and promoting organizational learning processes to capture external knowledge as new situations arise. These choices combine to create new substantive capabilities and the organization’s knowledge base. Organizational knowledge is the set of all that is known or understood by the organization and its members, whereas the firm’s substantive capabilities are the set of things that the firm can do. These two factors affect one another in that what the firm can do (its skills) is shaped in part by what it knows, and what the firm knows is affected in part by what it does.
Moreover, organizational knowledge and substantive capabilities determine which dynamic capabilities are necessary to adapt to emerging conditions. The bi-directional arrows to and from dynamic capabilities indicate that dynamic capabilities are affected by and transform substantive capabilities and the firm’s knowledge base. Together, the substantive capabilities and firm’s knowledge base directly and interactively affect the organization’s performance. Finally, performance results affect future entrepreneurial choices.

This implies that entrepreneurial processes shape the recombination of substantive capabilities and, over time, increase its ‘strategic variety’ which Miller (1993) views as the ability of the firm to conceive and implement varied, multiple, and innovative strategic responses to the challenges it faces in its environment.

3.3.5 Dynamic capabilities and organizational performance

Eisenhardt and Martin (2000) view that having dynamic capabilities do not lead to superior firm performance. Such capabilities are necessary but not sufficient for conditions with a sustained advantage. Firms with superior dynamic capabilities are more likely to meet emerging challenges in a timely fashion. The fact that different firms could arrive at the same point from different processes or angles does not diminish the potential advantage of possessing the ability to rapidly adjust, reconfigure, or change as desired.

Furthermore, Zahra et al. (2006) claim that the realization of the potential advantage accruing to dynamic capabilities depends on two factors: 1. the need to change and 2. the wisdom of the chosen changes. This means the less often a firm needs to change, the lower the opportunity to cover the costs of developing dynamic capabilities. If a firm rarely has needed to change substantive capabilities because of its stable market or technological environment, the performance may be harmed. Company’s performance may be harmed if it expends significant resources to develop change capabilities. On the other hand, if the environment is highly volatile and unstable, frequently and unpredictably changes in substantive capabilities, the potential value of dynamic capabilities can be quite high. Therefore, the potential value of dynamic capabilities is moderated by the dynamism of the external environment.

Dynamic capabilities can improve a firm’s performance. Anand (2001) argues that a dynamic alliance capability enables the firm to choose good and reliable partners and structure their relationships effectively, and gain new knowledge that improves its performance. Teece et al. (1997) note that dynamic capabilities renew a firm’s competencies that improve performance, especially in dynamic markets. Those firms which develop the substantive capabilities that address current challenges and the dynamic capabilities to redeploy or reconfigure those capabilities are the ones that will be most likely to succeed when things change.
3.3.6 The importance of dynamic capability for company’s success

It is important that, in mature businesses as well as emerging one, companies are able to scan their environments, identify relevant opportunities and threats, design responses that will satisfy customers in ways that competitors cannot easily imitate. Winners in the global marketplace have been firms that can demonstrate timely responsiveness and rapid flexible product innovation, coupled with the management capability to effectively coordinate and re-deploy internal and external competencies. Competences and capabilities are intriguing assets as they typically must be built and they cannot be bought (Teece et al., 1997). In this context, competences can lead to the competitive advantage only if they are based on organizational routines and skills that are difficult to imitate.

It is crucial that companies sense changes in their competitive environment, including potential changes in customers' needs and current market situations. Moreover, companies need to act on these opportunities and threats; to be able to seize them by reallocating resources, adjusting existing competencies and reconfiguring both tangible and intangible assets to meet the new challenges in the market place. These are at the core of a firm’s ability to grow and survive over time and represent the essence of dynamic capabilities.

The concept of dynamic capabilities as a coordinative management process helps a company to use its potential of inter-organizational learning as well as to recognize dysfunctional routines. The need to reconfigure firm’s structure and to accomplish the necessary internal and external transformation requires constant willingness to adopt the best practice.

Teece et al. (1997) argue that ‘dynamic capabilities approach’ exploits existing internal and external competences to address to changes in the business environment. Therefore, dynamic capabilities are an integrative and high promising approach to understanding the newer sources of gaining long –run advantage and competitive flexibility. The real key to a company’s success or even to its future development lies in its ability to create such competences that organization can do particularly well. Thus, a company will be seen as a structure to be profitable because it offers markedly higher quality or product performance.

Ray, Barney, and Muhanna (2004, p. 24) explain that firms can have a competitive advantage in some business activities and competitive disadvantages in others. The authors claim that the best level to measure processes is on the process level. Since changing environments make it difficult to predict which set of competencies will be valuable in the future, it is necessary to constantly reconfigure the existing set of competencies (Fowler et al. 2000).

Thus, we discuss dynamic capabilities that provide a link from customer value creation to sustainable competitive advantage. Dynamic capabilities involve adaptation and change of resources or upon the routines that enable resources to be reconfigured. Further on, we describe the role of organizational processes and functional competences to develop learning-how activities. These organizational processes refer to how to organize and perform
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logistics activities in a company, and its current routines and practices to understand the firm’s dynamic capabilities so as to generate new value-creating processes in order to sustain competitive advantage in the dynamic business landscape. Furthermore, dynamic capabilities alter the company’s performance by considering substantive capabilities through the capability formation and performance. Therefore, the main potential of dynamic capabilities is a long-term competitive advantage by building new configurations of competencies, whose goal is the sustained competitive advantage through continuous new combinations of competences to address the customer needs. Customer value can be achieved if companies adapt new process by integrating and reconfiguring it with opportunities, using internal and external organizational skills, resources and function competences to match the requirements of the changing environment.

3.4 Summary of the theoretical framework

We have structured the theoretical framework according to three building blocks: JIT Distribution, Relationship marketing and Dynamic Capabilities. Each building block reflects the role JIT Distribution in the company’s processes. We have divided these roles into the following: tactical, functional and strategic.

- Tactical role of JIT distribution is reflected in the first building block. It shows the concept of JIT distribution which has fundamentally shifted into a customer perspective. The main objective of JIT with customers is to satisfy the customers by delivering the right goods or services in the right quantities at the right times. Timing has become a critical issue for making decisions to achieve two significant objectives: improve customer service and improve operating efficiencies. Subsequently, this opens the doors to Demand Chain Management which is a combination of supply chain management and relationship marketing, based on exploring how to build lasting customer relationships and how to deliver value into customers’ operations. We use the Demand Chain Management approach to highlight the importance of understanding the individual customers’ needs and objectives and to be able to support the customer in meeting objectives, therefore, to reach good customer satisfaction. The coordination and integration of the company’s structure as a single entity as well as recognition the service level requirements of final customers are of vital importance for successful development and integration of JIT with customers. Integration refers to the effective information and material flow and communication throughout the organization to perform value-added activities. Therefore, the ultimate goal of JIT with customers is to improve customer service and firm’s delivery performance in terms of efficiency and profitability.

- Functional role is reflected in the second building block and is considered a ‘bridge’ between the tactical and strategic levels. It shows the evolution of relationship marketing from
product marketing to service marketing. It also reflects the integration of marketing functions into logistics today. As customers have become more sophisticated and high demanding than ever before, they do not only look for the product itself but also the holistic service offering from the company. It is based on the key processes: communication, interaction and value. These processes have an impact on the perception of the service quality as well as on customer-perceived value. Therefore, if the company manages to align its competencies successfully with its customers’ internal processes, this value base is turned into customer perceived value in the process. Customer-perceived value becomes a critical component of customer service. That is the customers’ perception of total value that prompts the willingness to pay a particular price or sacrifice for a business product or service. Thus, we see relationship marketing to support long-term relationships with customers and different actors in the value chain. The integration of communication and the interaction process creates relationship marketing as well as develops customers’ perceived value of the relationship. This understanding is important because the relationship marketing view is that the customer gives loyalty in exchange for their perception and expectation.

- **Strategic role** is reflected in the third building block. It highlights theoretical aspect of dynamic capabilities which involve adaptation and change of resources or upon the routines that enable resources to be reconfigured. As the business environment has been ever changing and becomes more dynamic, it is important that the company sustain competitive advantage by leveraging and reconfiguring its competencies and assets in ways that are valuable to the customer but difficult for competitors to imitate. We further examined the functional competences and organization process and its three roles: coordination/integration, learning and reconfiguration. These organizational processes refer to how to organize and perform logistics activities in a company, and its current routines and practices help to understand the firm’s dynamic capabilities so as to generate new value-creating processes. Therefore, dynamic capabilities can be viewed as embedded in routine organizational processes aim to affect changes. They are stemming from high-performance routines operating inside the firm, shaped by organizational processes. Dynamic managerial capabilities help company integrate and reconfigure organizational competences in response to changes in the external environment. We conclude this aspect by addressing the importance of dynamic capabilities for company’s success.

### 3.5 Personal Research Model

The theoretical framework has provided us with theoretical fundamentals of JIT distribution, relationship marketing and dynamic capabilities. In order to solve our main research problem how to improve customer service through Just-In-Time (JIT) distribution, the empirical and analytical part of the thesis are analyzed and structured according to the answer to the sub problems. We have combined and adapted the theoretical models presented in theoretical framework to our own research model illustrated in the Figure 3.12.
First, we will focus on answering the first question about what service is perceived by ELS' customer. In order to solve the sub problem, we identify the current customer’s situation in terms of needs and service perception as well as their current concerns. We focus on customer relationship characteristics in order to understand how the communicating process with customers look like, thus, how the interactions with customers are maintained. Therefore, it leads to customer perceived value in different segments.

Furthermore, in a model we concentrate on answering the second research question about how customer service perspective can be incorporated into traditional JIT concept. We discuss how JIT activities are utilized in supply chain throughout mapping material and information flow. We analyze the information flow related to order handling process between local sales offices and customers. We also analyze the current process of spare parts and finished products flow in outbound logistics. The analysis of activities throughout the material and information leads us to the changes in routines related to these processes.

Third, we answer the final sub question about changes in delivering, ordering and stock-keeping routines and competences are required in new JIT process. It refers to the need to accomplish the necessary transformation of internal and external processes to adopt the JIT distribution. Changes in routines and information flow process as well as new combinations of competences are used to redeploy existing resources and achieve organizational performance-related benefits. Therefore, dynamic capabilities are created in gaining these benefits. The sub-processes that constitute dynamic capability can be classified as routines for variation. Thus, ELS by means of JIT distribution take varying roles to deal with the customer depending on customer’s objectives.

The analyses based on theoretical framework and empirical findings in the abovementioned blocks guide us to firm’s performance improvement related to profitability and efficiency to perform customer value-added activities. It will also be a solid ground for customer service improvement resulted in high customer satisfaction in a long-term perspective. Thus, sustainable competitive advantage will be created.

We will use this model to describe our empirical and analytical parts. Further on theoretical conclusions and recommendations for the case company will be presented in the final chapter of the thesis.
How to improve customer service through Just-in-time distribution?

- What is perceived by customers as service?
  - Customer needs
  - Customer perception of service
  - Customer relationship characteristics

- How can customer service perspective be incorporated into traditional JIT concept?
  - New JIT process mapping

- What changes in routines and competences are required in new JIT process flow in JIT process?
  - Changes in stock-keeping, delivering and ordering routines
  - New combination of competences

Dynamic Capabilities creation

- Customer service improvement
- Firm’s performance improvement (efficiency and profitability)

Customer Satisfaction

Sustainable competitive advantage

Figure 3.12: Personal research model
4. Case Study

In this chapter we present the case company Electrolux Laundry Systems and the empirical findings structured as answers to sub problems. We begin by describing the starting point of Electrolux Laundry Systems logistic strategy and the current targets of the logistic strategy. We continue with the description of sales companies’ and customers’ situation in the UK, Germany, Finland, France and Spain according to the similarities and peculiarities of each particular country. We especially concentrate on the description related to local market network, information flow and material flow as well as changes in the current routines related to closing warehouses in the abovementioned countries. The information presented in the chapter is a result of primary data gathered during the interviews. The data was gathered from interviews with ELS executives, country managers and dealers. Most of them are leading suppliers of professional laundry equipment in the local markets.

4.1. ELECTROLUX LAUNDRY SYSTEMS CURRENT STRATEGY

This is the description of ELS new logistic strategy which involves illustrating the need for developing such a strategy. It also accounts for the vision of the strategy from ELS executives to guide the improvement of customer service and future development of the company. The description provides a frame for understanding the targets and vision of a new JIT distribution process in the case of ELS.

4.1.1. The starting point of the strategy

For many years an initiative was started to further integrate customer’s perspective with ELS production companies. However, nowadays all the processes and operation in the company is mostly concentrated on the production side and the costs.

“Electrolux is very focused on production. It will be very hard to change the perspective to the customer, but we must try. It we can’t succeed with that, we will have very tough times in front of us”. (Logistics manager, interview)

From the logistic point of view logistics is the part of the supply chain which is closer to a customer. If they cannot fulfill what customer demand is, then the problems occur. Logistics aims at providing the best solutions for a customer. Thus, logistics should be more proactive when dealing with a customer. Today sales people are discussing what types of washing machines or dryers are the most suitable for the customer, but sometimes the sales people do not have enough knowledge to discuss it with the customer. They also do not know so much about transport conditions and transportation. The sales people want to deliver the machine in the right time to the customer. According to the situation, sales people have to be aware that the information that they give to a customer must be handled correctly from the beginning.
“We speak the same language but we don’t understand the language in terms of conditions. We can say for categories that the products should always be delivered within three days, but three days starting from here not from a place in England, for instance. Sometimes we don’t understand that there are different conditions or these conditions will have these follows”. (Logistics manager, interview)

People then start to blame each other regarding the lead time which is wrong. If to go back to the beginning when a customer places an order the information regarding an order confirmation is not clear.

The target of ELS is to produce the system with the information that everybody could clearly understand, especially a customer. Nowadays the main issue is to produce information that a customer and sales people easily understand without errors in interpretation of it.

“When you have these errors for some people it is very difficult to see where is an error or where could be an error. You have to be very proactive in that case. People in their mind do not like errors and if an error occurs they think that is not their problem or it is out of their competence to solve it”. (Logistics manager, interview)

Nowadays ELS wants to remove and reduce the number of errors and make it easier to understand the flow of information. Today there is a purpose of learning who is a customer’s customer to be aware of the real information as well as the integration of that information to better understand the customers’ concerns and how they make business. Thus, logistics wants to be a part of the contact with a customer when talking about the delivery issues. Due to these issues ELS aims to be closer with a customer in terms of mutual understanding, so that the flow of information will be correct.

“It is very important to know when and where the information starts as well as how the information flow process proceeds. That is not about logistic issue but more about structuring issue in the company –how we send out information.” (Logistics manager, interview)

The issue of misunderstanding goes back to trust when logistics cannot fulfill promises to customers. Logistics is aware about lack of communication, bad delivery times and lead times from the factory which lead to the consequences of building up local warehouses to be sure about having the right product and have it under sales office’s control. The main challenge today is more about how to change behaviors and logistic set up, to change a “squirrel mentality”. Even when ELS controls the warehouse the situation becomes very tricky due to the distance and to the issue of having a third part logistic company who is operating in the warehouse.

ELS has worked with routines and looked at them from inside. People have common routines and have a good standard on that issue today having discussed that everybody
should work to have an agreed behavior. Especially, when ELS have unique markets (for example, Maldives) to work with and do not work in the same way because people are not educated enough or do not like each other’s way of working. This issue is considered to be one of the successful factors moving from an understanding of a unique customer to a less unique one.

**4.1.2 The current targets of the logistics strategy**

In December 2008 the decision was made that the overall stock level needs to be reduced to 40 million SEK. The reason behind this problem was that the overall stock level, measured as tied-up capital, has remained on a level of about 80 million SEK annually. Senior management has decided that the service level needs to be improved all over the sales companies as well as to remove the process of refilling warehouses in Europe. It is a direct way of sending a product to the end-user from Ljungby called “JIT distribution” without having any local warehouses. This is a scope between a production unit and a customer.

The Vice President of ELS sees the starting point for that concept in terms of money, in its price side. It also has to deal with an issue that ELS has a lot of machines which are under its control. Transport damage and its handling are not effective in many countries due to that reason. So, the challenge is not only about the costs of the machines which are standing but also the total logistics and issues regarding overall costs.

The targets of the new logistic strategy can be described as the following:

1. Close down warehouses
2. The product will be directly delivered to the customer
3. An order will be placed from a final customer directly to a factory

The first step is connected with diminishing local warehouses to avoid unnecessary costs and handling; the other one is connected with simplifying the administration and going closer to a customer.

From a logistic side and a product line side closing the remaining warehouses in Europe has five main aims:

- to increase service level
- to increase the quality of administration
- to decrease costs
- to control cash flow
- to be closer to a customer
Today ELS has a purpose of preparing sales people to accept the decision of diminishing local warehouses. A couple of years ago the local offices discovered what they had to do according to that direction but they were not prepared mentally. They were not capable to change the demand and to act.

“They know the direction which we should go, but we aren’t inside their box. We have the same direction that is the reason why, to a certain extent, my box is the same box as their box”. (Logistics manager, interview)

“Now we want the information to go centrally and the information to come faster. That means that hopefully people are prepared for that.” (Vice-president for Global Logistics, interview)

Precisely, it is essential that ELS want the information to be collected immediately. The current issue is in establishing a relationship, knowing the customer need and also letting a customer go out of control.

“A customer can have support in terms of different things to discuss or when he needs something to focus on. We can have a relation with him discussing the price, the product range and then he will be aware of the situation”. (Vice-president for Global Logistics, interview)

Thus, the starting point of ELS strategy lies in changing the current focus to a customer perspective aiming to provide a customer with best-possible solutions. The target of ELS is to produce the system with the accurate information that production unit could clearly understand customer need without errors in interpretation of it. Today the purpose of integration is to better understand customers’ concerns and to know how they make business in order to improve customer service. The targets of new logistic strategy can be described as the following:

1. Close down warehouses
2. Direct deliveries to the customer
3. Direct ordering from dealers

4.2 Local Market Network

This is a description of the local market networks related to segments and peculiarities in the Western European countries: UK, Germany, Finland, France and Spain. We further describe local customer needs and their perception of service as well as the customer relationship characteristics. The aim is to capture the current situation of what is happening in the local markets.
4.2.1 Local Market Situation

Today the local market for professional laundry washing machines is divided into project-based and replacement markets. The project-based market is related to selling the complete laundry solutions that meet specific laundry needs to the professionals in the laundry solutions, while the replacement market is characterized by selling individual laundry solutions and replacing washing machine to the customers which is not so big. The differences between project-based and replacement market varies from country to country, for instance in Spain market the share for projects is 70% versus 30% for the replacement. The projects are depending on the segments as well as on the size of the laundry, the big share of the replacement market is done through replacing the machines of the competitors such as Girbau. 40% of the machines are sold to the dealers which they deliver to the end customers. In Spain there are more or less 20 dealers and 3 exclusive ones who work in different areas. Detailed information is illustrated in the figure 4.1.

The amount of machines that are sold every year differs from country to country. For example, in France the figure for the year 2008 is about 3500 while compare with Spain where the amount is about 500-600. ELS sales in France are not affected by the economic crises. The EBIT in the year 2008 was 30 million euro. Danube Laundry Equipment and Dabau have not increased their market share. In the case of French market in Electrolux, sales has increased by 9 percent when compare with 2008;while in Spain there is a decrease of 11 percent in sales.

In France, the local market networks are divided into two parts: network 1 and network 2. Network 1 covers the project-based market while network 2 covers replacement market. The sales are done via dealers and direct sales. 80 percent of sales are done by dealers and 20 percent are sold directly to customers. The clear dimension into 2 networks gives a whole picture of the characteristics of these networks in France.
Figure 4.1: The areas covered by Network 1 in France (Source: ELS internal document)

Network 1 covers a network of certified dealers that have exclusive rights to sell Electrolux Laundry equipment. The dealers in the network 1 cover specific segments of the market.
such as healthcare business in the public segment: hospitals, homes for elder people, handicapped institutions and 4 to 5 star hotels. The biggest dealer is SEBI and the second one is JM service. The annual EBIT of the SEBI is 7 million Euros per year, which is more than the EBIT of the whole Spanish market with approximately 5 million Euros per year. Big customers in France pay for the laundry solutions 2-3 million Euro. 10 percent of sales revenue is done by big customers. These customers have been working with ELS for long years since their business was established on an inherited basic, which means the son inherited the business from his father. Each exclusive dealer in the network 1 has obligations for Electrolux. For instance, to they should sell only to hotels. Network 1 is a network of experts in the laundry solutions. They prioritize the products and receive the information according to each product. Every six months these dealers gather together with sales representatives to analyze the results. If the dealer does not meet their obligations given by ELS in every six months, ELS closes the contract.

“20 years ago the dealers were queuing up to have exclusive rights to sell ELS products. Now the completion is high and ELS sales managers are keeping by all possible means the customers”. (Country manager for France, interview)

The dealers in the network 2 are rather small. It can be even one person owning a company. They do not concentrate on selling only laundry equipment, but also others as well. They are non-exclusive and non-specialized dealers for ELS products. The customers are not so big. There are only 3 to 4 big dealers in the network 2. It is managed by 6 sales managers out of 37. The dealers in the network 2 are not the same organization with ELS. This network mostly deals with Ljungby and Thai products as well as some boating product from ELS suppliers. The dealers in the network 2 are non-experienced ones in terms of the product, they do not know the correct PNC of the product, and they always need the person behind to place an order and to choose the right product.

The customer situation in the local market networks differs related to the differences in segments that determine customer preferences in terms of washing machines. For example, the most important market segment in Spain is hospitality related to high-class hotel chains, commercial laundries that are working for hotels and restaurants, dry cleaning shops. Today the amount of dry cleaning shops account for 6000 in Spain, while in Germany their amount is 22000. Hospitality is the most important segment because every year 5, 5 million tourists come to Spain. Few years ago Spain was concentrating on 2 to 3 star hotels, now this trend is changing into 4 to 5 star hotels with high requirement for laundry and high demand for washing. Prisons are currently growing in importance. Such segments as hospitals are not of vital importance. People do not believe in hygiene concept in Spain like in France where hospitals are a bigger segment.

“Historically the Spanish market is very different than the others. The market is different because the customers are different. We cannot change the market. You have to offer the
right product to a customer when they want it otherwise they will leave.” (Sales Country Manager for Spain, Interview)

Coin up machines are not popular on the Spanish market like in Northern Europe. It takes 2 hours to clean the linen by the coin up machine while compare with a dry cleaning shop where it takes 10 minutes. Wet-cleaning solutions are gaining popularity in Spain. Garment shops and restaurants are interested in wet-cleaning solutions. There are not many competitors and nobody can compete ELS in this segment 100% in the Spanish market. Competitors such as Miele focus mostly on domestic products. Ecological washing system based on clean technology such as Lagoon is better for the environment and customers become more aware of this issue today. 50% of the customers in Spain outsource the laundry solutions.

In France ELS focuses on healthcare customers who outsource the laundry process. The most important issue for customers in France is microbe issue. Barrier washers are the special products produced mainly for French market due to the importance of hygiene business. A lot of things in terms microbe issue needs to be confirmed by an auditor. On a top the confirmation—a lot of standards for proper laundry process. ELS outsources the auditors in France to approve the high standards of the laundry process for hospitals. Such public sector segments as homes for older people and handicapped institutions as well as governmental institutions, for example SNCF (National railway operator in France), are also of vital importance for the market in France. If to take into consideration of the UK market the main focus lies in such segments as hotels and on-premises laundries as well as nursing and care homes.

“The differences lie in mentality. In France people care a lot about microbes in hospitals. In the UK the main focus lies in the hotels, healthcare business differs from the ones we have in France”. (Sales Country Manager for France, Interview)

The position in markets related to competitors also varies in different countries. ELS covers 70 % of the market share in France. In Spain this figure is 50% for the hotels segment as ELS in Spain is not strong when to compare with local competitors such as Girbau that offers much lower price for the products. The ELS machines are more expensive compared with the local competitors. In the Spanish market ELS is strong in such segments as old people homes, dry cleaning and hospitals. The strategy today aims at keeping the percentage of the market share as well as to develop unique business solutions that the competitors cannot offer.

“Today the market is changing and customers are more aware of the market situation. You cannot play with the customers as you did before; you need to be more experts”. (Sales Country Manager for France, Interview)

Thus, the local market situation differs related to differences in segments that determine customer preferences in terms of washing solutions and requirements. This issue determines
the share of project-based market versus replacement. In France, local market networks are divided into two parts. Network 1 covers project-based market while network 2 covers replacement market. The main focus in the UK is in the hotels, care and nursing homes, while in France hospitals, homes for elder people and handicapped institutions are of vital importance. These segments in France are covered by Network 1. In Spain high-class hotel chains allocates ELS position on the market. The differences lie in customers’ perceptions of cleaning and washing solutions.

4.2.2 Local Customer Situation

Local customer situation is related to local customer needs, local customers’ perception of service as well as the customer relationship characteristics. When we talk about the customer situation, we mean the dealer as a customer. Local customer situation has some similarities between countries as well as specific features which distinguish one country customer’s situation from one country to another one.

4.2.2.1 Local customer needs

Customer needs in all the above mentioned countries are similar in terms of product quality which is related to product efficiency and reliability. The issue of reliability refers to long operating hours and maximization of washing results.

“There are washing machines with 15,000 operating hours and I have ELS washing machine which have 45,000 operating hours. This is a real seal of quality.” (German customer, interview)

Customers perceive ELS products as the best products in the marketplace. They are satisfied because ELS offers products which meet the quality needs that customers are expecting. It also offers different variety of products. Customers perceive ELS products as fulfilling the high standards. ELS produces good products that are fitting for its customers. The product quality is very good and do not need much maintenance. The quality for such product as dryer is 30 percent higher than from the competitors on the French market. For example, the product which is called generation 3000 became outstanding and highly competitive on the German market after the implementation in the year 2000. Customers point out that ELS brand is important for them because ELS products have good reputation on the market.

“I am standing fully behind this product. I have stores for 20 years. In my store I also have alternative products, but during the years it figures out that we emphasize our choice in favor of ELS products.” (German customer, interview)

“ELS offers high quality products at the right price. We have good relationship with them and feel good about the brand”. (British customer, interview)

However, customers point out that ELS could not just only rely on the current market
position but also focus more on the target groups and find new customer segments. First of all, ELS could stabilize the current good quality and maintain good reputation on the market. Secondly, they could strengthen their brand name on the market and further develop it.

“**ELS should continue to improve. The quality should not be lower and sometime ELS could even improve it and the price performance ratio must also be proper**”. (German customer, interview)

The local customer requirements for ELS product differ in local markets. In the United Kingdom the main requirements for ELS product are that a product is environmentally friendly with low water and energy consumption. It is also very important that the price is competitive in the UK market.

“**This year our competitors have put through substantial price increases and we haven’t. The feedback I’m getting from customers says that now we are more competitive on the price. We don’t make the mistake of putting in a price increase now, because in the market it’s the wrong time to do it**.” (Country manager for England, interview)

In Finland customers are concerned about the construction of the machine in terms of rigidity as well as the size of washing machines.

“**We had problems with the mat of washing machines; the size and quality have been less than expected. The machines need to have more rigid construction. They need to improve reliability and construction of the machines in order for their product to be desirable**”. (Finnish customer, interview)

Customers in Finland require 100% reliability of the washing machine as well as reliable output of the machines. The price for ELS products is very important for customers in Finland who are constantly monitoring the price levels for the products. Customers require the products to be competitive in terms of price. The country manager in Finland discusses the pricing of the products with the customers every year in terms of setting bulk rates for the orders.

In France customers require a product that meets very high hygienic standards and a confirmation of high standards from the auditors. There is an audit team consisting of independent auditors. First, the auditors were previous employees that had a strong link with ELS. Now the auditors are independent from ELS. They go to a hospital to check the wrong points of the laundry process and then discuss it with the customer. The first choice for hospitals is barrier washing machines which need very complicated and expensive installation. The measurement of customer’s requirements related to the product in France lies in the number of kilos washed per day.

“1, 5 tons per day is the measurement for the customer. Beyond is the different business”. (Country manager for France, interview)
The issue of product discounts and arguments against the price is important for customers in France. The discounts depend on the kind of network the customer belongs to – either project-based or replacement. For example, in the network 1 sales people can give 39 percent discounts for products made in France and 45 percent for products made in Thailand or Ljungby. From the 'Troyes' products, the dealers can give 25% discount to their customers. The 'Troyes' products are ironers, front loading washer extractors and barrier washers. They are also called ‘French’ products.

Customers in Spain are specializing in mid-range demand for product which varies from 5.5 kg to 120 kg. The particular feature about Spanish market is that a customer usually does not require traditional A –categories products which have the standardized PNC, mostly the customer requires a B or C categories product with the specific PNC for each particular case.

“If we sell 600 units we sell 400 PNC’s because the machines are different. The PNC for each category is defined by Sweden, but then customers want bigger machines. Big machine in Sweden may be 40kg and the customers might want 120kg in Spain”. (Country manager for Spain, interview)

Big machines with the weight of 40, 60, 80 kg are popular for customers in Spain because of the amount of garments fits into the machine with mostly same color and fabrics. It makes the process of washing easier for customers. Barrier washing machines are not popular in Spain; they are sold only to high-quality hospitals and prisons. Wet cleaning solutions are gaining its popularity in the Spanish market as this cleaning technology is better for the environment and meet environmental regulations in Spain. The whole wet cleaning project-based solution is less expensive than the machines themselves and there are not many competitors offering this solution on the Spanish market.

Today the issue of price for the washing machine is the biggest concern for a customer in Spain because ELS products are more expensive compared to the local competitors. Customers need to pay for the product in advance or at least on the same day. Customers are allowed to pay 60 percent in advance and the rest by the end of the month; 20 percent of the customers are paying in advance.

“Today it is difficult to sell expensive machines. Dealers need to pay in advance and we need to support our dealers. We can’t risk any sales.”(Country manager for Spain, interview)

As we can see, customer needs on product are related to quality in terms of efficiency and reliability. They perceive ELS product the best product in the marketplace meeting high quality standards. These standards on quality vary between countries. For example, in France the standards lie in high hygienic standards, while in the United Kingdom the product should be environmentally friendly with low water and energy consumption. ELS brand is an important factor when customers choose ELS product.
4.2.2.2 Local customer perception of service

Customer perception of service in all above mentioned countries are related to on-time delivery, quick response for technical support and maintenance service as well as installation service.

Customers require the products to be delivered on time instead of waiting. For example in the UK customers are disappointed with the long delivery time of the machines despite firm contracts. It is very different than they expected and customers complain the delivery time is too long. It takes two and half months to deliver premium-quality products. Sometimes it takes a few days to know the concrete delivery date of the products. In order to be safe, some customers hold a stock for immediate use and have to order the product in advance. Lack of stock in England causes problems to the customer because of the long delivery time. It has always been postponed because of a lack of stock in the UK. This affects the business with end-customers, especially in the hospital and nursing home segments.

“Our customers are disappointed with the delivery of the machines, despite firm contracts. So, customers are unhappy about how long it takes. Customers shouldn’t have to wait this long. There is nothing happening in Sweden about this issue and we are very frustrated losing money because we can’t let the customer down “. (British customer, interview)

Customers in Germany also expect reliable delivery time and promised lead time to receive products on time. These problems depend on the reliability of the factory which sometimes does not work. The issue of delivery also depends on logistic centre of the company as well. Sometimes it happens that a sub supplier has missed his part. If a customer does not get a product on time he gets very angry and does not want to accept this. Especially, in the case of a dealer, who says that if it happens again he does not want to have any business with ELS and he will look for other suppliers. Therefore, sometimes a sales company is not able to make this business because the lead time is too long when compare with the competitors.

“ If a customer has to wait a couple of days or weeks before he gets the product, the customer is not happy with such a service. It is too long compared to our competitors. Our regular customers should buy a product from us in the future. We cannot disappoint them.” (Sales Manager, interview)

However, in Finland customers are mostly satisfied with the delivery time, but they constantly compare the order confirmations to delivery dates in order to track the shipment, and if it’s delayed customers do make claims. This issue varies based on the situation.

“Target is written in the agreement for 5 weeks, but products are usually delivered between 8-10 weeks. ELS need to keep their promises in general. “ (Finnish customer, interview)

Sales people are honest to the customers and explain the real situation even if it takes 10 weeks to get the product from Thailand. The customer does not understand why it takes so
long to deliver a product from Thailand to Finland. Sales people do not promise more than they can deliver and usually keep promises to the customers. The sales company is not doing safety buffers and they tell the customers when they receive machines from a production unit. They try to sell the products that are in stock in Ljungby.

“Our job is to solve the problems and to satisfy our customers”. (Sales Manager, interview)

The customer’s perception of delivery time differs in Spain and in France. In Spain customers can wait until goods arrive. The issue of delivery time is not the big issue for customers in the wet-cleaning shops. This is because customer needs to arrange the pre-installation with electricity, gas and water which takes a lot of time before the machine arrives.

“We usually promise 5 weeks of delivery time and we have to wait till the customer arranges the issues with electricity and gas. Customers never complain about the delivery”. (Spanish customer, interview)

For the other segments the delivery time is also kept and customers do not complain about it as local sales office usually pays extra in shipping to make sure that the product will be delivered on time. In 95 percent the sales company arranges the delivery of the goods for the end-customer and coordinates the process of delivery. When the customer requires the C category products to be delivered in 30 days from Thailand a sales office pays more than 1,800 EU to airfreight the goods from Thailand to Ljungby. Therefore, airfreight is the only one solution to deliver the product on time to customers because the Spanish competitors normally deliver goods in one week. Local sales office tries to find a similar product to offer in the expected time frame to deliver goods on time and sometimes have to pay extra

In France, the importance of on-time delivery varies in accordance to the kind of network that the customer belongs to. The delivery time for the network 1 is not the main issue as the customers are used to the flexibility in terms of delivery. Sometimes the customer changes his mind about the deliveries. Sometimes the customer wants the product to hold some days more on the stock. Then the products are hold in the stock. The flexibility in getting the product at the most suitable time is very important for the project-based network 1. The delivery time is important for the network 2 because the network 2 covers the replacement market. When the machine is broken down customers need the machine to be replaced as soon as possible.

Quick response for technical support and maintenance service appears to be the second important issue related to customer needs on service. Customers want the machines to be fixed very quickly when they are broken down. Today customers’ main concern lies in the availability of technical service due to not enough engineers. Sometimes customers cannot reach the engineers for technical support and maintenance services and usually they need to be called on their cell phones.
“In terms of technical service, customers expect speedy response. They want the products fixed very quickly in 1-4 days. Obviously, if a machine is down customers have problems. If it is a care home, they can’t clean beds. If it’s a hotel, similar sort of thing. And also the on-premise laundries - a very similar sort of thing, that they need the laundries to be up-and-running’. (Sales Manager for the UK, interview)

Customers’ main concern in the UK and Finland lies in the availability of technical service. It is available only if a customer has to complain about the product. Customers expect from ELS good service related to maintenance response times which is sometimes overdue. It is related to after sales services and technical support. However, German customers are experiencing excellent service related to technical support. Sometimes when the contact person for Germany is on vacation, it is hard to get the right information when problems occur. In France the technical issue is solved by 100 service engineers specialized in the laundry. ELS benefits from the good availability of the contact persons in technical support in Germany and France as well as in Spain. The peculiarity in Spain lies in the issue that all the technical specialists are outsourced. These technical specialists are not the employee of the ELS company. They have their own companies which are independent from ELS. There are only two technical specialists who are managing all the installations and coordinating the technical issues of the ELS product. Customers usually call the official technical service and then the product is fixed. The product is fixed within the day or the next day. It depends on the complexity of the machine and the problem related to the product. If it is a commercial laundry, all the technical problems are solved by phone.

“I am always available for the customers and they call me directly by the telephone”. (Owner of the technical company, Spain, interview)

Trainings for customers by technical specialists are provided in France and Spain on a regularly basis. Training sessions are offered to the customers of how to use the product as well as the training covers a lot of technical issues. If one of the machines is broken the rest are affected. The problem about customer trainings in Spain is related to the issue that people often change jobs and they are not stable. 90% of the workers are ladies who are in charge of everything from laundry to garbage and other machines. When they quit the jobs and new staff comes, nobody has that knowledge and nobody can handle the laundry operation.

Customers from the UK and Germany want to have more assistance in using ELS products and training in ELS’s products and technicians need regular training related to ELS products.

“Nobody from Sweden has never contact us. We have not received any training in ELS’s products because ELS even don’t take the time to train their local employees.” (British customer, interview)
**CASE STUDY**

In the UK flexibility related to payment condition is important for the customers. However, the situation of payment condition is that customers are forced to pay for the products upfront from ELS and have to pay ELS for their products first before end-customers can pay to them. This payment condition leaves customers with a deficit of money. Customers have poor credit ratings because they are dealing with large amount of goods which are not covered by the current credit allowances. They do not have the capital to maintain that process with expensive goods. Customers want ELS to accommodate until the product is paid for, which was how the customers used to do business in the UK. In Spain the situation with payment conditions is similar to the ones in the UK. Customers pay for the product in advance or at least on the same day. These rules for payment are decided from Sweden. 20 percent of the customers in Spain are paying in advance because sales company cannot risk any sales. Customers are allowed to pay 60% in advance and the rest by the end of the month. Competitors can offer 24 months credit for their products in Spain. It is very hard for customers to work on pre-payment conditions, especially in the current market situation in the UK and in Spain. If we take France into consideration, the payment conditions today are improved due to the new governmental regulations that customers can pay 60 days after they receive the product. Sometimes such customers as healthcare institutions pay 120 days after they receive a product.

The customer service issues related to the installation of the machines as well as the transportation to the customer are also of vital importance for the local customer. German customers point out that sometimes the transportation companies take weeks to deliver the products. Sometimes they deliver at least 2 broken washing machines per week. The machines look like as they have fallen down from the truck. The delivery time is inefficient because it takes from 4 to 5 working days. It is not possible for drivers to deliver the products before noon.

“The drivers are so busy, so they do not deliver on time, and then it is not a good service at all. But this issue has nothing to do with ELS. It is more an issue of delivering companies”. *(German customer, interview).*

The customers in Spain concern a lot about the installation of the machines. Before the machine arrives they need to arrange the electricity, gas and water by themselves. Customers do not have direct contact with the technicians. When machines are ready to install, the customer is transferred to talk to the local sales company. When these problems are fixed, the sales office arranges the technical service. Sometimes it takes from 2 to 3 months with delivery and installation to get the goods for the customer.

Thus, in all the above mentioned countries customer needs on service were related to on-time product delivery, speedy response related to after-sales and availability of technical support as well as training related to products and technical issues. It is not too easy for a customer to understand to have the dimension for in A, B, or C categories of internal process.
in ELS. The point is that some of the needs related to C products require a very long delivery time, but the customer does not understand it. In general, customers think that in the case of ELS the standards in terms of customer service are fulfilled. This issue is highly dependent on good communication and quick problem-solving skills.

"The service is excellent but you have to consider that it always depends on individuals. When you are in an area of a good key account manager, the service is very good. It couldn’t be better”. (German customer, interview)

4.2.3 Customer relationship characteristics

The current relationships with customers are based on long years of cooperation and frequent communication with local sales company as well as quick problem-solving skills. Customers communicate with the local sales company 2 to 3 times a day. Customers do not experience any problems regarding communication. They do not have any misunderstanding so far because sales office usually solves the problems. Sales people are very helpful in terms of answering all the questions. They understand the customer needs and the local demand. Customer trusts sales people because there is a mutual understanding between them and good personal contacts. Sales people try to solve all the problems that occur in terms of delivery time and try to keep promises according to the lead time.

“The relationship with people is good. The people are sympatric, nice and friendly. There is everything fine. We speak one language. There is a team which I trust completely and they are sticking to appointment and delivery time.” (German customer, interview)

Customers need certain kind of support in terms of service. Sales people need to discuss many issues related to service providers and installation. Nowadays they have to fight for every order because customers receive different offers from the competitors. They have to convince customers to buy units from ELS. When the customer calls the dealer he discusses with the customer all the details.

Dealers are selling individual solutions to the end-customers which are configured to each particular customer’s needs. For example, if to take into consideration auxiliary products-special equipments which are individually asked by the customers. Today dealers can communicate with a sales person who is able to answer the questions about specifications of the products and to check if machines are available or not. Specifications can be so detailed that a customer cannot know everything about it. Dealers receive constant support from the sales office in the product ordering process.

“There should be a person who knows about the details of the products and he has to know more about the machine that I know. That means he must be better than me”. (German customer, interview)
In Germany, sales people are available via their mobile phones at times where other sales people would not be available anymore. When the contact person for Germany is on vacation, it is hard to get the right information when any problems occur. In the case of the UK, dealers require more assistance from local sales office related to price discussions and payment conditions. For example, today the relationship between the sales office and a dealer in Ireland is not so good because a customer thinks that local sales people do not understand his business related to a large hospital project with all ELS products. ELS has not been provided any help besides pamphlets and useless information.

“Local sales people usually promise actions, but they never follow-through and thus we don’t depend on them. No reasons to keep talking about any of this until someone could give me some real answers, or dealer training. ELS doesn’t understand anything about our company”. (Irish customer, interview)

This customer would like to have direct access to the manufacturer in Sweden in order for Sweden to have a better understanding of the situation. He would like to talk to the manufacturer because the local sales people told him to contact Swedish office. He thinks that neither manufacturer nor local sales office can make a decision providing assistance to his project and answers to all the questions.

The relationship with customers in France is dependent on the kind of network that the customer belongs to. There are two people in charge of the networks today in France. Network 1 is characterized by long-term relationships with customers since their business has been established, while in the network 2 the relationships can be currently established. Network 1 is a network of professionals in the laundry solutions. They know the correct PNC of the products and do not need so much assistance related to the products. In the network 1 customers are experts who do not need too much support and help because some of the dealers are previous ELS employees. The dealers in the network 2 are non-experienced ones in terms of the product, they do not know the correct PNC of the product, and they need the correct tools to place an order of the correct PNC. It is a bit different to cope when the problems occur in this case. Customers have ideas and their ideas need to be confirmed. Confirmation involves a lot of standards for proper laundry process. These standards need to be discussed with an expert. For hospitals there are special purchasing managers. They are provided with the information about energy, detergents, space. So, dealers offer the complete sales solution the customer. In the case of ELS the standards are discussed with the sales managers and confirmed by the auditors. There is a big trust between the auditor and the customer. The main issue of networking with the customers in France lies in the sales people and their expertise. Sales people regularly meet the dealers, offer product training sessions to the customers and organize exhibition campaigns together.

“Face to face contact through expertise is very important for a French customer. Dealers deliver specific washing to specific customers. Sales people discuss the price. Purchasing
managers can win the tenders offering a bit higher price than the competitors but at the same time better service solutions.” (Country Manager for France, interview)

In Spanish market the main issue that determines customer relationship is the price and the supports that sales office gives to dealers related to arrangement of technical service.

“We support our dealers in everything sometimes the dealers cannot invoice because it is one million euro. There are dealers who are real professional in what they sell as you have to be real expert to sell the ELS product because the price is very high”. (Country Manager for Spain, interview)

In Finland the sales office does not have any misunderstanding with customers because they usually help customers and support them in solutions. The relationship between sales people and customers in Finland is based on a group level agreement that is operated by the corporate office, including sales, service and spare parts. Sales office discusses with customers the installations solutions as well. Sales office does not promise more than they can deliver. They seldom they have problems with customers. Usually sales office keeps their promises. When they know when they receive the machine then sales representatives inform the customers. Sales office does not make safety buffers.

“We always need to tell a customer in good time that there will be some changes. Then, it will be ok if you tell a customer one week before”. (Country Manager for Spain, interview)

Thus, customer relationship characteristics are based on long years of cooperation and frequent communication with local sales company related to problem–solving and product specifications. The main issue for customers is to have a person who understands their situation and answer all the questions related to product delivery and installation as well as technical solutions.

4.3 Material and Information flow

This is a description of the current relationship and the logistic flow between the local sales companies and the production units in Sweden, France and Thailand. The description of logistic flow involves the information flow and material flow between the actors. Material flow includes the flow of finished goods and spare parts. The aim of the description is to capture what is happening and what people are thinking between the local sales companies and the production companies.

4.3.1 Relationship between local sales company and production units

The relationship between local sales companies and the production companies is different and mainly depends on the factory where different categories of machines are manufactured. In general, the relationship and communication between the local sales companies and the factory in Ljungby, Sweden are quite good due to daily communication
basis and mutual understanding. Many local sales people point out that the communication has improved a lot with Ljungby unit and less misunderstanding than before. Ljungby keeps the delivery time and informs sales people once there are any delays.

However, the relationship and communication between the factory in Thailand and local sales companies are not good because people do not understand each other due to language and cultural barriers. The local sales people do not communicate with Thai factory so often than with other factories in Europe due to geographical locations and time differences. There are always problems about delivering machines from Thailand because it usually takes 8 to 10 weeks to ship the goods from the factory in Thailand to the factory in Ljungby. It is too long for customers to wait for the products to be arrived. This is a difficult situation which many local sales companies are facing currently. Every local sales company has complained about issue when discussing the issue of delivery time from Thailand. This subsequently affects the relationship between local sales companies and the customers. It also affects their financial performance because the local sales company cannot sell the products that are manufactured from Thailand. The issue is that for the products produced in Thailand the lead time is too long for the customer to wait.

There are some specific issues that happen in different local sales companies which affect the relationships between the local sales units and the production units. In the sales companies in the UK and Spain, there is some misunderstanding and cultural differences between local sales units and production units. For example, the factory in Ljungby closes down about 3 weeks during industry holiday in summer and the local sales people found it is difficult to get help from the Swedish office.

"I know during the summer last year, the factory closed down for about 3 weeks. They put temps in to run the office; but at the same time, there was not much experience in the office in Sweden, because they were on holiday" (British Sales Manager, interview)

"Sometimes Ljungby doesn’t keep the delivery time when the factory is closed. These delays the time of delivery. We need to know the number of stock correctly in the warehouse for that period." (Spanish Sales Administration Manager, interview)

Concerning the German sales company, the relationship between the local sales company and factory in France is not as good as with the factory in Ljungby. The communication is much more difficult but it has been improving. There are always delivery problems about transporting special products when the volume ordered is not so high compared with the volume of other products.

“With Ljungby it is the best, with the other ones in France and in Thailand it is getting better. It was worse in the past. One or two years ago the communication was very bad, now it is becoming better. France and Thailand promised us to be much better in the future. " (German Sales Manager, interview)
The relationship with the production unit in Sweden and Finnish sales company is good based on good communication and mutual understanding. Sales office communicates very often with Ljungby and follows the rules introduced by Ljungby. Moreover, there is one person who is in charge of the logistics issue and follows the rules of ABC classification in the Finnish office. Sales office never promises the customers something that the factories did not promise to them.

"We know the rules and sales guys are doing what they have told to do, nobody is promising more than we cannot do." (Finnish Sales Manager, interview)

While in the French sales company, the communication has been improved very much due to frequent communication. The relationship is getting better between the sales company and production unit in Ljungby. However, the local sales people would like to work together with the production units. Local sales people want people from Ljungby to understand how the Troyes factory works and understand more of the local French market situation. The situation of the French sales company is complicated because it is mixed with its own production and sales units. Stock flexibility is the critical issue of the situation in France.

"Ljungby does not know how the French office works. Sweden does not understand the process. If the local sales office will be diminished, then the competitors will have better delivery time. Flexibility means a lot for a French customer." (French Sales Administration Manager, interview)

In the Spanish sales company, the relationship and communication between the local sales unit and the production unit in Ljungby are not good. This is because the local sales people always communicated with the same person in Ljungby unit before. However, it takes longer time to receive response from Ljungby about the information of delivery date now. Sales office complains that the Ljungby unit does not keep delivery time. This creates misunderstanding and affects their relationships between each other and thus also affects the response time to their customers.

"Now the process is more confusing because the e-mails are sent to one mail box. Then they are redirected to the specialists in the department. They try to solve the easiest cases while the most difficult ones are left." (Spanish Sales Administration Manager, interview)

In sum, the relationship between local sales and production units are very different in various countries. It also depends on the types of machines which are manufactured and the locations of the factories. The relationship is quite good with Ljungby unit due to regular communication and mutual understanding. The negative issue lies in the communication and cooperation with the factory from Thailand because it takes 4 weeks to produce the machines and additional 8 to 10 weeks by sea-freight. Furthermore, different local sales units have their own special issues regarding customer needs, volumes ordered and
unfamiliarity of situation in the production unit. These issues affect the relationship between the local sales and the production units.

4.3.2 Information flow between local sales and production units

The information flow between local sales and production units is diverse and it relies on how the local sales units understand the rules and the systems. In general, the dealers receive the order from end-customer and the dealers send the orders to the local sales companies by fax or email. The local sales companies send the orders to the production unit and ask for delivery date. Once the production unit replies them the delivery date the sales people inform the dealers. The dealers reply to their end-customers and arrange the installation of the machines accordingly. This process is illustrated in figure 4.3.
Based on the information from the interviews, we have found out that the information flows is not clear between the local sales and production units in different countries. In the British sales company, the sales people are confused related to the delivery time information. Ljungby unit changes the delivery date quickly without telling the sales people clearly. Moreover, the information sent from Ljungby to the local sales company is not accurate related to the delivery date. It also takes long time to get reply from the factory in Thailand and customers are not satisfied with such slow responses.

"There seems to be confusion, you can ask for a delivery date one minute and they can change the delivery date next time when you speak with them. They have been told the goods are dispatched but actually they were still left in the factory". (British Sales Manager, interview)

In the local sales company in Germany, France and Spain, people have different understanding of the rules of ABC classification. In the German sales company, sales people are satisfied with the order handling process. They understand the rules of ABC categories. The misunderstanding happens in the French sales company, people point out A-product is delivered in 48 hours from Ljungby unit and the average delivery time for the other products are 2 weeks for the machines produced in Ljungby and 8 weeks for the machines produced in Thailand. While in the Spanish sales company, people point out it takes 7 days to deliver A-product and the other products is 14 days.

The information flow is different in the Spanish sales unit related to technical service support such as machine installation and maintenance service. This is mainly because the local sales unit outsources all the technical issues to the technical service companies and they communicate very often with each other regarding the installation and maintenance issues of the machines. Therefore, the local sales unit needs to firstly talk to the service technicians regarding technical issues and the technicians speak to the end-customers directly and arrange the installation. The information flows is illustrated in Figure 4.3.

"We outsource all the technical specialists. Dealers and end-customers can call the technical service directly to the technical service companies." (Spanish Sales Manager, interview)
Concerning spare parts order, the dealer sends the order to the technical service companies and the technicians send the order to local sales unit. The local sales unit sends the orders to Ljungby unit. When the spare parts are ready, Ljungby unit sends the spare parts to the dealer or sometimes to the end-customers directly. The local sales unit has been working with this routine for 2 to 3 years.

In addition, the information flow between Spanish sales and the Ljungby units is not clear. The people said the information in the order system is not accurate. For example, the delivery time for B-category is 10 days ex work. However, when they place an order of B-category for Swedish product in the system on 5th May 2009, the system shows the delivery time is 9th June 2009 and the delivery time is more than a month.

In the Finnish sales company, people understand and follow the rules of ABC classification. Therefore, the information flows between the local sales unit and production unit is clear and thus no problem occurs. Moreover, the information flow regarding order sending is different when comes to dealers and end-customers. The dealers know the type of machines and spare parts so they order them from the internet while the end-customers do not know the type of machine and do not know what they need. They need to discuss with dealers and dealers send the orders to the sales company by email.

In summary, the information flow between the local sales unit and production units is very diverse in different countries. It depends on how people understand the rules and system. The information flows regarding order handling is mostly the same in each country except in Finland. In general, the flow is that the orders sent from end-customers to the dealers, and the dealers send the orders to the local sales company. The local sales people inform the dealers once they receive the reply from the production units and finally the dealers inform their end-customers about the delivery and installation issues. Nevertheless, except in Finland, the information flows between local sales and production units is not reliable due to inaccurate delivery information from production units and misunderstanding of the rules of ABC classification. The delivery times was neither measured between the local sales and production units nor between the local sales unit and the customers.

4.3.3 Material flow between local sales and production units

The material flow between the local sales and production units is highly dependent on various practice of each local sales unit. It also depends on the machines types as well as the location of the factory. The goods manufactured from Thailand is a critical aspect regarding the materials flow because it takes 4 weeks to manufacture and plus 8 to 10 weeks to transport. In normal practice, the goods manufactured in Ljungby or Thailand will be sent
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from Ljungby unit to the dealers and the dealers deliver the machines to their end-customers.

Based on the information collected from the interviews, the local sales companies in the UK, Germany and Finland follow the normal practice that machines are delivered directly from Ljungby to the dealers. The major difference related to the material flow is in the factory in Troyes, France because their practice is to consolidate all the products in their factory. They manufacture their own products such as barrier washers, ironers and front loading washers in its own factory and they name theses products 'French' products. They are used to consolidate all products; either manufactured from Ljungby or Thailand, into one shipment and then send the shipment to the dealers. The materials flow is illustrated in Figure 4.4

"The products are shipped from Ljungby. Then the deliveries come to Troyes and all the products are consolidated in Troyes." (French Sales Administration Manager, interview)

![Figure 4.5 Materials flow -Finished goods and spare parts- in Troyes, France (Source: Own)](image)

To cite an example in France, when the dealer orders a product on the 4th May and then local sales people put the order into the system on the same day or 5th May. The product is ready on the 7th May and leaves Ljungby on the 8th May. It arrives the factory in Troyes on the 11th May and loaded on truck on 13th May, and finally delivers to the dealer on the 15th May. That means it takes more than 10 days to deliver the products from Ljungby to the dealer.
If the orders are not sent from French dealers, the sales people send the 'French' products to Ljungby unit first before arriving to the final destination. Therefore, sales people in German and Spanish local units complain that there are always delivery problems of the products manufactured from France. They do not understand why the 'French' products cannot be delivered directly from Troyes, which can be dispatched on next day, instead from Ljungby.

The Spanish local sales unit usually coordinates the delivery process with both spare parts and finished goods.

"In 95 percent the sales company arranges the delivery of the goods for the end-customer." (Spanish Sales Manager, interview)

The spare parts are delivered from Ljungby unit to the technical services company or sometimes to the end-customers. Finished goods are delivered to the local sales unit then distribute to the end-customers by the local carriers. When the goods have arrived to the end-customers, the technicians discuss with the end-customers and arrange the machine installation. The materials flow is illustrated in Figure 4.5.

![Figure 4.6 Materials flow (Finished goods and spare parts) in Barcelona, Spain (Source: Own)](image)

In case there is urgent shipment of the products manufactured from Thailand, the Spanish local unit has to pay airfreight the machines in order to meet the requirement from the dealer. Otherwise, they will lose the order because the dealer can get the machines from other competitors in a shorter period.
To sum up, the material flow including finished goods and spare parts is more or less the same in many local sales units except the ones in France and Spain. The general practice is that the machines are delivered from Ljungby unit to the dealers and the dealers deliver the goods to the end-customers. There are differences in the factory in Troyes because it needs to consolidate all the products in one shipment and send to the French dealers finally. The material flow is also different in the Spanish local sales unit due to the outsourcing of technical services to the technical services companies.

4.4 Changes in routines

This is a description of the changes in routines related to the local sales units after the implementation of the new initiative of closing the local warehouses. The description of the changes includes warehousing and stock-keeping, delivering and ordering aspects. The aim of the description is to capture what has happened regarding the routines of the different actors in the value chain.

4.4.1 Warehousing and stock-keeping routines

The routines have been changed in the local sales companies since the new initiative of closing all the local warehouses is taken. Based on the data gathered from the interviews, the local sales companies complained that they only received a short message of the closure of local warehousing from the Logistic center in Ljungby without concrete explanations and steps. They are not allowed to keep any stock as a buffer like before. The sales people need to start measuring the delivery time through communication with the production units. The most challenging issue still lies in the communication with the factory in Thailand because it always causes late delivery problems for the customers.

In United Kingdom, since the local warehouse is closed in early 2009, the changes in stock-keeping routine are that the local sales unit cannot keep any stock. The goods are delivered to dealers directly from Ljungby unit. The dealers need to order the goods in advance and keep stock in their own warehouses. Today local sales company is looking at outsourcing the warehouse at the moment because the ELS competitors in the UK have warehouses and can do next-day delivery.

"When we make a sale it takes a few days for Sweden to tell us when the product will be delivered, and then the delivery date is not met. We need to order proper stocks so that we are not forced to depend on ELS." (British customer, interview)

In France, the local sales unit will be keeping the stock in the factory in Troyes because they need to deal with the issue of availability and flexibility with customers. When the customer rejects an order, the stock is kept in the warehouse since it is not acceptable to return it back to the Ljungby unit. French customers get used to flexible solution and they change their mind about the product and deliveries. Sometimes the customers want the product to be
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held in Troyes more days before dispatching. The local sales unit communicates with the customer and delivers the goods when they are ready to receive.

"When the warehouse would be diminished, the flexibility in getting the product at the most suitable time will not be covered. It will not be so easy to implement in the French market as the customer used to flexible solutions." (French Sales Administration Manager, interview)

In Germany and Finland, the routines have changed that the goods are delivered to dealers directly from Ljungby unit. The local sales units are not allowed to keep any stock and they rely on the information sending from Ljungby. The Finnish sales unit is the best example after the warehouse was closed in the 1990s because they follow the rules of the direct deliveries introduced by Ljungby and understands the system well.

In Spain, the warehouse will be closed in early May 2009, the stock-keeping routines will change because the local sales unit cannot keep stock anymore and goods will be delivered directly to customers. Today the dealer does not keep stock for ELS products. Carriers normally have their own warehouses in Spain.

4.4.2 Delivering routines

When the warehouse was closed in the local sales units of UK, Germany and Finland, the stock-keeping routines have changed. Subsequently, the routines of delivery activities have also changed. Goods are delivered directly from the Ljungby unit to the dealers in these three countries. The local sales units have to rely on the reliability of the factories regarding the delivery time.

In Germany and Finland, the sales people are satisfied with the new routines and the communication with Ljungby is good. The only issue they are not satisfied is the delivery from the factory in Thailand which always takes more than two months to get the machines. In UK, however, it takes a minimum of 8 days to get the products from Ljungby unit to the customer instead of 'next day' delivery and also it takes two and half months to get a premium product to the customers.

The major changes in delivery routines will occur in France and Spain. The warehouse in France will be closed in June 2009 and the one in Spain will be early of May 2009.

In France, the current delivering routine is that the goods are delivered to the end-customers by the local transporter from the factory in Troyes after consolidation. When the warehouse will be closed in June 2009, the goods will be delivered directly from Ljungby unit and Ljungby will be responsible for the complete contract with the end-customers regarding the transportation issue.

In Spain, the local warehouse will be closed in early of May 2009. Before May 2009, the local sales people always arranged the delivery with the technical service companies who were in
charge of control of the unload and verify if there are any damages of the machines. After the warehouse has closed, the goods are delivered directly to the end-customers in the early of May. From that time local sales people co-operate more often with the technical service companies to arrange the installation of the machines. The local sales people said this new routines are more time consuming than before.

"I need to change my habits of work because the delivery won’t be on time and I need to work with Sweden and the customer about this issue. I need to spend 3 times more time dealing with the new system than before." (Spanish Sales Administration Manager, interview)

The local sales people consider the initiative of direct deliveries can be very good, but they also suggest delivering the goods to their local office and letting them to check the goods, install the coin meter in the machine and arrange installation with technical service companies.

"If the model of the machine is external W455+T4130, the coin meters must be assembled here." (Spanish Sales Administration Manager, interview)

4.4.3 Ordering routines

The ordering routines are related to spare parts order and finished goods order. Many dealers have been placing spare parts via internet because they find it is easy to do with the clear PNC and complete access is provided.

"It is convenient to order spare parts online and technical products would be ok" (British Customer, interview)

"Spare parts are completely ordered via internet. There we have complete access to everything." (German Customer, interview)

"Spare parts are ordered via internet as the customer knows the PNC" (French Sales Administration Manager, interview)

However, ordering routines related to finished goods have not changed in many countries except in Finland that the dealers order finished goods via internet. The main issue is that the sales people are selling the whole laundry solution but not single unit to the customers. Therefore, many customers do not know the PNC of the machines and they cannot send orders via internet in many countries. The dealers usually send orders to the local sales company and the local sales unit sends the orders to Ljungby unit. Ljungby proceeds the order and then send out the goods. Both the local sales people and dealers said they have to discuss together about the machines before making a purchase for finished goods.
"Business is done by people but not by computer. There should be a person who knows about the details of the products and he has to know more about the machine that I know." (German Customer, interview)

"We prefer the new sales are done through sales staff and not online, people understand better than the machines." (Finnish Customer, interview)

"Sometimes the questions occur when customer is placing the order, thus everything should be checked. For many customers the distinction between A, B, C products are not clear" (French Sales Administration Manager, interview)

In France and Germany, both the sales people and dealer point out it can work if the product is simple and standardized but not the whole laundry solution with all the products. When the dealers know the PNC of the machines then they can send the orders over the internet.

"If we are talking about the direct orders, the whole solution and all the products should be ordered via internet. So everything should be ordered in one goal." (French Sales Manager, interview)

"Yes, I could, for sure. If I know the exact PNC of the machine I need, I could order it via internet." (German Customer, interview)

"PNC is not stable; it changes so frequently related for the solutions we offer to the customers." (Spanish Customer, interview)

In summary, there are changes in the routines related to warehousing and stock-keeping, delivering and ordering in many countries. The local sales people are not allowed to keep stock anymore and the goods are delivered directly from the Ljungby unit to the customers. Many dealers have been placing spare parts orders from the internet due to clear PNC information and complete access. However, the ordering routines related to finished goods have not changed except in Finland. The dealers in many countries still send the orders to local sales unit and the local sales people send the orders to Ljungby unit. On the other hand, people in France and Germany pointed out that the direct ordering for finished goods i can work if the machine is standardized and the PNC is clear.

4.5 Summary of the empirical findings

- The starting point of ELS strategy lies in changing the current focus to a customer perspective aiming to provide a customer with best-possible solutions. The target of ELS is to produce the system with the accurate information that production unit could clearly understand customer need without errors in interpretation of it. Today there is a purpose of integration of that information to better understand customers’ concerns and how they make business in order to improve customer service. The targets of new logistic strategy can be described as the following:
- Close down warehouses
- Direct deliveries to the customer
- Direct ordering from dealers

- **The local market situation differs related to differences in segments that determine customer preferences in terms of washing solutions and requirements. This issue determines the share of project-based market versus replacement.** In France, local market networks are divided into 2. Network 1 covers project-based market while network 2 covers replacement market. The main focus in the UK is in the hotels, care and nursing homes, while in France hospitals, homes for elder people and handicapped institutions which covers are of vital importance. These segments in France are covered by Network 1. In Spain high-class hotel chains allocates ELS position on the market. **The differences lie in customers’ perceptions of cleaning and washing solutions.**

- **Customer needs on product are related to quality in terms of efficiency and reliability.** They perceive ELS product the best product in the marketplace meeting high quality standards. These standards on quality vary between countries. For example, in France the standards lie in high hygienic standards, while in the United Kingdom the product should be environmentally friendly with low water and energy consumption. **While customer needs on service are related to on-time product delivery, speedy response related to after-sales service.** The customer’s perception of delivery time differs in Spain and in France where customers are used to the flexibility in delivery issues. Customers also concern about availability of technical support as well as training related to products and technical issues. It is not too easy for a customer to understand to have the dimension for in A, B, or C categories of internal process in ELS. The point is that some of the needs related to C products have a very long delivery time, but the customer does not understand it. In general, customers think that in the case of ELS the standards in terms of customer service are highly dependent on good communication and quick problem-solving skills. **The main issue for customers is to have a person who understands their situation and answer all the questions related to product delivery and installation as well as technical solutions.**

- **The relationship between local sales and production units are very different in various countries.** It depends on the types of machines which are manufactured and the locations of the factories. The relationship is quite good with Ljungby unit due to regular communication and mutual understanding. The negative issue lies in the communication and cooperation with the factory from Thailand because it takes 4 weeks to produce the machines and additional 8 to 10 weeks by sea-freight. Furthermore, **different local sales units have their own special issues regarding customer needs, volumes ordered and unfamiliarity of situation in the production units. These issues affect the relationship between local sales and production units.**
The information flow between the local sales unit and production units is very diverse in different countries. It depends on how people understand the rules and system. The information flows regarding order handling is mostly the same in each country except in Finland. The Finnish situation is very different than other countries because some dealers order finished goods directly. The local sales people inform the dealers once getting reply from the production units and finally the dealers inform their end-customers about the delivery and installation issues. Nevertheless, except in Finland, the information flows between local sales and production units is not reliable due to inaccurate delivery information from production units and misunderstanding of the rules of ABC classification. The material flow including finished goods and spare parts is more or less the same in many local sales units except the ones in France and Spain. The general practice is that the machines are delivered from Ljungby unit to the dealers and the dealers deliver the goods to the end-customers. There are differences in the factory in Troyes because it needs to consolidate all the products in one shipment and send to the French dealers finally. The material flow is also different in the Spanish local sales unit due to the outsourcing of technical services to the technical services companies.

There are changes in the routines related to warehousing and stock-keeping, delivering and ordering in local sales companies. The local sales people are not allowed to keep stock anymore and the goods are delivered directly from the Ljungby unit to the customers. Many dealers have been placing spare parts orders from the internet due to clear PNC information and complete access. However, the ordering routines related to finished goods have not changed except in Finland. The dealers in many countries still send the orders to local sales unit and the local sales people send the orders to Ljungby unit. On the other hand, people in France and Germany pointed out that the direct ordering for finished goods can be applied if the machine is standardized and the PNC is clear.
5. Analysis

In this chapter the empirical findings described in the previous part of the thesis will be analyzed following the theoretical framework. The analysis includes the analysis of ELS current strategy, local market network and local customer situation as well as information and material flow process mapping focussing on dealers, local sales offices and production unit as major actors in this process. It also includes the analysis of the factors associated with JIT with customers in ELS. These factors include four dimensions: decentralization, formalization, integration and specialization. Furthermore, we analyze the local sales companies’ routines and the functional competences.

5.1 ELECTROLUX LAUNDRY SYSTEMS CURRENT STRATEGY ANALYSES

The decision of new transportation solution was taken centrally in the end of 2008. The main reason for new solution was seen in decreasing tied-up capital that remained on a level of about 80 million SEK annually. The other reason is to safeguard information from the customer to the production unit about customer needs. New transportation solution from the logistics point of view covers the initiative of JIT distribution implementation that starts from customer need. The targets of the new logistic strategy take into consideration three steps: 1. Close down warehouses, 2. Direct deliveries to the customer, 3. Direct ordering from a customer to the factory. The first two steps are seen as facilitating timing in the product distribution to external customers. In the case of ELS, timing is related to delivery and changes, product orders and customer needs. It is a critical component of customer service. The issue of timing related to on-time delivery includes diminishing inventory at every point of the supply chain and product delivery at a fixed time frame when the customer need arises. Thus, close down warehouses is seen as removing unnecessary steps in the chain to perform transportation more efficiently as well as speed up information and material flow. Therefore, the benefit lies in premium for value-added services. The third aspect is related to timely data received from the customer to respond to customer needs and produce right-time decision for changes in customer needs as well as to share the information about material flow. Today local sales companies are aware of all the information about customer needs and possess real-time information about customer situation which the local sales units subsequently transfer to the production unit. Sometimes this information is not handled correctly from the beginning, thus, the customer needs are not satisfied because of the inaccurate information. This put emphasis on the aspect of customer need as the starting point giving the production unit access to the customer’s real demand data. Thus, the information is aimed to be directly transferred from the customer to the production unit. ELS recognizes that having real-time information availability would help them to achieve two significant objectives: improve customer service and improve operating efficiencies.
The implementation of new JIT distribution strategy does not start simultaneously in the local sales companies. Sales companies today do not understand the clear focus of the new transportation solution and preconditions for customer service improvement. One of the reasons is that the direction about new transportation solution was taken centrally without clear explanation to the local sales companies. The local sales units perceive this direction only in the aspect of decreasing costs. They also see the direction in the aspect that Sweden wants to control everything, including their relationship with customers. Sales companies in the UK and Spain do not see the reduction of inventory without decreasing customer service. Thus, sales companies do not see the goals of the new strategy in the way that it has been established centrally. This creates a conflict of misunderstanding between centralization and localization meaning that the understanding and starting points of the strategy is perceived differently between central office and local sales companies.

5.2 Local market network

In the empirical part we have described local market situation in the countries of France, Spain, UK, Germany and Finland related to market network and customer situation. The networks which cover specific segments of market differ in each particular country. They also determines the market share for project-based versus replacement. In the above mentioned countries market products are mainly sold not directly to customers, but through dealers. Working indirectly (through local dealer) allows the company to cover a greater geographical area, having better access to the local end-customers. However, such relationship also brings along certain dependencies, for example sales company has indirect feedback from the end-customer. Moreover, the dealer represents the company for the end-customer and influences the customers directly. However, even if a dealer is an independent partner, the local sales companies influence and sometimes control its relationship with customers. Local sales companies in most cases control exclusive dealers which have obligations to ELS. Sometimes there is the third actor involved in the relationship between the local sales company and the dealer. For example, the independent auditor in France and the technical specialist in Spain. Their importance determines customer preferences related to laundry solution.

In France there is a vivid dimension between two local networks which cover different segments of the market. The concentration of project-based network 1 on such segments as hospitals, homes for older people and handicapped institutions determines its consideration on healthcare customers. These customers concern about microbe issue. Barrier washer products are the special products produced mainly for French market due to the importance of hygiene business. As it was described in the empirical findings lot of things in terms of microbe issue need to be confirmed by auditor. An auditor is considered to be the third and independent actor that approves the high standards of the laundry process for hospitals. There is a trust between the customer and the auditor in France. The confirmation of the proper laundry process is important for the French customer. Thus, the role of auditor as an
independent actor between sales company and customer means a lot for the French customer. Therefore, the differences between project-based and replacement market is France lie in the needs of each network. The network 1 needs the complete laundry solutions that meet specific customer needs and standards on microbe and hygiene issue with the involvement of auditors’ confirmation for the laundry solution, while the network 2 needs individual laundry solutions and replacing washing machine to the customers which are not so big. Network 2 needs on product mostly deal with Ljungby and Thai products as well as some boating product from ELS supplier. The differences of customers needs in these networks determine the approaches of how sales people work with these networks. As customers in the network 1 are professionals in the laundry solutions, they know the PNC of the product and do not need so much assistance with the products, while customers in the network 2 are not aware of the PNC of the product and need more support related to the products.

As contrasted to France, people do not believe in hygiene concept in Spain. Thus, the segment of hospitals is not of vital importance in Spain. Barrier concept is not popular with Spanish customers. The segment that determines current market situation is hospitality related to high-class hotel chains with high requirement for laundry and demand for washing. Big machines are popular with hotels because of the amount of garments fit into the machine with mostly same color and fabrics which makes the process of washing easier for customers. The particular feature about Spanish market that a customer usually does not require traditional A–categories products with the standardized PNC, mostly customer requires a B or C categories product with the definition of PNC for each particular case. One out of three exclusive dealers is concentrated on selling wet cleaning solutions for such segments as garment shops and restaurants which are gaining its popularity in the Spanish market as this cleaning solution meets all the environmental regulations and is less expensive than the machines offered by competitors. The most important issue gained from the empirical data is the significance of technical specialists for the installation of the machines. The technical specialists are a third and independent party involved in the relationship between the local sales office and dealer. The role of technical specialist is crucial for the customers in Spain as they are dependent on the process of arrangement all the installation of washing machines. This process coordinates sales office with the customer requirements when it should be. Thus, sometimes when the machines arrive and the customer premises are not ready for the installation the machines are kept on the side of technical specialists. There is an understanding and trust between technical specialists and customer in Spain. Technical specialists support customers in understanding how to use the machines as when the machines are installed technical specialists provide customers with training on how to use the machines in the best possible way.

Therefore, the role of third independent actor involved in the relationship between customer and sales company is important for the local market network in the countries of
France and Spain as customers trust and is dependent on this actor’s involvement in the service provided by local sales company. Customers do not communicate with the auditors in France or technical specialist in Spain, they communicate with these actors only through local sales company.

The situation in the local market is different as the customers are different. Customers’ situation differs related to local customer needs and their perception of service. Local customer needs on product differs related to how customers perceive the laundry solution. In France it is related to the hygiene standards which are connected with the barrier washer concept, for Spain the main issue lie in the size of the machine which should include the garments with mostly same color and fabrics that makes the process of washing much easier. The customers’ main requirements in the UK for ELS product are environmentally friendly standards with low water and energy consumption. Customers in Finland require 100% reliability of the washing machine as well as reliable output of the machines. The German customers expect the products with the maximization of washing results. Since the implementation of generation 3000 the product became outstanding and highly competitive on the German market. Thus, the differences lie in how customers perceive laundry solution.

In all the above mentioned markets the customers are satisfied with the products of ELS because of the high quality which meets high standards. These standards vary according to the local customer needs. ELS offers different variety of products for customers to choose in order to meet different requirements of their end-customers. Therefore, the customers perceive ELS products as the best products in the marketplace and they are loyal to the ELS brand due to good reputation on the market.

Another value that the customers perceive is the delivery time and quick response for technical support. In all the above mentioned countries customers expect quick response related to the delivery dates as well as the changes related to the delivery information. They expect the delivery information at the earliest appropriate time and to receive clear information about product delivery because sometimes it takes a few days to know the concrete delivery date of the products. It is not reasonable for a customer to wait. The customers are very time-sensitive and, for example, they feel annoyed to wait for long time to get hold of the products which are manufactured from the factory in Thailand. Such frustration affects the relationships with customers because the products are not delivered on time and the response time is always slow.
Figure 5.1: Customer perceived value (Source: Own)

The relationship between local sales company and the customers are ambiguous because the customers are satisfied with the products but they are not satisfied with services related to slow response in terms of delivery information and technical support. The customer satisfaction in terms of services provided varies between countries. The other aspect of relationship characteristics such as the duration of relationship is characterized by long-term cooperation based on daily communication with local sales office. The third aspect of relationship characteristic is trust which can be characterized by the facts that customers trust ELS based on producing high-quality products in the marketplace. However, customers do not trust in the ELS information reliability related to the issues of on-time delivery as it does not fulfill the promised dates of delivery from a customer point of view.

5.2.1 The UK

In the UK, the customers expect products should be delivered in a short period of time instead of waiting long time especially when they are asked to pay a premium for the products. The aspect of “right times” is considered of vital importance for the UK customers. However, today this aspect is not covered with the direct delivery to customers without a local a warehouse. Some of the dealers have to order such products in advance and keep in their own warehouses in order to be safe. They are not satisfied with this issue because sometimes they have been losing a lot of money as they work with ELS on prepayment conditions.

The customers do not get the total perceived benefits that they expect when they have sacrificed by paying high premium price. When the machines are down, customers have found difficulties to get quick technical support as it takes usually 3 or 4 days to get fixed. This makes them frustrated and affect their customer service as well as business to their end-customers. Thus, the perceived customer value is not satisfied when discussing delivery time and technical support services perspectives and those are needed to be improved in the UK. Such dissatisfaction affects the customer loyalty and retention.

According to the empirical findings, local sales company does not understand the customers’ needs and their business in order to be able to support their customers in meeting their objectives. Therefore, the characteristic of “understanding the customer situation and need” related to competence are that sales people has a lot of competences related to product which meet the customer needs. They have a good knowledge of the British market and laundry industry. However, they do not have enough competences to understand the customer situation in terms of delivery and service support. The issue of misunderstanding contributes to customer’s perception of support related to service issues which is not at the
Analysis

good level. It negatively impacts customer satisfaction. Customer satisfaction as a degree to which customers are satisfied with the product received can be analyzed as following:

1. Customers are mainly satisfied with pre-transaction as they have local sales managers for helping them in terms of choosing the right laundry solution to cover all the needs related to a product.

2. Customers are not satisfied with the transaction as they cannot check the reliability of delivery time and lead time of a product when it is involved in the distribution process.

3. Customers are not satisfied with post-transaction as they do not receive technical support and any training on how to use ELS’s products

The UK sales office does not totally recognize the service level requirements of final customers and connects it only with the warehouse problem. It leads to bad co-operation with the production unit and low customer satisfaction.

5.2.2 France

In France, the customers’ expectations differ related to the network the customer belongs to. The aspect of “right times” is considered of vital importance for the customers in the network 2 which requires the products to be delivered as quickly as possible. As this network covers the replacement market, when the machine is broken down customers need it to be replaced as soon as possible. In the network 1 customers used to flexibility in getting the product at the most suitable time. Thus, the aspect “suitable times” is important for the customers in the Network 1. Today this aspect is covered that customers’ products is stored in a local a warehouse and the product is delivered to a customer at a time most suitable for the customer. Customers do not experience any difficulties to get quick technical response when the machines are down. Thus, they benefit from the availability of technical support as well as constant training sessions covering the technical aspects of the product. Customers also benefit from conjoint exhibition campaigns with ELS that help them to save costs and visiting end-customers. If compare with competitors ELS is matching the price with the quality. Sales representatives also provide arguments against the price offering discounts and flexible payment conditions for the customer.

Therefore, customers get the total perceived benefits that they expect when they have sacrificed by paying higher price for ELS product. Thus, the perceived customer value is satisfied. The issue of customer satisfaction highlights by the customer loyalty and retention which shows that many of the ELS customers have long-term relationship with ELS since their business was established on an inherited basic.

According to the empirical findings, local sales company understands the local customers' needs in each network and their business. This issue lies in sales people expertise which lies in regular training sessions in the product which cover a lot of technical issues,
communication and exhibition campaigns and visiting customers with dealers. Face to face contact through expertise is very important for a French customer as well as availability of technical support. Thus, sales people are able to support customers in meeting their objectives. They are real experts in the French market and laundry industry with sufficient competences to understand the customer situation in both networks in terms of delivery and service support. The issue of mutual understanding contributes to customer’s perception of service and impacts customer satisfaction in the best possible way. Customer satisfaction as a degree to which customers are satisfied with the product received can be analyzed as following:

1. Customers are highly satisfied with pre-transaction as they have real experts for covering all the needs related to a project-based or individual laundry solution.

2. Customers are satisfied with the transaction as they receive information about the delivery time and lead time of a product as soon as sales representatives receive this information from the production unit.

3. Customers are satisfied with post-transaction as they receive technical support and trainings in how to use ELS’s products.

The French sales office recognizes the service level requirements of final customers and thus customer’s perception of support received from the company to meet customer’s objectives is fulfilled. It leads to good co-operation based on mutual understanding and trust as well as high customer satisfaction.

5.2.3 Spain

In Spain, the customers expect products to be delivered when all the issues with the arrangement of installation such as electricity, gas and water are fixed by the end-customer. The aspect of “right times” related to the information about concrete delivery date is considered important for the Spanish customers. Today this aspect is covered by local sales office which arranges technicians to install all the goods in the “right “times for the customer. Sometimes sales office finds a similar product to offer in the expected time frame to deliver goods on-time or have to pay extra for the product delivery. Thus, customers do not complain about the delivery time and are mostly satisfied with it.

Price for ELS products is not competitive in the market as well pre-payment conditions because of the local competitors which offer lower price and credit for their products. ELS customers in Spain benefits from being an innovator in laundry solutions, thus is able to pay for the different options. Customer benefits from availability of technical support and quick problem-solving response. Therefore, customers get perceived benefits that they expect when they have sacrificed by paying high price. Thus, the perceived customer value is high.
when discussing delivery time and technical support services which are based on local sales office competences.

According to the empirical findings, local sales company understands local customer situation. They are aware of the customer concerns and perspectives. The issue of understanding contributes to customer’s perception of support related to service issues. It positively impacts customer satisfaction. Customer satisfaction as a degree to which customers are satisfied with the product received can be analyzed as following:

1. Customers are satisfied with pre-transaction as they have local sales managers who help them to choose the right laundry solution as well as arrange the technicians for the installation of the machines.

2. Customers are satisfied with the transaction as sales office try to inform them about the reliability of delivery time and lead time of a product. If it is not kept sales office try to find best possible solution for the customer.

3. Customers are satisfied with post-transaction as they do receive technical support from independent technicians as well as from the ones that were involved in installation.

The sales office recognizes the requirements for service level of customers. It leads to good cooperation and understanding, therefore, leads to customer satisfaction.

5.2.4 Germany

In Germany, the customers expect products to be delivered on-time. The aspect of “right times” is of vital importance for a German customer. Customers expect reliable delivery time and promised lead time to receive products on time. These problems depend on the reliability of the factory and on logistic centre. Lead time is too long for special products which in terms on the quantity are not A-products because the volume for these products is not so high. Lead time is too long compared to ELS competitors for such kind of products.

However, the price for ELS products is very competitive in the market. ELS customers in Germany benefit from availability of contact persons and quick support when technical problems occur. Therefore, customers get perceived benefits that they expect when they have sacrificed waiting for special kind of products longer than expected. Thus, the perceived customer value is high when taking into consideration product price and quick response for technical support. The perception of service by German customers is highly dependent on good key account managers that fulfilling high standards related to quick problem-solving response and ability to answer the questions about specifications of the products.

According to the empirical findings, local sales company understands local customer requirements and concerns. It impacts customer satisfaction in the way that customers’
perception of support meets their objectives. Customer satisfaction as a degree to which customers are satisfied with the product received can be analyzed as following:

1. Customers are satisfied with pre-transaction as they have local sales managers who are available to support their ordering process and provide detailed information about laundry product.

2. In most cases customers are satisfied with the transaction as sales office try to keep promises according to the lead time. However, there is lack of information about the accurate delivery dates of special products which are not clear A, B or C products.

3. In most cases customers are satisfied with post-transaction as they receive technical support. However, customers would like to receive trainings for their own technicians.

The customer service level is good based on long-term cooperation and trust between a customer and key account managers, thus, leads to customer satisfaction.

5.2.5 Finland

In Finland, the customers expect products to be delivered on time promised by sales office. Sales office never promises customers something that the factory did not promise to them. The aspect of “right times” is important for a customer in Finland, especially related to the accurate information about the delivery time. Sales office usually explains the situation as it is to a customer, they are honest even if a customer does not understand the issue of long delivery. Sales office always tells a customer in good time that there will be changes in delivery time. Thus, the customers in Finland do not complain about long delivery time, the most important issue for a customer is to know the changes in advance.

However, the price for ELS products is competitive in the market because customers usually meet country sales manager and discuss bulk rates for the orders. Therefore, customers get perceived benefits that they expect when they have sacrificed waiting longer for products. However, ELS customers in Finland do not receive sufficient support related to after sales services, only when they complain about the products. Thus, the response for technical support is slow when technical problems occur. Thus, the perceived customer value is high when taking into consideration product price and promised delivery time.

According to the empirical findings, local sales company understands local customer situation. Customer satisfaction is highly dependent on long-years of cooperation and loyalty to this cooperation. Customer satisfaction as a degree to which customers are satisfied with the product received can be analyzed as following:

1. Customers are satisfied with pre-transaction as they have local sales managers who are available to support customers in the whole solutions including installation.
2. In most cases customers are satisfied with the transaction as sales office keeps promises according to the delivery time because they do not promise more than they can deliver.

3. In most cases customers are not satisfied with post-transaction as they do not receive sufficient after sales services.

Therefore, the local market situation in the countries of Spain, UK, France, Germany and Finland is different as the customers are different. Customers’ situation differs related to local customer needs and their perception of service. The customer service level is based on long-term cooperation, understanding customer needs and customer situation and trust as well as reliability of information about the delivery time. These issues determines customer satisfaction. In general, the customers do not receive accurate information about the delivery and lead time. It is related to the quality of information received by a customer. We can state that the quality of information flow related to timing and accuracy between local sales companies’ and its customers is not good because the information is not clearly exchanged and communicated between the sales company and the production units. Therefore, unreliable information flow between actors in the value chain contributes to low order fulfillment, high lead times and high inventory commitment as well as order changes information. These aspects contribute to the demand chain efficiency in a negative way. Therefore, establishing the accurate information flows to satisfy the customer becomes the main goal for better customer service in case of ELS.

5.3 New JIT process mapping

The new JIT process mapping includes the analysis of relationship characteristics, information and materials flow in each country we have presented in the empirical findings. Table 5.1 shows the differences and similarities between relationship characteristics, information and materials flow of the five countries. The analysis is based on the information from the table.
### Table 5.1: Summary of the relationship characteristics, information and material flows between local sales and production units (Source: Own)

#### 5.3.1 Relationship between local sales and production units

The relationship established between the local sales units and production units are various. Based on the empirical findings, we can see the relationship is different and highly depend on different countries as well as its local country situation.

The bottleneck is the relationship between all the local sales units and the production unit in Thailand mainly due to less frequent communication and misunderstanding between the actors. This could be explained that people in the factory in Thailand do not understand and communicate often with the local sales units. They have been focusing on productions and they do not realize what the customers’ needs are. Therefore, communication and relationship building play an important role between the factory in Thailand and all the local sales companies.

In the following, we based on the previous empirical findings and analyze the relationship characteristics between each local sales company and the production unit in Ljungby.
**Finland**

The issue with Finnish Sales Company can be characterized by good relationships with Ljungby unit and good understanding of the rules of ABC classification. This can be explained by similar working style and relatively strong willingness to follow the new routines. The duration of working with the new routines is much longer than the local sales companies in other European countries. Established good relationship helps create competence of the sales people of working in the markets since communication mechanisms are well established.

**United Kingdom**

On the contrary, the relationships between the British sales company and the Ljungby unit are not good because the delivery time is not accurate and Ljungby unit changes the delivery date without informing the sales people. This gives people confusion and the information transmission is not consistent. As a consequence, trust is not built and benefits are not shared with each other. Thus, accuracy and consistency of the information transmission play an important role in the relationships building between the actors.

**Germany**

The relationships between the German sales company and the production unit in Ljungby are better than the one in Troyes. The local sales people always communicate with the Ljungby unit regarding the goods delivery and they are informed when there are any changes. This gives good quality of information sharing and trust is built between the actors. As a result, strong ties and interdependence are established accordingly. We can note that the communication and information sharing determine the relationships building between the actors.

**France**

The relationships between the French sales company and the production unit in Ljungby are quite good because the local sales people communicate often with the Ljungby unit regarding the orders delivery. The Ljungby unit informs the local sales people every case when there is any delay then the sales people can inform the customer of the goods delivery. As a result, good co-operation and trust have established between the local sales unit and the Ljungby unit. We can see that the communication and trust building determine the relationship.

**Spain**

The relationships between Spanish sales company and the Ljungby unit are not good because the delivery time is not reliable and is not kept from Ljungby unit and the local sales
people do not trust Ljungby. Such relationship that characterized by misunderstanding and mistrust does not contribute reliable information flows between the actors.

Furthermore, the relationship characteristics are complicated in France and in Spain because there is another actor involved in the chain. In France, the hospital is the biggest market segment and the situation is distinguished by the co-operation with public health medical auditors that give big trust to the customers. This makes ELS’s relationship towards the triad relations between auditors, dealers and the sales company. Such relationship characteristics are complicated and Ljungby unit is not involved in the communication of these triad relations. Thus, the information flow could be altered along the value chain and the information transfer is not smooth. In Spain, the situation is characterized by outsourcing of technical services to technical services companies that have close relationships with local sales unit. As a consequence, such situation makes the relationships as well as the information flows between the actors become complex and the information transmission could be affected.

5.3.2 Information flow

The information flow differs and highly depends on the relationship building in different countries. Communication and quality of information are also important. In the following, we based on the empirical findings and analyze the information flows of each country.

**Finland**

In Finland, regular communication between the local sales unit and Ljungby unit establishes good relationships which lead to trust building and information sharing. Information sharing and level of trust are high that make it possible to work together to improve the performance. High demand chain performance increases the motivation of the customers to co-operate. Therefore, we can say the information flows between Finnish sales unit and Ljungby unit is co-operative because of good relationships building and mutual understanding.

**United Kingdom**

In United Kingdom, the relationship between the local sales and Ljungby unit is not good because the delivery information is not accurate and inconsistent. The quality of information sharing is not satisfactory and trust is not built with each other. Thus, we can see the the information flows between the local sales unit and Ljungby unit is not good due to bad information quality and mistrust between the actors.

**Germany**

In Germany, the relationships between the local sales and Ljungby units are good because they communicate often with each other and the delivery information is accurate. The quality of information flow is satisfactory and mutual understanding is built with each other.
Hence, we can see the information flow between the local sales unit and Ljungby is good because of good information quality and mutual understanding between the actors.

**France**

In France, the relationships between the local sales and Ljungby units are quite good because they communicate with each other and the delivery information is accurate. The quality of information flow is satisfactory and trust is established with each other. Therefore, we can note that the information flows between them are good.

**Spain**

In Spain, the relationships between the local sales and Ljungby units are not good. The local sales people do not trust the production unit as well as the system. They do not know how to use the system and they do not follow the rules. The quality of information flows is not good and thus the information flow between the local sales and Ljungby units is not satisfactory.

**5.3.3 Material flow**

The materials flows differ in each country and highly rely on the location of the production units. Local transportation and information sharing also play an important role in the materials flow. It also depends on the machines types as well as the location of the factory. The goods manufactured from Thailand is a critical aspect in the materials flows because it takes 4 weeks to manufacture and plus 8 to 10 weeks to transport. In the following, we based on the empirical findings and analyze the material flow in each country

**Finland**

In Finland, since the information transmission is accurate and the local sales people communicate well with the production units. People understand each other and they share information clearly to the factories. The delivery time is kept and goods are delivered directly to the customers. Therefore, we can say the material flow is good and this explains why Finland is the best experience of the direct delivery.

**United Kingdom**

In the UK, the information transfer is not consistent due to the frequent changes without informing the sales people. Delivery time is not always kept and goods are delivered directly from Ljungby unit. It takes minimum 8 days to get hold of the products and we can point out that the material flow is not good.

**Germany**
In Germany, the information sharing and information transfer is good and the local sales people communicate often with the production units. People understand each other and they share information clearly to the factories. Delivery time is kept and goods are delivered directly to the customers. Thus, we can note that the material flow is good.

**France**

In France, the information transmission is complicated and the local company has both their own factory and sales company. Their normal practice is to consolidate all products to one shipment and this takes few days more to dispatch the goods. The material flow is not smooth as the goods are delivered to Troyes after sending from Ljungby.

**Spain**

In Spain, the information sharing is not effective because the delivery time is not kept by Ljungby. The local sales unit co-operates with the technical service company due to the fact that they have outsourced the technical services. Goods are delivered from Ljungby unit to the local sales unit then sends to the end-customers. Such material flow is not effective because it takes few days more to reach the end-customers.

**5.3.4 Supply chain efficiency**

The supply chain efficiency is highly based on the relationship characteristics and the information flows throughout the supply chain. The previous empirical findings show that the relationship characteristics and information flows are various in different countries. The Finnish sales company which has the best experience of direct deliveries proves that the supply chain efficiency is satisfactory due to mutual understanding and trust building. These relationship characteristics contribute to the reliable information flows between the sales and the production units that in return lead to high supply chain efficiency.

On the other hand, the Spanish sales company does not have good relationship with the production units and local sales people do not trust and not rely on the information from the factory. They need to spend a lot of time to check and ask about the delivery time. Such relationship characteristics do not contribute trustworthy information flows and thus do not give high supply chain efficiency. As a result, supply chain inefficiency could not promote order fulfillment lead-times and sharing of order changes that in return affects customer satisfaction.

In sum, the relationship between local sales companies and the production companies are various and highly depend on the factory where different categories of machines are manufactured. Generally, the relationship and communication between the local sales companies and the factory in Ljungby, Sweden are quite good due to daily communication
basis and mutual understanding. However, the relationships between local sales and production units are not satisfactory due to less frequent communication and lack of mutual understanding. Subsequently, this affects the information and material flow between the actors. The information flow between Finnish, German and French sales units and Ljungby unit is satisfactory because of good relationships building and mutual understanding. However, the information flow between the UK and Spain is not good because the delivery information is not accurate and inconsistent. The quality of information sharing is not satisfactory and trust is not built with each other.

Furthermore, the material flow differs in each country and mainly relies on the location of the production units. Local transportation and information sharing also play an important role in the materials flow. It also depends on the machines types manufactured in the factory. The bottleneck is the goods manufactured from Thailand. This is a critical issue in the materials flows because it takes 4 weeks to manufacture and plus 8 to 10 weeks to transport. Another issue lies in the consolidation practice in the French factory because it takes few days more to deliver to the final destination compared to delivering directly from Ljungby unit.

5.3.5 JIT with Customers

In this section we will identify and analyze the factors associated with JIT with customers in ELS. These factors include four dimensions: decentralization, formalization, integration and specialization.

5.3.5.1 Decentralization

Decentralization involves scheduling decisions, strategic decisions and marketing decisions which are associated with the delegation of decision making. According to the theory of JIT with customer in the chapter 3.1, high level of JIT requires more decentralized of the decisions making.

Based on the information flows between all local sales units and Ljungby unit that we presented in the empirical findings, the local sales people have to wait for the delivery date information from the Ljungby unit after sending out the orders. We can see that the Ljungby unit controls the scheduling of the orders and the delivery dates to customers and thus the decision-making of these scheduling activities is not decentralized and the local sales units are highly dependent on the information from the Ljungby unit.

Regarding the strategic decisions, Ljungby has taken the decision to close the local warehouse in Finland in the 1990s and now they decided to close all the local warehouses in other countries. The local sales people are not allowed to keep stock anymore and goods are delivered directly from Ljungby to the customers. We can note that the Ljungby unit controls the materials flows of the products. The strategic decision-making of delivering activities is
not decentralized and the local sales units rely very much on the stock availability and delivery time from the Ljungby unit and lose the control of the flexibility.

The above-mentioned could affect the local sales companies' ability to provide good customer service. If Ljungby unit centralize the delivering activities, the local sales people are not in control of the factors that affect customer satisfaction such as flexibility. In the cases of France and Spain, flexibility is very important to the customers because the customers are used to flexible solutions in France and the customers do not want the machines to arrive before the installations are ready in Spain.

Concerning marketing decisions, the local sales people understand the local market situation and they know the rules of the games in their own countries. The pricing and payment terms are decided by Swedish head office but the local sales people have their own pricing models in their own countries. For example, the French sales people have been using the discount systems with the dealers in Networks 1 and 2. It is seen that Ljungby unit does not control so much of the sales and marketing activities and thus the decision-making of these activities is decentralized.

From the above, we can see the level of decentralization is not high due to Ljungby unit controlling the scheduling decision and strategic decision. The local sales companies are not empowered to make decisions regarding the order scheduling and stock keeping. Therefore, the level of JIT with customers is not high as much of the decision-making is centralized by Ljungby unit.

5.3.5.2 Formalization

Strategic formalization is concerned with whether the logistics function has a formal, written mission and strategic plan in the organization. The firm collects information about the performance of the firm relative to industry standards as well as internal performance information on customer service and productivity.

ELS has started the new initiative by closing the local warehouse in Finland since the 1990s. The central logistic unit in Ljungby has a formal and written plan for how people should follow the rules. From the empirical findings, we can see that the local sales unit understand and follow the rules. The sales people do not promise the customers more they can do and their honesty builds up the trust from the customers. The relationships between the sales and customers are good and customers are satisfied. This means the formal internal control is relatively high and the performance is measured by the level of productivity and customer satisfaction.

On the other hand, there are not any clear written rules or explanation in the local sales units in France and Spain, it was a short message sent by the Logistic department from Ljungby in 2008 and they are told that the warehouse will be closed without further
explanation. The sales people do not understand why such new initiative is implemented. They neither trust the system nor follow the rules instructed from the Ljungby unit consequently. The situation is characterized by mistrust and unwillingness between the local sales and the Ljungby units. This means the formal internal control is low and the performance is not measured between the units. This could be explained by cultural differences and low level of willingness of working with new routines. Therefore, the level of JIT with customer is not satisfactory because the formal performance is not measured.

5.3.5.4 Integration

The relationships between local sales units and production units in the empirical findings show that the collaborations and communication between them are not satisfactory throughout ELS. The information flows presented in the empirical parts also show that the collaborations between the local sales and the Ljungby units is not satisfactory because of the inaccurate delivery information and misunderstanding of the rules of ABC classification. The Finnish sales company is an exception mainly because they understand and follow the rules as well as such practice has been doing since the 1990s. The level of integration between the Finnish sales unit and the Swedish production unit is relatively high.

Another problem occurs in the factory in Thailand because it takes 4 weeks to manufacture the machines and additional 8 to 10 weeks to transport from Thailand to Ljungby. People do not understand well each other because of language and cultural differences and they do not communicate enough due to geographical and time differences. We can see the integration between local sales units and the factory in Thailand is very low and this is one of the bottlenecks of the pipeline that need to change.

Furthermore, the collaboration between the sales units and the factory in Troyes is not satisfactory. In the case of Germany, the products are consolidated in Troyes from Ljungby and then send them to Germany. This takes few more days to arrive to the final destination instead of sending directly from Ljungby. We can observe the integration between the local sales units and the factory in Troyes is low which need to improve.

Based on the above-mentioned, the collaboration between the units and understanding of the rules are the critical issue regarding the integration in ELS. The integration level is not high because the inter-organizational collaboration is not effective and conflicts exist. Therefore, the situation that the integration is not high can be characterized by misunderstanding of the rules and mistrust between the local sales units and production units. The level of JIT with customer is not high because the local sales units do not collaborate and integrate within the ELS organization. Frequent communication and learning help the local sales unit to integrate better in the future.
5.3.5.5 Specialization

Specialization is the degree to which organizational tasks are subdivided. The previous empirical chapter shows that the Finnish sales company is the best practice because people understand and follow the rules. Another reason could be due to the fact that there is one person who mainly handles the logistic issues and follow the rules of ABC classification in the Finnish sales unit. Hence, we can see that the Finnish sales unit possesses a specialized logistic function, in comparison with other local sales units in Europe, which has a specialist, directs the efforts to defined sets of logistic activities. The longer time specializing on logistic issues, the better understanding of the rules.

However, there is no specific person to mainly handle logistic issues in the other local sales units and nobody understands and follows the rules. The local sales units do not have specialist to direct the efforts on working with the logistic activities. Therefore, the specialization is not high and the effect of JIT with customer is not significant.

5.4 New combination of competences related to JIT with customers

5.4.1 New organizational routines

The initiative of new transportation solution implementation in related to the modifying traditional routines of warehousing, delivering and ordering that the local sales companies and customers get used to. The implementation of new JIT distribution strategy does not start simultaneously in the local sales companies. Therefore, the changes and adaptation to the new way “doing things” runs differently in the local sales companies. We will analyze the differences in the adaptation to the new transportation solution further on.

5.4.1.1 Stock –keeping routines

After the implementation of the new initiative, the local warehouses have closed and many routines have been changed in different countries. Based on our empirical findings, it shows that the stock-keeping routines have changed in the local sales units.

In the UK, the local sales unit do not have local warehouse and customers order the products in advance. When the machines arrive, they put them into their own warehouses in order to be safe if the end-customer places an order. This means that the stock-handling routines have been altered and the stock-keeping routines have been changed and shifted from the local sales side to the customers' side. Such changes require better forecasting information from the customers in order to reduce stock on the customer side.

In Spain, the local sales unit do not have local warehouse anymore and sales people need to communicate very well between production units, carrier, technical services companies and end-customers in order to organize the delivery of the machine as well the installations. Thus, they have additional work to do now when the warehouse is diminished. The stock-
keeping routines could be changed due to the local carriers putting the goods into their warehouses before delivering to the customers.

In France, the local warehouse will be closed in June. As French customers are used to flexibility in delivering washing machine, this issue need to be solved when the warehouse will be diminished. This means that the local sales unit still will be keeping stock but the physical location of stock keeping will change, as the goods will be stored in the French factory.

Thus, we can say that the stock-keeping routines in the countries of the UK, France and Spain change to the side of the other actors. In the UK to the customer side, in France to the factory in Troyes and in Spain either to the local carrier or to the technicians side. Therefore, the problem with stock reduction has not been totally solved in these countries due to the peculiarities in stock-keeping routines and product deliveries. In Germany and in Finland, the stock-keeping routines were modified to the routines of direct deliveries to the customer without any stock involved meaning that those sales companies learned how to perform direct deliveries quicker and better than the other local sales organizations. As learning requires common codes of communication and coordination processes, we can state that in Finland and Germany the communication between local sales companies and the production unit as well as coordination of direct deliveries to the customer contributes to the understanding of new transportation solution.

5.4.1.2 Delivering routines

In the countries of the UK and Germany the first step of the new transportation solution has been implemented in the beginning of 2009. In Spain and France the steps of closing down warehouses and direct deliveries to the customer are under way. Sales offices in these countries are preparing to the new initiative as changing their current way of work and generating new way of deliveries directly to the customer without a warehouse. As we can see from the empirical findings, the direct deliveries will create more responsibilities and arrangement for the local sales office in those countries as the customers are used to flexible solutions related to product deliveries.

We can state that the direct deliveries routines has been created in Germany as the previous routines were transformed into accomplishing a centrally-given task such as to perform direct deliveries activities. The previous functional competences of the key account managers were renovated to the new problem-solving ones related to the direct deliveries. In the UK, the direct deliveries has not created a new way of perform activities by effectively allocating the products (now the products that were kept in the local sales’ office are kept on the customer side). Thus, the necessary transformation of internal processes were not accomplished to perform direct deliveries activities.
Finland can be considered the practice of transforming its routines in the best possible way into direct deliveries following the rules and understanding the value—creation of this process for the customers. The integration of JIT practice into sales company in Finland and reconfiguration of its competences into the way of direct deliveries to customers took time, as this initiative was implemented in Finland in the early 90-s. We point out the aspect of time to adapt to direct deliveries practice to be of vital importance for local sales company success and customer value creation. We also consider the issue of aligning sales companies’ new competences with the customer’s processes to be significant, as this value base is turned into customer perceived value in the process. It is vividly shown on the example of sales company in Finland which accomplished the necessary transformation of internal and external processes to adopt the best practice of direct deliveries to customers.

Therefore, the adaptation to the direct deliveries without warehouse flows smoothly in Germany, while in the UK the local sales office as well as the customers connect all the challenges with the delivery to the warehouse closing.

5.4.1.3 Ordering routines

After the implementation of the first two steps of new transportation solution in the local sales companies, the third step related to ordering routines is supposed to change meaning that a customer is placing an order for finished goods to the production unit.

The situation with many dealers today is that they have been placing orders for spare parts via internet because they find it is easy to do with the clear PNC and complete access are provided. The exception from this process is Spain where the orders for spare parts are done via technical specialists. However, as we point out from the empirical part the customers are very internet-addicted, so they possess the ability of handling an order for spare parts via internet.

What concerns the ordering routines for finished goods in the above mentioned countries, some dealers from Finland are placing orders for finished goods directly. We connect this aspect with the ability for quick learning and individual understanding the process of order handling. However, the process of direct deliveries of finished goods can be deployed for ordering standardized product. It can be used by customers who possess enough knowledge and skills in professional laundry solutions such as PNC of the machines or some additional options. As we can point out from the empirical part, the dealers in the network 1 in France or exclusive dealer in Spain are the examples of such customers. For other customer the direct order handling could refer to the aspect of learning how to put the direct order of the right machine. In the first stages, they need some support in discussing the details with the sales managers. Later on, as the customer will get used to direct ordering, he could manage to handle orders in a new way without any assistance. Thus, customers could perform direct deliveries if they are trained how to use the system and consequently transform their activities to adapt to direct deliveries practice.
5.4.2 New combination of competences

As the empirical findings show, the local sales people have strong competences related to product knowledge and they can provide professional laundry solutions to the customers. However, there are not enough competences in terms of managing delivery time in the outbound logistic. The local sales companies cannot meet customer requirements for accurate and timing information about product delivery, thus does not match the customer need “right time” delivery. Thus, the inside-out competences are activated to the point that local sales companies’ are aware of local customer situation, however in terms of customer requirement for “right time” delivery they are not activated. Therefore the customer need for “right time” delivery information made corresponding changes in local companies’ organizational processes. These processes are related to warehouse closing, direct deliveries and direct orders. All this activities have reconfigured the competences of the sales company in Finland to serve the customers need for right time delivery and accurate information. If we take into consideration the local sales company in Germany, the activities related warehouse closing and direct deliveries accomplished the changes in the local sales companies’ internal and external processes. Thus, the favorable process to better match customer needs was created with the transformation of previous competences to the new ones to address the customer needs. Therefore, JIT distribution in case of sales company in Finland and Germany is considered a capability how to serve customers in the best possible way.

If to consider other sales companies routines and processes to be connected with the JIT distribution, they do not lead to the creation of new competences that better match customer needs for accurate information related to product delivery. If to look at their organizational processes related to integration, learning and reconfiguration we can state that in the countries of UK, France and Spain the integration does not link customer experiences with the production unit related to the routines for processing timing information; the learning does not lead to a common understanding of complex problems related to incorrect information in the value chain as well, thus in the today situation require common codes communication and coordination processes; the reconfiguration in its relation to the need to adopt the best practice does not enable the sales companies in the abovementioned countries to perform activities related to new transportation solution in the best possible way, thus, do not lead to the joint contribution to perform customer value-added activities.

Therefore, the new transportation solution is not embedded in the routines of organizational processes in the countries of Spain, France and UK. However, in Germany and Finland the initiative is integrated into the customer service perspective meaning that it became a ground for customer service improvement resulted in high customer satisfaction.
5.4.3 Dynamic capability

Based on the empirical findings, the Finnish sales company is the company that best implements the necessary practice after the implementation of direct delivery and direct ordering.

We can see that the local sales company has started to work on the new routines since the 1990s. They reallocated the internal human resources and skills and also captured the knowledge of ABC classification. Certain activities related to stock-keeping were taken away and the new competences based on timely decisions to coordinate delivery solutions were created. These tasks are performed by a person who is mainly responsible for all the logistic tasks so that the other people can concentrate the resources and focus on sales and customer services but not administration. They understand the rules and recognize the importance and complexity through learning processes. These combine to create new substantive capabilities and the organization's knowledge of ABC classification.

Nowadays, the local sales people understand the rules and how the system works. They communicate clearly with the customers and get better forecasting information because they know which categories of products are in stock so that they can deliver on-time. Thus, Finish sales office has created a timing ability to deliver products on-time without a warehouse. Accuracy and timely of information exchanged are clear between the local sales and Ljungby units. The quality of information and materials flows are good and this gives higher customer satisfaction.

In this sense, dynamic capabilities comprise several complementary processes. One is the ability to reallocate and reconfigure the human resources to create a new logistics platform and another is the ability to deliver products on-time. Together these form the capabilities that are difficult for competitors to imitate. By improving the operational processes gradually step by step and developing the competences to deliver on-time, a new type of logistics can be identified and realized, which can form a highly dynamic logistics platform for ELS.

5.5 Summary of the analytical findings

Derived from the analytical findings which include local market network and local customer situation as well as information and material flow process mapping as well as the factors associated with JIT with customers in ELS, the following summary of the analyses is presented. It also includes the summary of local sales companies’ routines and functional competences.

- The situation in the local market is different as the customers are different. Customers’ situation differs related to local customer needs and their perception of service. Local customer needs on product differs related to how customers perceive the laundry
solution. For instance, in France it is related to the barrier washer concept, for Spain the main issue lie in the size of the machine which should include the garments with mostly same color and fabrics that makes the process of washing much easier. Thus, the differences in how customers perceive laundry solution lie in the customer needs on washing solutions.

- Customers’ expectations on service are related to timing response to the delivery dates as well as to changes related to the delivery information. The customer service level perception varies between countries. It is based on understanding customer needs and customer situation and trust as well as reliability of information about the delivery time. These issues determine customer satisfaction. The role of third independent actor involved in the relationship between customer and sales company means a lot for the local market network in the countries of France and Spain as customers trust and is dependent on this actor’s involvement in the service provided by local sales company. We can state that the quality of information flow related to timing and accuracy between local sales companies’ and its customers is not good because the information is not clearly exchanged and communicated between the sales company and the production units. Therefore, unreliable information flow between actors in the value chain contributes to order changes information, low fulfillment of on-time delivery and high inventory commitment as well as. These aspects contribute to the customer satisfaction in a negative way.

- The relationship between local sales companies and the production companies are various and highly depend on the factory where different categories of machines are manufactured. Generally, the relationship and communication between the local sales companies and the factory in Ljungby, Sweden are quite good due to daily communication basis and mutual understanding. However, the relationships between local sales and other production units are not satisfactory due to less frequent communication and lack of mutual understanding. Subsequently, this affects the information and material flow between the actors. Furthermore, the material flow relies on the location of the production units. Local transportation and information sharing also play an important role in the material flow. The bottleneck is the goods manufactured from Thailand. Therefore, communication and relationship building play an important role between the factory in Thailand and all the local sales companies.

- The analyses the factors associated with JIT with customers include four dimensions: decentralization, formalization, integration and specialization. From the analyses we see that the level of decentralization is not high due to the fact that local sales companies are not empowered to make decisions regarding the order scheduling and stock keeping. Therefore, the level of JIT with customers is not high as much of the decision-making is centralized by Ljungby unit. The local sales people do not understand the core of the new transportation initiative. They neither believe in the new system of direct deliveries nor
follow the rules instructed from the Ljungby unit consequently. The situation is characterized by mistrust and unwillingness to collaborate on the new initiative between the local sales and the Ljungby units. This means the formal internal control is low and the performance is not measured between the units. This could be explained by local sales companies’ differences in understanding the centralized decisions and low level of willingness to work with new routines associated with new transportation concept. Therefore, the level of JIT with customer is not satisfactory because the formal performance is not measured. Based on the above-mentioned, the collaboration between the units and understanding of the rules are the critical issue regarding the integration in ELS. The integration level is not high because the inter-organizational collaboration is not effective and conflicts between centralization and localization exist. Frequent communication and learning would help the local sales unit to integrate better in the future. However, there is no specific person to mainly handle logistic issues in the local sales units except local sales company in Finland. Thus, the local sales units do not have specialist to direct the efforts on working with the logistic activities. Therefore, the specialization is not high and the effect of JIT with customer is not significant.

- The initiative of new transportation solution implementation in related to the modifying traditional routines of warehousing, delivering and ordering that the local sales companies and customers get used to. As the implementation of new transportation strategy does not start simultaneously in the local sales companies, the changes and adaptation to the new way of performing activities runs differently in the local sales companies. The stock-keeping routines in the countries of the UK, France and Spain change to the side of the other actors due to the local peculiarities in stock-keeping routines in these countries. In Germany and in Finland, the stock-keeping routines were modified to the routines of direct deliveries meaning that those sales companies learned how to perform direct deliveries quicker and better than the other local sales organizations. As learning requires common codes of communication and coordination processes, we can state that in Finland and Germany the communication between local sales companies and the production unit as well as coordination of direct deliveries to the customer contributes to the understanding of new transportation solution. In Finland the local sales company has developed the competences to deliver on time. We account these competences with the knowledge about the delivery rules and how to coordinate the deliveries through timely decisions. Therefore, the ability to coordinate delivery process through timely decisions was created. We connect the aspect of changing traditional ordering routines to direct orders with the ability for quick learning and individual understanding the process of order handling. Thus, customers could perform direct deliveries if they are trained how to use the system and consequently adapt to direct deliveries practice. We consider the changes in local sales companies’ traditional routines and processes.
into the new ones associated with the new transportation concept could lead to the creation of new competences that better match customer needs for accurate information related to product delivery. Thus, the favorable process to better match customer needs will be created with the transformation of previous competences to the new ones to address the customer needs. Therefore, JIT distribution in case of local sales company can be considered a capability how to serve customers in the best possible way. Based on the analyses conducted we conclude that in Germany and Finland the new transportation initiative is highly integrated into the customer service perspective meaning that it became a ground for customer service improvement resulted in high customer satisfaction. By improving the operational processes gradually step by step and developing the competences to deliver on-time, a new type of logistics can be identified and realized, which can form a highly dynamic logistics platform for ELS.
6 Conclusions

The purpose of this chapter is to provide an answer to our main research question for this study, which is “How to improve customer service through Just-In-Time (JIT) distribution”. We start with answering three sub questions and consequently the main research question. In this chapter of the thesis conclusions and recommendations will be made on the basis of analytical findings and structured according our model.

6.1 Customers’ perception of service

What is perceived by customers as service?

The answer to the first research question has been found through studying the local market networks related to local customer needs and their perception of service in Western European countries: UK, Germany, Finland, France and Spain. As it is shown in the empirical findings, the local market situation differs related to differences in segments that determine customer preferences in terms of washing solutions and requirements. The most important segments in the UK are in the hotels, care and nursing homes, in France- hospitals, homes for elder people and handicapped institutions, while in Spain high-class hotel chains. The differences in market segments lie in differences in customers’ perceptions of cleaning and washing solutions. Therefore, the local market situation in the countries of Spain, UK, France, Germany and Finland vary as the customers are different related to local customer needs and their perception of service.

Customer needs on service are related to on-time product delivery, speedy response related to after-sales and availability of technical support as well as training related to products and technical issues. According to product delivery customers expect timing response on the delivery dates as well as to changes related to the delivery information. Thus, customers are very time-sensitive, but in different way. In France and in Spain customers used to “flexible times” delivery, while in the countries of Germany, Finland and UK to the “right times” delivery.

The customer satisfaction on the services provided varies between countries as customers’ perception of services differs. It is based on relationship characteristics and understanding customer needs by local sales company. Trust as one the aspect of relationship characteristic can be revealed in a way that customers do not trust in the ELS information reliability related to the issues of on-time delivery. This issue determines customer satisfaction.

We conclude that the UK sales office does not totally recognize the service level requirements of final customers and connects it only with the warehouse problem. Subsequently, such misunderstanding of customer needs on service contributes to low
perception of support related to service issues. This negatively impacts customer satisfaction.

In France customers get the perceived benefits that they expect when they have sacrificed by paying higher price for ELS product. These benefits lie in availability of technical support as well as constant training sessions covering the technical aspects of the product. They also lie in delivering a product to a customer at a time most suitable for the customer. Thus, the French sales office recognize the service level requirements of final customers. It leads to good co-operation based on mutual understanding and trust, therefore, high customer satisfaction.

According to the empirical findings, in Spain customers benefit from availability of technical support and quick problem-solving response. Thus, the perceived customer value is high when discussing delivery time and technical support services which are based on local sales office competences. Local sales company understands customer concerns and perspectives. The issue of understanding positively impacts customer satisfaction.

In Germany ELS customers benefit from availability of contact persons and quick support when technical problems occur. Therefore, customers get perceived benefits that they expect when they have sacrificed waiting for special kind of products longer than expected. Thus, the perceived customer value on service is high when taking into consideration quick response for technical support and problem-solving response from key account managers. Accordingly, sales company understands local customer requirements on service. It impacts customer satisfaction in the way that customers’ perception of support meets their objectives.

Customer satisfaction on service provided is highly dependent on long-years of cooperation and loyalty to this cooperation in Finland. This cooperation is based on trust as sales people keep promises about product delivery. However, the response for technical support is slow when technical problems occur. Thus, the perceived customer value on service is high only when taking into consideration promised delivery time.

From the abovementioned we can conclude that ELS does not understand the differences in customer needs according to customer service perception in local country markets. ELS does not consider country difference and customer difference according to local customer perception of service when the central direction of new transportation solution was taken. Accordingly, this created conflict of misunderstanding between centralization and localization.
6.2 New JIT process - customer service perspective

How can customer service perspective be incorporated into traditional JIT concept?

The answer to this question is addressed through our analysis. We claim that traditional JIT concept mainly focuses on internal and upstream JIT related to production and purchasing perspectives with materials suppliers through the maximization of resource utilization. Such concept is adopted by production-oriented companies which see logistics is a part of the production system contributing to high productivity and utilization of production resources. The purpose of traditional JIT is to improve coordination between a manufacturer and its supplier networks which is not concerned with servicing the needs of downstream channel members such as customer perspective in the dynamic business environment.

In order to incorporate customer perspective in the traditional JIT concept, we conclude that it is necessary for ELS to shift the focus from production-oriented to service-oriented point of views; and to start from customer end and understand the need of customer in order to achieve high levels of customer service. This can be done through applying demand chain management concept which is a combination of supply chain management and relationship marketing. We find that it is important to establish good relationship and trust with customers at the beginning to create good relationship characteristics. Our analysis shows that good relationship building gives reliable information flow as well as materials flow between the actors. This is because good relationship enhances the quality of information sharing and timing which in turns gives higher demand chain efficiency. ELS can get more accurate and early information from the customers for the production planning in terms of 'make-to-order'. The early information creates a critical time gain and helps ELS to reduce inventory without decreasing customer service. This also helps ELS to satisfy the customer by delivering the right goods or services in the right quantities at the right time.

Furthermore, we also find that good relationship building enables good co-operation between ELS and the customer. Having good co-operation helps ELS achieve both high efficiency and high customer satisfaction. Subsequently, when the customers are satisfied, mutual trust and customer loyalty are established which promotes long-term business relationships between ELS and the customers. These integrate customer real focus into logistics operation by mapping customer's demand and building long-lasting customer relationships.

We also conclude that it is crucial for ELS to change the focus from production to customer service and delivery performance objectives in order to achieve competitive advantage.
Therefore, we would like to claim that JIT with customers is a strategic logistics initiative to be implemented which involves changes both internally and across boundaries.

In order to implement JIT with customers, our analysis shows that four factors associated with organizational designs critically affect the level of JIT with customers in ELS. First, formalization which utilizes more internal performance control. *Formal performance control based on internal records such as written routines and company policies to guide the logistics function.* Second, integration is important because the more collaboration between departments and lateral communication throughout the organization, *the greater coordination of inter-functional flows, the higher the level of the integration in the organization.* Since logistics strategy integration is the use of top level, cross-functional departments to develop logistics strategy, teamwork plays a crucial role in the logistics strategy implementation. Third, decentralization is relatively important when the company implements JIT with customers especially in terms of letting the local sales company control the maintenance of relationship with customers. Finally, *we also find that specialization is crucial for ELS to implement JIT with customers because the organizational tasks should be divided and handled by a logistic specialist who directs his/her efforts to logistic related tasks.* This helps to ensure the smooth transfer of information and material flow between the customers, local sales and production units, and also to perform additional value-added activities. As a result, the above-mentioned enables ELS to improve its efficiency and overall financial performance and a long term competitive advantage is sustained eventually.

6.3 New combination of competences related to JIT with customers

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<th>What changes in routines and competences are required in new JIT process?</th>
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The answer of the third research question has been reached through analysis of stock-keeping, delivering and ordering routines as the initiative of new transportation solution in related to the modifying of these routines into the new way “doing things” that the local sales companies and customers get used to.

Due to the fact that implementation of new transportation solution does not start simultaneously in the local sales companies the changes and adaptation to new routines runs differently in the local sales companies.

If to take into consideration, the stock-keeping routines in the countries of the UK, France and Spain they changed to the side of the other actors and have created more tasks related to dealing with stock on the side on these actors. In the UK the close warehouse created stock on the customer side. In France the diminishing of warehouse in Troyes creates more stock in the factory because of the product consolidation and in Spain the stock is moved either to the local carrier or to the technicians’ side. In Germany and in Finland, the stock-keeping routines were modified to the routines of direct deliveries to the customer without...
any stock involved. Thus, the sales companies in Germany and Finland learned how to perform direct deliveries without stock allocation on the side on another actor. We can state that in Finland and Germany the communication between local sales companies and the production unit as well as coordination of direct deliveries to the customer contributes to the understanding of new transportation solution. *We conclude that successful learning to change the stock-keeping routines requires common codes of communication and coordination processes between production unit and local sales company. They contribute to the effective reconfiguration of stock-keeping routines and recognition the value of direct deliveries to the customers. Common codes of coordination contribute to execute the tasks of direct deliveries need to reconfigure into the new functional competences successfully.*

We can state from the empirical findings and from the analyses that not all the customers are prepared to the direct deliveries. The differences lie in local customer traditional way of delivering the product, which deals with flexibility in France and Spain as well as other actors’ involvement. It also deals with the constant support according to delivery information the customers can receive from local sales office. Therefore, the direct deliveries create more responsibilities and arrangement for the local sales office as the customers are used to constant problem-solving support related to delivery issues. The previous functional competences of sales managers are renovated to the new problem-solving ones related to the direct deliveries. *We conclude that successful learning to change the delivering routines requires time for the transformation the traditional deliveries’ practice to perform direct deliveries activities. We stress the need to coordinate the many tasks and people involved in the delivery process according to the local countries’ environment. Finally, since the new configurations of functional competences consist of direct deliveries activities they are based on the common understanding of the tasks and rules related to new delivery practice either by locals sales company or by customer. They are also based on the local sales companies’ ability to coordinate the deliveries through timely decisions.*

What concerns the ordering routines for finished goods in the above mentioned countries, only some dealers from Finland are placing orders for finished goods directly. We connect this aspect with the facts that Finland has been experiencing the direct deliveries practice since the middle of 90-s. Thus, during that period of time customers possess the ability for learning and understanding the process of order handling for finished goods. We can state from the empirical findings and analyses that the process of direct ordering of finished goods can be deployed for ordering standardized product by customers in other countries. However, customers should possess enough knowledge and skills in professional laundry solutions such as PNC of the machines. *We conclude that learning to change the ordering routines requires time for the understanding the ordering process from the customers and training how to use the ordering system. Consequently, customers can transform their activities to adapt to direct ordering practice. We stress the need to support customers*
CONCLUSIONS

according their belonging to project-based market of laundry solutions in local country environment.

Finally, we conclude that all the activities related to warehouse closing, direct deliveries and direct orders reconfigured the competences of the sales company in Finland to serve the customers need for right time delivery and accurate information in the best possible way. These activities accomplished the changes in the local sales companies’ internal and external processes. Thus, the favorable process to better match customer needs was created with the transformation of previous competences to the new ones to address the customer needs. Therefore, JIT distribution in case of sales company in Finland is considered a capability to serve customers as the initiative is integrated into the customer service perspective meaning that it became a ground for customer service improvement. The reconfiguration in its relation to the need to adopt the best practice should enable other local sales companies to perform activities related to new transportation solution which lead to the joint contribution to perform customer value-added activities. Hence, their value lies in the configuration of competences they create.

6.4 Main Research Question

How to improve customer service through Just-In-Time (JIT) distribution?

To improve customer service through JIT distribution, it is vital to incorporate customer perspective into the concept. To deploy this, a company should start from the customer end and to understand the situations and needs of the customers. Our research has revealed the differences of the local market situation in the countries of Finland, UK, Germany, France and Spain. We conclude that the local market situations are various due to the differences of the local customer needs and their perception of service in terms of washing solutions and requirements. The most important customer needs on service are related to on-time product delivery, speedy response related to after-sales service and availability of technical support.

In order to understand local customer needs, relationship building plays an important role in the value chain. As we have found that good external relationship with customers enables reliable quality of information and materials flow between ELS and the customers. This is because the company can receive more accurate and early information from the customers to the production unit. The early information creates a critical time gain and helps ELS to reduce inventory and satisfy the customer by delivering the right goods or services in the right quantities at the right time.
We have also found that good internal relationship between local sales and production units is important because mutual understanding and trust enable good quality of information and material flow between the actors in the value chain. Our research has shown that the bottleneck of the pipeline is the factory in Thailand. People between the local sales and the production unit do not understand each other due to less frequent communication and thus the material flow is not efficient. Many customers do not understand why it takes such long time to get hold of the products and thus customer dissatisfaction is created. Therefore, we conclude that it is necessary to establish good relationship between the local sales and production units in order to enable reliable information and material flow along the value chain. This helps improve customer services eventually.

Another critical issue to improve customer service is to create value-added service to the customers. Changes in routines such as direct order and delivery services through JIT concept enable efficient information and material flow between ELS and customers. This creates value for customers in long-term. As the local sales units are not involved in the tasks related to order handling and delivery follow-up, these spare more human resources for the local sales companies to focus more on developing sales and customer relationships. Thus, getting closer to the customer and acquire good quality of information from the customers according customer situation. Such reconfiguration of competences and centralized logistic platform create dynamic capabilities in ELS. These enable improvement of customer services (short lead time and high reliability) and company performance (efficiency and profitability).

We draw the conclusion that by improving customer service helps ELS to achieve customer satisfaction; trust and dependence are established subsequently. Together with improved company performance differentiates ELS’ position and sustainable competitive advantage is created in the dynamic business environment.

6.5 Explanation of the personal research model

The personal research model is created to answer our main research question in the thesis. The model illustrates how we perceive that a company could improve customer service through Just-in-Time distribution. By answering to the sub questions presented above we suggest that JIT distribution in the case of ELS lead local sales companies to develop their capacity to change their traditional delivering and ordering routines and integrate the ones that start with customer needs into their operations. Thus, by developing an ability to change the way of understanding customer needs by reconfiguring delivering and ordering routines in local sales companies JIT distribution will be considered a capability to serve customers in the case of ELS. By improving the operational processes gradually step by step, JIT distribution can form a highly dynamic logistics platform for ELS which can be difficult for competitors to imitate. Therefore, JIT distribution in case of ELS leads to the creation of dynamic capabilities. We suggest that JIT distribution in case of ELS enable local sales companies to organize and perform warehousing, ordering and delivering activities in the
CONCLUSIONS

way that lead to the customer service improvement and firm performance improvement in a changing market environment. Thus, JIT distribution implementation helps ELS to reach from operational to a strategic level to be successful in a long-term perspective which leads to sustainable competitive advantage. It goes beyond the tactical ability to improve the flow of materials and information to include a strategic component that ties into the strategic business objectives.
7 Recommendations for the case company

In this chapter we will provide recommendations for the case company based on how to develop JIT distribution to fit into the customers’ service offer. The information gathered from the theoretical chapter and empirical findings, as well as the analysis and conclusions, have lead us to the recommendations outlined here. Consequently, our recommendations are structured according to our personal research model.

7.1 Local market network

- We suggest ELS consider the situation in the local market network while implementing a new transportation concept. **ELS should understand the differences in customer needs according to customer service perception in local country markets.** Local sales company possesses the knowledge about customer situation in local country markets. In order to understand local market situation we suggest ELS to meet with local sales companies and customers together in order to explain the core and rules of the new transportation system. This is a first step to integrate a new transportation concept into customer’s operations and to make production unit closer to a customer.

- In order to solve the conflict between localization and centralization in perception of the new transportation solution, **ELS should take into consideration customer service requirements on the delivery solutions.** Flexibility is important to respond to customer service requests for goods delivery in the countries of Spain and France. Thus, **Ljungby should take the issue of flexible delivery solutions according to the local customers needs. That means that the local sales company should cooperate more with the local carriers and dealers in order to adjust to the flexible delivery solutions in the transition period to the direct deliveries practice.** Thus, use the postponement technique delaying the point of the product’s final consolidation as close to the customer as possible. In transition period the implementation of a postponement format together with the local sales company coordination and support can help customers to adapt to the new direct deliveries concept. In case of the UK, the cooperation with production unit should be more optimized in order to consider the reasons of stock holding on the customer side and a common standard of understanding the rules of the new delivery system both from the customer side and from the sales company side. Therefore, the customer as an actor in the supply chain would not feel himself isolated from ELS and left with stock without any help from ELS to diminish it. Therefore, **we suggest that the implementation of a new transportation initiative should be undertaken from the holistic perspective, including local customer requirements for delivery solutions.** This is a second step to start the new transportation initiative from a customer perspective.
RECOMMENDATIONS FOR THE CASE COMPANY

- ELS should take into consideration that customers should possess enough knowledge and skills in professional laundry solutions such as PNC of the machines in order to place a direct order. Direct ordering for finished goods can be deployed for ordering standardized product; however, **ELS should support customers when placing direct orders according their belonging to project-based market of laundry solutions in local country environment.** The understanding of the ordering process requires time for the customers to “learn-how” and **training from ELS how to use the ordering system.**

7.2 Information and material flow mapping

- The issue that the quality of information flow related to the accuracy, timing, adequacy and credibility affect the entire supply chain actors and reflects customer’s perception of support received from the manufacturer to meet demand chain management objectives lead us to the following suggestion: **The quality of inter-firm information sharing in the ELS should meet customer objectives to receive the delivery information timely and in the earliest appropriate time.** We suggest **ELS should make delivery information visible for the customer to assess the delivery accuracy.** This visibility can resolve the errors in the value chain before they cause significant problems downstream. This visibility also helps customers to focus their attention on the orders and gives customers the ability to monitor the status of the product.

- **We suggest that the customer information visibility must extend across the enterprise to embrace production units in the customer situation awareness in local country environment to assure that the right data is being captured in the right time.** When the customers’ data are collected, integrated, and presented as timely information, supply chain actors can confidently make timely decisions in a real-time manner rather than relying on secondary data about local customer needs and their differences. Only in that case ELS can dynamically respond and adapt to local customer needs on service. **We suggest the information visibility along the supply chain gives ELS the core information about customer needs on services to provide more accurate product arrival times to customers and to increase customer service—all while decreasing inventory levels and associated costs.**

- **Another recommendation of improving information and material flows is that ELS should integrate and connect the customer database with the internal system of ELS.** In doing so, the customers have the access to check the delivery status in their database and ELS has the access to know the changes in customer preferences. As a consequence, ELS can capture the actual demand data from the customers, safeguard the information and to take proactive action to adjust the delivery information according to customers’ requirements. This is crucial to deal with those customers who are concerned about flexibility especially in France and Spain. Through accessing the customer database, ELS can know when is the suitable time to
RECOMMENDATIONS FOR THE CASE COMPANY

deliver the machines to the customers without any disturbances such as pre-installation or preparations on the end-customers’ side. This satisfies the customers by delivering the right goods at the right times without decreasing customer service level. Reliable information enables ELS to know when the customer will need to order machine. In the long run, customers will become more integrated with ELS and this contributes to good co-operation. Long-lasting relationships can be maintained and the level of JIT with customer can be raised.

- As we have found that the major and common problem related to goods delivery is the machines produced from Thailand which always takes long time for sea transportation. This is the bottleneck of the pipeline and both the local sales and Ljungby units are being put into the passive positions. Therefore, *ELS should take proactive actions with the factory in Thailand*. The first step is that both local sales and Ljungby units need to communicate more frequently related to production lead time as well as transportation. Through communication, both of the factories in Thailand and local sales companies can receive more information from each other. The second step is to consider product configuration in Ljungby factory instead of waiting the machine for more than 2 months from Thailand. ELS should keep the important component parts of the machines manufactured from Thailand. In doing so, the Ljungby factory has larger flexibility to build and assemble the machines based on the demand from customers. As a result, this improves the material flow and reduces the dependence from the factory in Thailand.

7.3 JIT with customers

In order to implement JIT with customers, ELS should prepare a structure which is relatively formalized, specialized and integrated in the company. These helps ELS facilitate timing and improve quality of information and materials flow in the value chain. We will give our recommendation of how to enhance the level of JIT with customers in the followings.

7.3.1 Formalization

In order for all the local sales company to understand the new system, *ELS should provide formal, written mission, rules and procedure to guide the new transportation system for everyone*. ELS should explain clearly the benefits of the new system and how it works for the local sales company. Some people are skeptical or they do not know how to use the new system currently. When the mission and rules are clearly explained, people have stronger willingness and acceptability to use the new system if they have better understanding that how it will benefit to them in the future.

Providing formal rules also helps measure formal internal control so that the local sales people can follow the central directions of ELS. At the same time, ELS can also monitor and measure the internal performance in terms of delivery times, customer service and
RECOMMENDATIONS FOR THE CASE COMPANY

productivity. In case the local sales companies do not follow the procedures of the system, ELS can inform and provide corrective actions to the local sales people in time without creating any misunderstandings. When everyone understands the new system, mutual understanding and trust are created between the local sales and production units. As a result, mutual understanding and trust help establish good relationship and enables reliable information and material flows along the value chain. Therefore, formalization improves operating flexibility and achieves operating efficiency. Improved operating flexibility and efficiency enhance the level of JIT with customers.

7.3.2 Integration

Integration is important for ELS to implement the new system with the local sales companies. ELS should encourage cross-functional or interdepartmental communication and collaboration internally especially during the beginning stage of the new initiative is implemented. The local sales people should create communication network with all the production units in order to provide accurate information of what is happening or what will happen. In managing the new order and delivery process, it is important to have an interdepartmental team to report and discuss what has happened in the company. In this way, both the local sales companies and the production units have clear understanding related to goods delivery and local customer situations. Through frequent communication, local sales people have stronger sense of belongings and thus the local sales company will become more integrated. Relationship and trust are established and these contribute reliable information and materials flows subsequently.

7.3.3 Specialization

It is important for the local sales company to become specialized in terms of logistics issues handling. Before the implementation of the new initiative, logistics responsibilities were scattered throughout the local sales units and there is no specific person to handle this task specifically. All logistics activities are now centrally co-ordinated from Ljungby unit. Therefore, ELS should reallocate the human resources and appoint one specialist to handle logistics issues in each local sales company. He or she has to direct the efforts to narrowly defined sets of logistics activities. As a result, this optimizes the organizational resources and enhances operating efficiency in the local sales companies. This specialist coordinates and acquires better quality of information between customers, local sales and production units which helps ensure the smooth transfer of sales forecasts from customer and perform additional value-added activities to the customer. The longer time specializing on the logistics issues, the higher the operational efficiency. From the side of production units, we recommend ELS to reallocate corresponding human resources for each local sales company to handle the issues related to lead time and delivery times. Therefore, the above-mentioned labor specialization is of vital importance for ELS in order to improve flows of information and material as well as heightening the level of JIT with customers.
7.4 Changes in routines

A fully integrated initiative is the engine that runs the firm. It determines the organization's capability for transforming traditional business practices into the new ones associated with the new warehousing, delivering and stock-keeping routines. It builds on an organization's most important strategic elements in achieving an adaptive state—its people, or more specifically, their skills and functional expertise. To progress along the adaptive value chain, **we suggest ELS and its value chain actors must be willing to change, must be flexible, and must understand that the use of new transportation initiative improves customer service.** It requires such execution of a new transportation initiative that fully supports local sales people and customers in the adaptation period. Thus, **we suggest that all members of the value chain should be integrated in a new initiative in way that enables to collaborative practice of learning “how-to” and understand the rules of the new transportations concept, thus, follow them in the best possible way.**
8 Suggestions for further research

In this chapter we will give our suggestions for further research. During our research we have found out that some areas that ELS can follow up in the foreseeable future. These suggestions are considered as long term strategy and vision of our case company, ELS.

As ELS is currently implementing Just-in-time distribution in order to improve delivery performance, it will be interesting to investigate how much of the delivery performance will be improved after the implementation of the new transportation concept. It is also interesting to know the effects of the stock centralization in terms of reduction the total distribution costs.

In a more dynamic business environment when new demands emerge, it requires a more flexible logistics set-up which is based on a strategic level. The need for strategic flexibility will be another important area that future research can be looked into in ELS.

As we have found out from our empirical findings and analysis, flexibility plays a critical role in the markets in France and Spain, it will be a critical area to find out the compromise or solution between flexibility and direct delivery on the customer's side without dissatisfying the customers in these countries for ELS.
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9.1 Books


9.2 Articles


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9.3 Internet sources


9.4 Internal Documents

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Electrolux Laundry Systems, Logistic Strategy (PowerPoint presentation), 2008

Electrolux Laundry Systems, Training ELS Logistics (PowerPoint presentation), 2009

Electrolux Laundry Systems, France, Distribution Networks Presentation (PowerPoint presentation), 2009

9.5 Interviews

Sweden

Personal interview on 5th February, 2009 with Sven Kallin, Vice President and Responsible for Global Logistics, Electrolux Laundry Systems Sweden AB

Personal interview on 5th February, 2009 with Janne Ljungman, Logistics Manager, Electrolux Laundry Systems Sweden AB

Finland

Phone interview on 24th March, 2009 with Hans Mellner, Sales Country Manager, Electrolux Laundry Systems, Finland

Phone interview on 30th March, 2009 with Harri Puputti, Senior Vice President of Corporate Investments, Process Development and Environmental Issues, Lindström Oy, Helsinki, Finland
Phone interview on 3rd April, 2009 with Peter Metsälä, Purchasing Manager of ISS Palvelut Oy

**United Kingdom**

Phone interview on 26th March 2009 with Andrew Jell, Country Manager, Electrolux Laundry Systems UK

Phone interview on 27th March 2009 with Adam Elphinstone, Owner of Southern Contracts, Bournemouth

Phone interview on 2nd April 2009 with Peter Murphy, Owner of Murphys Laundry Equipment, Newry

**Germany**

Phone interview on 30th March, 2009 with Herald Heske, Sales Country Manager, Electrolux Wäschereimaschinen

Phone interview on 2nd April, 2009 with Ralf Brinkmann, Owner of Maschinen- Handel & Elektro Service

Phone interview on 6th April, 2009 with Mrs. Krüger, Owner of Elektro Krüger GmbH

**France (Paris)**

Personal interview on 4th May, 2009 with Philippe Caraminot, Country Manager, Electrolux Laundry Systems France SNC

Personal interview on 4th May, 2009 with Pascale Kerneis, Sales Administration Manager, Electrolux Laundry Systems France

**Spain (Barcelona)**

Personal interview on 5th May, 2009 with Juan Prado López, Sales Country Manager, Electrolux Professional, S.A.

Personal interview on 5th May, 2009 with Pilar Lanau Pons, Sales Administration Manager, Electrolux Professional, S.A

Personal interview on 5th May, 2009 with Alvar Thomas I Pellicer, Director of franchise division La Mussara de serveis, S.L.

Personal interview on 5th May, 2009 with Victor López, Owner of Victor López Alejos
## 10 Appendix

### 10.1 Tables summarizing analytical findings

Table 10.1: New organizational routines (Source: Own)

<table>
<thead>
<tr>
<th>New organizational routines</th>
<th>United Kingdom</th>
<th>Germany</th>
<th>Finland</th>
<th>France</th>
<th>Spain</th>
<th>Similarities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stock–keeping routines</strong></td>
<td>-stock-handling routines have been altered and shifted from the local sales company’s side to the customers' side</td>
<td>-Able to handle product delivery without stock involved</td>
<td>-Able to coordinate of the deliveries without stock and -Timing communication with production unit according product delivery information and changes -follow the rules of the system</td>
<td>-physical location of stock keeping might change, as the goods will be stored in the French factory</td>
<td>-additional work to sales people to organize the delivery of the machine as well the installations</td>
<td>No local stock</td>
</tr>
<tr>
<td><strong>Delivering routines</strong></td>
<td>-has not been changed in such a way that the delivery time is kept -do not understand the new transportation concept</td>
<td>-Ability to stick to the promised delivery date by following the rules and understanding the system</td>
<td>-Ability to deliver on time by following the rules and understanding the system</td>
<td>More responsibilities and arrangement for the local sales office as customers are used to flexible delivery solutions</td>
<td></td>
<td>Deliveries directly to the customer</td>
</tr>
<tr>
<td><strong>Ordering routines</strong></td>
<td>-Ability of handling direct orders for spare parts</td>
<td>-Ability of handling direct orders for spare parts and finished products -Ability for understanding the process of order handling</td>
<td>-Ability of handling direct orders for spare parts</td>
<td></td>
<td></td>
<td>Customer is placing an order for finished goods to the production unit</td>
</tr>
<tr>
<td><strong>Dynamic capability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 10.2: Local market network (Source: Own)

<table>
<thead>
<tr>
<th>Local market network</th>
<th>UK</th>
<th>Germany</th>
<th>Finland</th>
<th>France</th>
<th>Spain</th>
<th>Similarities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market segments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>Hotels and on-premises laundries, nursing and care homes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German</td>
<td></td>
<td>Hospitals, homes for elder people and handicapped institutions in the public sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td></td>
<td>Hospitality related to high-class hotel chains, commercial laundries that are working with hotels and restaurants, dry cleaning shops.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer needs on products</th>
<th>UK</th>
<th>Germany</th>
<th>Finland</th>
<th>France</th>
<th>Spain</th>
<th>Similarities</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>Environmentally friendly</td>
<td>Maximization of washing results</td>
<td>-100% reliability</td>
<td>High hygiene Standards</td>
<td>-Big machines (40, 60, 80 kg)</td>
<td>Product quality in terms of efficiency and reliability</td>
</tr>
<tr>
<td>German</td>
<td>-Low water and energy consumption</td>
<td>Long operating hours of the machine</td>
<td>Reliable output</td>
<td>(Law regulations)</td>
<td>-Load of the machine (because of the amount of garments fit into the machine with same color and fabrics)</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td>Construction of the machines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
<td>High hygiene Standards (Law regulations)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Timing communication with production unit
<table>
<thead>
<tr>
<th>Customer needs on service</th>
<th>Delivery according to the contract</th>
<th>Reliable and promised delivery time</th>
<th>Availability of technical service</th>
<th>Flexibility in product delivery for the project-based Network 1</th>
<th>- On-time delivery for the Network 2 (replacement market)</th>
<th>- Flexibility in product delivery according to customer electricity, gas and water arrangement</th>
<th>- Right time delivery</th>
<th>- Quick problem-solving support</th>
<th>- Regular training of customer technicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Speedy response related to after-sales</td>
<td>- Transportation of the machines</td>
<td>- Promised date of delivery</td>
<td>- Flexibility in delivery for the most suitable for the customer time</td>
<td>- Communication campaigns</td>
<td>- Visiting customer with dealers</td>
<td>- Special purchasing managers for hospitals</td>
<td>- Long-term duration of relationship</td>
<td>- Cooperation based on daily communication with local sales office related to problem-solving and product specifications</td>
<td>- Customers trust ELS based on producing high-quality products in the marketplace</td>
</tr>
<tr>
<td>- Flexibility in payment system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Customers do not trust in the ELS information reliability related to the issues of on-time delivery</td>
<td>- Customers do not trust in the ELS information reliability related to the issues of on-time delivery</td>
</tr>
<tr>
<td>Customer relationship characteristics</td>
<td>Local sales people do not keep promises according to the delivery time</td>
<td>The local sales company tries to keep promises according to lead time.</td>
<td>- The local sales company usually keep promise on the delivery time</td>
<td>- Sales people do not promise more the factory can deliver.</td>
<td>- Relationship is based on group level agreement</td>
<td>- The local sales company arranges the delivery for the most suitable for the customer time</td>
<td>- The local sales company arranges the delivery when the customers' premises are ready for the installation</td>
<td>- Arrangement of technical service</td>
<td>- Special purchasing managers for hospitals</td>
</tr>
<tr>
<td></td>
<td>- Lack of support for customers' business</td>
<td>- Customer trusts sales team</td>
<td>- Sales people do not promise more the factory can deliver.</td>
<td></td>
<td>- Relationship is based on group level agreement</td>
<td></td>
<td>- Arrangement of installation</td>
<td>- Long-term duration of relationship</td>
<td>- Cooperation based on daily communication with local sales office related to problem-solving and product specifications</td>
</tr>
<tr>
<td>Customer</td>
<td>Perceived customer value is not</td>
<td>Perceived customer value is</td>
<td>Perceived customer value is high</td>
<td>Perceived customer value is high</td>
<td>Perceived customer value is high</td>
<td>Customers are satisfied with pre-transaction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Satisfaction

| satified when discussing delivery time and technical support services | satisfied according to quick problem-solving response of key account managers | satisfied when taking into consideration promised delivery time | people are able to support customers in meeting their objectives | when discussing delivery time and technical support services which are based on local sales office competence | as they have local sales managers who are available to support their ordering process and provide detailed information about laundry product |

### 10.2 Questionnaire №1. New transportation solution from a sales companies’ perspective

#### Relationship with customers

1. How do you perceive your current relationship with customers?
2. Which are the most problematic issues? Why?
3. What is the most complicated aspect in terms of communication?
4. Have you ever experienced any misunderstanding issues?
5. How could you try to solve the problem of misunderstanding?
6. How do you think of a current customer service? What works? What can be improved?
7. What is the role of administration in the order taking process?
8. How did the relationship change after the local warehouse was closed?
9. Did you see any benefit/drawbacks of warehouse closing for customer?
10. Does it happen that you say 'no stock' to a customer? What was the reaction?
11. How do you solve the problem when there is no stock for the customers?

#### Local customers and their needs

12. What kind of local customers do you have?
13. How does the customer’s behaviour look?
14. What kinds of products that customers order the most?
15. Are there differences in customers’ needs?
16. Is it common for customers to wait? Who can, who cannot?
17. What are the customer’s concerns today?

#### Order handling

#### Customer Request
18. How do you receive customer orders?
19. How do you match customer’s request with the products?
20. How do you handle order replacement and new sales?
21. What’s the weight between replacement and new sales order per month?
22. What are the major difficulties when handling customer’s orders?
23. Do you use internet to take orders? If not, why?
24. When do the customers place an order directly via WEB?
25. How long does it take for an order to be transferred to a production unit?
26. What kind of common misunderstandings between you and the customer occurs? Why?
27. How do you solve the problem of misunderstanding?
28. How do you estimate a delivery time/price to a customer?
29. Do you add any lead times to your estimates? How many days more?
30. Are the delivery times kept? How do you deal with that question?
31. How do you cope with customer when the delivery time is not kept?
32. How do you solve issues when things go wrong?
33. What is your opinion about the current process of order handling?
34. How would you define the ideal process of order handling?
35. Do you receive any feedback on your work either from customers or internally?
36. What are your suggestions for improvement?

**Order entry / confirmation/order maintenance**

37. What do you do if you don’t find a suitable product number code to match the customers’ requirements?
38. How do you ensure that the same delivery date is communicated the same way by you and customers?
39. Were there any misunderstandings regarding delivery terms between you and the customers? If yes, how did you solve?
40. Does it happen that you change the order after it has been processed?
41. What do you think of the role of administration in the order taking process?

**Relationship with Ljungby**

42. How is your relationship with Ljungby?
43. How often do you speak with Ljungby?
44. Do you receive the products on time? If not what do you do?
45. How do you prioritize orders?
46. Do you feel that Ljungby understands your situation and your needs?
47. Is Ljungby dependent on you for something, such as information or knowledge? Vice versa?
48. What do you think the current information transfer?
49. Do you always understand each other?
50. Had any misunderstandings occurred? What can be improved?
51. Do you have any rules or instructions written down of what to do when things go wrong?
52. Do you see any potential channels for exchanging ideas and helping each other?
53. What are your actions if you disagree with a clear direction or a decision from Ljunby? What are the conflict resolution channels?
54. What is your vision of an ideal relationship with Ljunby?
55. Do you agree with the direction Ljungby is taking right now?

The project (Just-in-Time perception from a sales perspective)

56. Have you heard about the project in which the warehouses should be closed and finished goods delivered directly to the customer? From whom and when?
57. How did you react? Why?
58. How do you evaluate a process of central handling from the customer perspective?
59. What would be the advantages/disadvantages of the concept?
60. What changes do you foresee in future?
61. What would be the benefits/drawbacks?
62. Would it work for all customers and all products?
63. What is necessary for the customer to place an order directly via WEB?
64. Do you think the customers are prepared for that?

Concerns, recommendations, improvements for the future

65. What would you advice Ljungby when starting to handling orders directly from customers?
66. What improvements can be done related to information transfer?
67. How do you safeguard information from customers? What can be improved? In which time frame?

10.3 Questionnaire №2. New transportation solution from a customers’ perspective

Customer needs
1. Why do you choose Electrolux? How do you find Electrolux products?
2. What kinds of products do you order the most? Why?
3. What are your requirements for that type of product? Why?
4. What are your current needs in terms of the product? What are your needs in terms of service?
5. What do you want in terms you wish for the product to be?
6. Are the delivery times kept? Who do you turn to when the delivery time is not kept?
7. Did you experience any situations when your needs were not satisfied? What are they?
8. What are your concerns today?
9. What do you suggest Electrolux in terms of improving customer service?

Order handling

10. How do you purchase?
11. How do you send the order of the washing machine to Electrolux currently?
12. How often do you send orders for a washing machine?
13. Do you know in advance when an order is about to come? How?
15. What are major the difficulties with order handling?
16. Do you prefer to send the order directly to a production unit or via local sales office?
17. Have you ever had any misunderstanding with local sales office? What kind of? How was a problem solved?
18. Do you use internet for product searching or for a process of ordering to be transmitted? Is it convenient to use internet?
19. What do you do if you don’t find a suitable product in the internet?
20. How often do you need a washing machine to be replaced?
21. What are major the difficulties with order handling?
22. In which situations do you use internet for ordering?
23. How long does it take for a process of ordering to be transmitted?
24. How long do you get the confirmation date of delivery from local sales offices?
25. What do you want to improve in the process of ordering?
26. How do you see the perfect process of order handling?

**Relationship with local sales office**
27. How is your relationship with local sales office?
28. How long have you been dealing with a local sales company?
29. How do you communicate with our local sales people?
30. How often do you speak with each other? With whom do you speak?
31. About what do you communicate?
32. Do you feel that sales people understands your situation and your needs?
33. Do you share the same understanding for lead times etc.?
34. Do you receive the products on time? If not what do you do?
35. Do you always understand each other? Have misunderstandings occurred? Why? How was a problem solved?
36. Whom do you talk to if something goes wrong?
37. What difficulties did you encounter before?
38. What works and what can be improved?
39. Do you prefer to work directly with a factory (skipping the process of dealing with local sales office)? Why?
40. What is your vision of an ideal relationship with Electrolux?

**The project (preparation)**
41. What do you think of delivering a washing machine directly from a factory?
42. What would be the advantages/disadvantages for you?
43. What changes do you foresee in future? Why?
44. What would “Deliver the goods directly from a factory” mean for you personally?
45. What do you think about placing an order directly via the WEB in the future?
46. What conditions are necessary for you to place an order directly via WEB?
47. What would be the benefits/drawbacks?
48. Are you prepared for that?

**Recommendations for the future**
49. What will you expect regarding the delivery schedule in future? Why?
50. What’s your advice for Electrolux in terms of your future cooperation?

10.4 Questionnaire №3. New transportation solution from the technical service perspective

Customer needs and relationships
1. How is your relationship with customers? Why?
2. What works and what can be improved?
3. What difficulties did you encounter before?
4. What are main customer requirements for Electrolux product? Why?
5. What are your current needs in terms of technical aspect of the product?
6. What are customer needs in terms of service?
7. What does a customer want in terms the product to be?
8. Did customers experience any situations when their needs were not satisfied? What are they?
9. What are customer concerns today?
10. What do you suggest Electrolux in terms of improving technical service and support?

Technical support

11. Are customers satisfied with technical support today? Is it easy for them?
12. What are major the difficulties?
13. Have you ever had any misunderstanding with a customer? What kind of? How was a problem solved?
14. Is it convenient for a customer today?
15. How often do customers need a washing machine to be replaced?
16. What are major difficulties with the washing machines today?
17. How do you see the perfect process of technical support?

Relationship with local sales office

51. How is your relationship with local sales office?
52. What works and what can be improved?
53. What is your vision of an ideal relationship?

The project( preparation)

54. What do you think of delivering a washing machine directly from a factory?
55. How can it influence the issue of technical support?
56. What would be the advantages/disadvantages for you?
57. What changes do you foresee in future? Why?

Recommendations for the future

58. What will you expect regarding customer technical support in future? Why?
59. What’s your advice for Electrolux in terms of future cooperation?
The University of Kalmar

The University of Kalmar has more than 9000 students. We offer education and research in natural sciences, technology, the maritime field, social science, languages and humanities, teacher training, caring sciences and social service.

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