Logistics

Managing effective logistics
A cases study related to Swedish companies

Dissertation in Marketing
C-level dissertation 15 points
28th May 2008

Authors
Nisrine OUATI  880401-N289
Loïc VIDOT  880114-N113

Supervisor
Gabriel Baffour AWUAH
AKNOWLEDGEMENTS

This C-level dissertation was written as part of the International Business double-degree program at Halmstad University during the spring semester of 2008. We are 2 co-authors: Nisrine OUATI and Loïc VIDOT. We both follow our study in IFI Groupe ESC Rouen, in France. We have worked together to understand how Swedish companies deal with logistics to reduce the costs, while offering the best product possible. It was really interesting for us as it was a way to discover another face of Sweden, where we have spent a nice full year. Moreover, meeting some people from the REJMES company enabled us to have a real contact with Swedish persons who work in the area that we are interested in.

We would like to thank all the people who helped us in the writing and research process of our dissertation. Special thanks to our supervisor, Gabriel Baffour Awuah, who gave us support and guidance, and to our opponent group. We also would like to thank Mr. Kjell Wahlstedt, Managing director of REJMES, car reseller in Halmstad (Sweden), our respondent from REJMES, for the important information that he gave us and the time he accorded to us. We thank our parents for their valuable support that helped us all throughout the dissertation writing process.

Nisrine OUATI             Loïc VIDOT

Halmstad, 28th may 2008
# TABLE OF CONTENTS

I. Introduction ........................................................................................................ 1
   I.1. Research problem ...................................................................................... 2
   I.2. Research purpose ................................................................................... 2
   I.3. Research delimitation ............................................................................. 2

II. Theoretical framework: the effective logistic system ................................. 4
   II.1. The material flow ................................................................................ 5
   II.2. The information flow .......................................................................... 6

III. Methodology .................................................................................................. 7
   III.1. Choice of method ............................................................................... 7
      III.1.a. Qualitative research ............................................................................. 7
      III.1.b. Quantitative research ......................................................................... 7
      III.1.c. Chosen approach ............................................................................... 7
   III.2. Types of research ............................................................................... 8
      III.2.a. Exploratory research ......................................................................... 8
      III.2.b. Conclusive research ......................................................................... 8
      III.2.c. Chosen approach ............................................................................... 9
   III.3. Types of data collection ....................................................................... 9
      III.3.a. Primary data .................................................................................. 9
      III.3.b. Secondary data ............................................................................... 10
   III.4. Reliability and validity ........................................................................ 11
      III.4.a. Reliability ....................................................................................... 11
      III.4.b. Validity .......................................................................................... 12

IV. Empirical findings ......................................................................................... 13
   IV.1. The REJMES case .............................................................................. 13
      IV.1.a. The material flow ............................................................................. 13
      IV.1.b. The information flow ...................................................................... 14
   IV.2. The IKEA case .................................................................................... 16
I. Introduction

The aim of this chapter is to give an introduction to our dissertation and to its purpose by presenting the problem background and some general thoughts about the subject. It defines also the relevance of our subject, as it gives its limitations.

The basic purpose of a company is to grow and to make profit. To be able to survive and to expand, this firm will need to develop coherent strategies and to set intelligent objectives (Kotler, 2005). Thus, it will develop strategies right along the four elements of the marketing mix: product, price, promotion and place. Doyle and Stern (2006) also propose some extra elements, like service and staff. And as they explain it, the objectives have to be set in a way that will enable the firm to satisfy all its different stakeholders. That means that all the actions launched by the company have to meet the expectations of the customers, the employees, the managers, the suppliers, the government, the shareholders, the creditors and the community in general.

Until the beginning of the 1990s’, companies were giving high importance to the first three Ps (Product, Price and Promotion), and this situation is still visible nowadays\(^1\). This is quite astonishing as the costs related to logistics are quite important for an organization.

In fact, Christopher (1998) explains that companies become more and more aware of the importance of logistics as the conditions of competition change. Nowadays, to remain competitive, firms have often to go international. Indeed, the origin of the raw materials might be quite far from the location of its transformation and the final market. In the same idea, the different suppliers all throughout the supply chain will often be located far from each other. In consequence, companies have to deal with greater distances. Then, the demands of the customers have developed. As more and more companies try to satisfy their needs, often at reasonable price, and that products become mass products, they want the product that they need “right now, right here”. And if the company cannot respond immediately, there is high probability that the customer switches to a competitor, or even to a substitute product. It is thus crucial for the company to be highly responsive to the market.

---

\(^1\) Christopher, M., (1998), “Gaining competitive advantage through logistics”, *Logistics and Supply Chain Management [...]*, p. 37
We can thus understand the prime importance of managing logistics and the supply chain. It is fundamental to handle wisely the costs and the different parameters related to logistics. In fact, as the products might be presented in foreign markets, its price shouldn’t be higher than the one proposed by the local competitors. Then, the product has to be present on the market without any defect. However, so many and diverse transportations increase the risk of damage. Finally, as the many localizations in which the product (in its primary form – this means, the raw materials – or finished) are quite far away one from the other, the company has to deal with long delays and high risks. In fact, it can take one month to transport one product from Europe to Japan!

We can then consider the problems that companies which go international have to deal with.

I.1. Research problem

How do companies handle logistics to meet customers’ expectations and to reduce overall costs?

I.2. Research purpose

The purpose of our research is basically to find out how do companies manage the supply chain to reduce overall costs without sacrificing the quality and meeting their customers’ expectations.

I.3. Research delimitation

The delimitations of our dissertation are of two kinds.

First, we will not consider all the supply chain. As explain it Handfield and Nichols (2005), “the supply chain encompasses all organizations and activities associated with the flow and transformation of goods from the raw material stage, through to the end user, as well as the
As we can see, such a system is really complex. In our research, we have decided to only focus on the flows which directly exist between the company (which we can also call the manufacturer), its direct supplier and its direct customer. As a matter of fact, we will also study how the manufacturer deals with carriers and distributors (in the case where it doesn’t undertake the activities realized by these companies). It is also important to keep in mind that managing logistics is necessary to maintain a competitive advantage, but that it is not enough. Other marketing activities, such as marketing research, production and communication, are also highly important.

Then, our research focuses only on two Swedish companies. However, each company, even within the same industry, develops different processes, lead by different strategies. In consequence, we cannot generalize our findings. The objective is in fact to study how a company, from its actual assets and knowledge, is able to deal with the logistical difficulties related with the internationalization.

---

2Dam Jesspersen B. and Skjøtt-Larsen T., (2005), “Supply Chain Management”, p.11, from their own sources
II. Theoretical framework: the effective logistic system

This chapter focuses on the theory used throughout our research: the effective logistic system. It helps us understand how a company can theoretically realize savings, while offering the best services possible. The main steps of the logistic process will be discussed.

Effective logistic system

Christopher (1998)\(^3\) describes logistics as the “process of strategically managing the procurement, movement and storage of materials, parts and finished inventory (and the related information flows) through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost-effective fulfillment of orders”. Thus, managing logistics refers to controlling the different flux that the company has to deal with.

Figure 1: Logistics management process

The figure \(^4\) presents the logistics management process and the nature of the flows which it creates.

---

\(^3\) Christopher, M., (1998), “Logistics and Supply Chain Management […],” p. 4

II.1. The material flow

II.1.a. Procurement

This process begins with the supplier, who procures the company with the different elements that it needs to produce the final product. These supplies can consist of raw material and of semi-finished products, as components, but it corresponds also to all the equipments and expendable supplies that the company needs to undertake its core activity and which are not altered during the process (i.e. machines …). To select its supplier, the purchase department will refer to many sources. It can use internal sources, by for example consulting the company staff, and external sources, as government agencies and banks. The company can also consult documents such as consult trade journal, yellow pages and catalogs from the potential supplier. It can finally ask the supplier’s current customers (Bloomberg, 2002)\(^5\). Then, the purchasing department has to evaluate the suppliers that seem to be able to satisfy the company’s needs. In this purpose, it will use all the means available to analyze the potential suppliers’. It will have to examine these suppliers’ solvability, price, delivery, quality and customer service.

II.1.b. Operations

Afterwards, internal operations will transform the procurements into the final product. This is what we can call the process which transforms the inputs into outputs\(^6\). The company will also realize some other logistical operations as storage.

II.1.c. Transportation

To move the different products from one place to another, the company has to undertake transportation activities that are often outsourced. The company will select the mode of transportation regarding the nature of the goods, the access to carriers, the price, the transit time and the security of the goods. Then, it will have to select its carriers. Bloomberg (2002)


\(^6\) Renders B., and Heizer J., (2006), Principles of operations management, p. 3
explains that one should consider the following characteristics of the different carriers to do the best choice\(^7\): price, accessibility, responsiveness, claim record and reliability.

II.1.d. Distribution

The company makes afterwards the final product available to the customers through distribution. There are three main channel alternatives\(^8\): direct marketing, sales force and intermediaries. If the company decides to deal with intermediaries, it will usually study the following characteristics: the proposed amount of service to the customer, the offered product line, the relative price and the organization. The companies will have to define how many intermediaries it wants to deal with and the responsibilities it will give to each of them.

II.2. The information flow

There is also a requirement of information flow. In opposition to the material flow, this one begins from the customers. In fact, their needs correspond to the starting point of the process. From there, the company will decide which resources it will use and how it will allocate them. At this time, the company will decide about the distribution channels, and will communicate its requirements to its suppliers. Here we can consider the complexity of the companies which go international as the needs and demand of the customers might highly change from an area to the other. The company will then have to wisely undertake marketing researches and to carefully listen to its current customers to find out their expectations and to evaluate their satisfaction.

To develop a strategic advantage through logistics, the company will then have to maximize the efficiency of its exchanges with the customers, but also with its suppliers, as with all the actors involved during this logistics management process.


III. Methodology

The marketing research process consists of four steps: defining the problem and research the objective, developing the research plan, implementing the research plan and interpreting and reporting the findings. In this chapter, we will discuss the methodological process which is appropriate to our work.

III.1. Choice of method

III.1.a. Qualitative research

Qualitative research is a form of exploratory research involving small samples and non-structured data collection procedures. Qualitative research involves collecting, analyzing, and interpreting data that cannot be meaningfully quantified, that is, summarized in the form of numbers. For this reason qualitative research is sometimes referred to as soft research. This term is unfortunate, because soft research is no less valuable than so-called hard, or quantitative, research.

III.1.b. Quantitative research

Quantitative research is a form of conclusive research involving large representative samples and fairly structured data collection procedures. Quantitative research, in contrast to qualitative research, is characterized by more structure and by larger, more representative respondent samples. Consequently, the logical place for quantitative-research techniques is in conclusive-research projects.

III.1.c. Chosen approach

For our dissertation, we will use the qualitative research. This choice comes from the fact that we will study processes which are quite unknown from our part. Moreover, the results may highly differ from a company to another: our purpose is not to make a generalization, but to

---

10 Parasuraman, A., (1991), Marketing Research, p. 251
11 Parasuraman, A., (1991), Marketing Research, p. 252
understand how companies manage the supply chain to offer the best product at the lowest price.

### III.2. Types of research

#### III.2.a. Exploratory research

The primary objective of exploratory research is to provide insights into, and an understanding of, the problem confronting the researcher. Exploratory research is used in cases when you must define the problem more precisely, identify relevant courses of action, or gain additional insights before an approach can be developed.

As Kotler resumes in his book, *Principles of Marketing* (2005), the exploratory research is “the marketing research to gather preliminary information that will help to better define problems and suggest hypotheses”.

#### III.2.b. Conclusive research

Conclusive research is intended to verify insights and to aid decision makers in selecting a specific course of action. Conclusive research is typically more formal and structured than is exploratory research. It is based on large, representative samples, and the data obtained are subjected to quantitative analysis. The findings from this research are considered to be conclusive in nature in that they are used as input into managerial decision making. So this type of research is more precise in a way that it can lead to action rather than the exploratory research which leads to suggestions.

We can divide the conclusive research into two parts: the descriptive and the causal one.

---

• The **descriptive research** is the marketing research undertaken to better describe marketing problems, situations or markets, such as the market potential for a product or the demographics and attitudes of consumers.\(^{15}\)

• The **causal research** is the marketing research to test hypotheses about cause and effect relationship.

### III.2.c. Chosen approach

In our dissertation, it is more relevant to use the exploratory research which will allow us to make some suggestions on how the companies work.

### III.3. Types of data collection

The second step of the marketing research process calls for determining the information needed, developing a plan for gathering it efficiently and presenting the plan to marketing management. The plan outlines sources of existing data and explains the specific research approaches, contact methods, sampling plans and instruments that researchers will use to gather new data.

### III.3.a. Primary data

Primary data is the information collected for the specific purpose at hand\(^{16}\). Primary data is collected in such a way that it reinforces secondary data – if they are unavailable or impertinent.

---

\(^{15}\) Kotler K., Armstrong G., Saunders J. and Wong V., (2005), *Principles of marketing*, Chapter 9, p. 345

\(^{16}\) Kotler K., Armstrong G., Saunders J. and Wong V., (2005), *Principles of marketing*, Chapter 9, p. 346
Primary data collection methods

- **Observational research** is the gathering of primary data by observing relevant people, actions and situations.
- The **survey research** is the gathering of primary data by asking people questions about their knowledge, attitudes, preferences and buying behavior.
- The **experimental research** is the gathering of primary data by selecting matched groups of subjects, giving them different treatments, controlling related factors and checking for differences in group responses.
- The **interview** is defined as a formal meeting at which somebody is asked questions to see if they are suitable for a particular course of study.

Chosen approach
For our research work, the interview seems to be the most relevant way to collect data. By asking directly the companies about their methods and behavior face to logistics and customers satisfaction, we will gather the necessary data for our dissertation.

Choice of the information source
To get the necessary primary information for our dissertation, we interviewed M. Kjell Wahlstedt, the managing director of REJMES, car reseller in Halmstad. The core activity of this company is to sell Volvo, Renault and Land Rover cars.

We have decided to interview this person because we think that he is able to give us a concrete vision for our dissertation. As he is selling cars, the logistic has an important role in his company. This interview of almost one hour has been conducted on Tuesday 08/03/08 at 10 a.m., in the office of M. Wahlstedt, in the REJMES store. Thanks to this meeting, we are able to consider the differences between the information we found in the theory and the point of view of a manager whose job leads him to deal with those concepts every day. Moreover, interviewing a reseller enable us to get the point of view of a distributor on our topic.

III.3.b. Secondary data

---

Kotler (2005) defines secondary data as the information that already exists somewhere, having been collected for another purpose. The information can come from various sources (companies, government…).

**Chosen approach**

We will use some desk research to compare our findings with already existing data.

**Choice of the information source**

The secondary data enables us to nuance the information got by through the interview. For this part, we have decided to study IKEA Corporation. IKEA has firstly been chosen, as REJMES, because of its Swedish identity. Then, it is a huge multinational. In consequence, handling logistics is of prime importance for this company. Its website enabled us to find relevant information related to our topic. All the information collected in this part comes from the IKEA website: www.ikea.com (/france / Tout sur ikea / espace étudiants; connection on the 08/03/12). We have been positively surprised to discover that this part of the website is especially dedicated to students, which facilitates the gathering of valuable information.

**III.4. Reliability and validity**

**III.4.a. Reliability**

The reliability is the extent to which a measure, procedure or instrument yields the same results on repeated trials. With this concept, we will be able to see if the information we found in the theories can be applied to the companies we study.

We present in the bibliography the authors that we refer to and the theory we use. Moreover, we have clearly presented in the previous sections our sources, as the process used to collect data. In an identical environment, other researchers should then be able to find out the same as our empirical findings, if they use the same kind of research, use the same method, and ask identical questions to the respondent.

---

18 http://writing.colostate.edu/guides/research/glossary/index.cfm#transferability, connection on the 08/04/10
III.4.b. Validity

The validity is defined as the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. A method can be reliable but not valid.

**Internal validity**

The internal validity consists of two parts. The first one is the rigor which with the study was conducted, e.g. the study design or the care taken to conduct measurement. The second part of this definition is the extent to which the designers of a study have taken into account alternative explanations for any casual relationships they explore.

**External validity**

The external validity corresponds to the extent to which the results of a study can be generalized and transferable. That means that the results can be applied to a larger population than the studies were conducted and also the ability to apply the results of research in one context to another similar context. The transferability means also the extent to which a study invites the readers to make connections between elements of the study and their own experience.

**Transferability**

Transferability is the ability to apply the results of research in one context to another similar context and also, the extent to which a study invites readers to make connections between elements of the study and their own experiences.

**Outcomes**

Internal validity seems to be achieved in this dissertation due to the fact that the findings actually help us to answer our research questions. Concerning external validity, on the other hand, it does not correspond to the qualitative research as the outcomes cannot be generalized. However, with regard to transferability, the complete thesis may be used in the future by other researchers exploring this topic. Thus, it seems to be also achieved.
IV. Empirical findings

This chapter presents the information that we could gather from our sources and which are relevant for our topic. We present first the primary data, and then the secondary one.

IV.1. The REJMES case

This part presents the results of the interview with Mr Kjell Wahlstedt, Managing director of REJMES, car reseller in Halmstad (Sweden). The questions and the answers that Mr. Wahlstedt gave us are presented in the annex 1. This interview enables us to get the points of view of a distributor company.

IV.1.a. The material flow

IV.1.a.1. Selection of the actors participating in the logistic process

REJMES sells Volvo, Renault and Land Rover cars. It buys the cars, but also the accessories from these companies. This enables it to certify the quality of the products it sells to its clients and to get some price offers from the suppliers.

REJMES generally doesn’t take in charge the transportation of the products it sells. The supplier is responsible for it. We can mention that it happens only occasionally that the suppliers outsource the transportation. In fact, doing it by themselves, according to Mr. Wahlstedt, enables them to make the logistic process safer and to reduce risks.

The main activity of REJMES is to resell cars. Thus, it doesn’t outsource any distribution activity. The cars are in fact sold in one of their stores. Here, they sell the products to the public or to other companies.

IV.1.a.2. Handling customers’ orders

It has several ways to handle an order. It undertakes sometimes warehousing. However, it occurs that REJMES orders a product from the supplier, in the case where the customer
desires something which is not present in the store. In this case, the car will generally be ready within 4 weeks. It is quite difficult to know how many cars it should order in advance, because the reseller doesn’t know exactly how many it is going to sell. To have an idea about the number of cars it is going to sell, REJMES often looks back to past performance. It is a sensitive issue as, for instance, as it has been said before, if it buys more than 1000 cars, it will get higher discounts than if it buys only 800. But that means also that it will have higher inventory costs.

IV.1.b. The information flow

IV.1.b.1. Meeting customers’ needs

REJMES doesn’t undertake any formal marketing research. It generally sells the cars that its suppliers give it. However, it organizes some special events to meet it clients. The main purpose is to present the new products to them and to make them try it. It seems then that the suppliers (for instance, Volvo) undertake the marketing research and that the reseller presents to the customers the new products designed from these researches.

REJMES uses the list of its customers (people who have purchased at least once in one of its stores) and it buys similar lists from its “competitors”, for instance the Audi house. It sends letters to all these customers, describing the new products and inviting them to try the cars, as offering some discounts. In this way, the customers discover the new models. On a general basis, 5 out of 50 contacted customers will purchase after such an event.

Moreover, when they buy their car, the customers can ask REJMES for extra features. The reseller buys these accessories from its suppliers (the car brands) and can fix it in one of its factories. This refers only to some options. For instance, it cannot add the conditional air or change the color.

If the clients have a problem with their car, or that something has to be fixed on it, REJMES offers to repair it in one of its factories.

IV.1.b.2. Evaluating the customers’ demand
To have an idea about the future demand of its customers, REJMES uses, among other things, its past performances. Moreover, its website enables it to have an idea about the number of people who might be interested by a purchase. In fact, until 5 years ago, there were much more people in the stores. But now, many of them go first on the Internet to get information about the cars and to compare them.

This shows the growing importance of internet. In fact, especially for the youth cars, many people buy directly from the Internet. The development of the Internet is not a threat for the reseller, who sells also online: it is just a change in the marketing. In fact, it doesn’t sell less than before; there are just less people in the stores.
IV.2. The IKEA case

IKEA Corporation is a Swedish company which has been created by Ingvar Kamprad some decades ago. Its actual concept is based on “offering a wide range of well designed, functional home furnishing products at prices so low that as many people as possible will be able to afford them”\(^{19}\). We will now see how they handle logistics to propose good products at so low prices to their customers.

IV.2.a. The material and the information flows

In the IKEA’s organization, logistics has a really important role in achieving low prices while offering to the customers the best products. The next figures help us understand the importance of logistics: IKEA proposes an average of 9 500 products, produced by 1300 suppliers and sold in 220 stores worldwide, most of the time after being conveyed by one of the 28 logistical platforms of the corporation, present in 16 countries.

IV.2.a.1. Procurement

The objective of IKEA is to find suppliers who are able to produce aesthetic and functional products at lowest costs possible. The suppliers have also to comply with the Behavior Code IKEA (IWAY), which is quite exigent regarding working conditions and environment friendliness. The purchase department works with 1 300 suppliers located in 53 countries. Some are in Sweden and work for IKEA from its beginning. Others have factories in China, Poland or in Germany. IKEA tries to always develop a long-term relationship and to make its best to keep close and friendly relationships. What is quite unique in the working habit of IKEA is that it buys a production capacity rather than a product quantity. In other words, it is more likely to order 10 000 hours of production than 10 000 desks.

Moreover, IKEA has located offices next to the suppliers. In this way, the company can maintain good commercial relationships with its suppliers. The collaborators from the purchase department can frequently go to the suppliers and follow closely the production process, which enables to evaluate the new ideas and to check frequently the quality. IKEA is

\(^{19}\) http://www.ikea.com/ms/en_US/about_ikea_new/about/index.html, connection on the 08/03/12
an exigent client. But in the other hand, it is straight, professional and honest within its transactions.

To be able to sell large volumes, IKEA signs long-term contracts with its suppliers. This enables to realize the necessary investments and to guaranty the procurement of the stores. In some cases, IKEA can financially help a supplier. This enables IKEA to continue to propose a wide range of products, at a price which is so low that many people can buy it. In most cases, the final price is fixed at the really beginning of the creation process. That’s why the designers work often together with the suppliers, in the production place. This is at this moment that IKEA can the most enjoy the experience and the production potential of its suppliers. Furthermore, the raw material is of high quality and not expensive.

**IV.2.a.2. Operations**

The large volumes are an important factor of the low prices. When IKEA decreases its prices, more people can buy the products. The company was selling 40 000 extensions a year for 7,50 € per product. The company wondered what would happen if the price of this extension was 2 €. How many would the visitors buy? They decreased the price and after one year, the company has sold 1 million of extensions, only in Sweden. The fact that IKEA sells the same products in the whole world enables to create huge volumes.

Moreover, IKEA tries to never spoil its resources. For example, the tissue scraps of the FAMNIG pillow, shaped as a heart, are used to make the small pillow FAMNIG. Some doors manufacturers make trays for IKEA. The cost consciousness is present all throughout the production channel.

**IV.2.a.3. Transportation**

The main idea of this system is to make the road between the supplier and the final customer as short as possible. Transportation is realized by outsider companies. In Europe, 76% of the products are transported by road, 11% by combined (road and rail), 10% by rail and 3% by water shipment. For some years, all the transportation companies which work for IKEA have
to communicate figures via an “environment-friendly performance questionnaire” which enables to evaluate the impact of their activities on the environment. This enables IKEA to control their environmental work and to know what they have done to reduce their energetic consummation and their emission.

The company works on minimizing the prices. In this purpose, the company continually works on the rationalization and the simplification of the transport and the storage of its products, but also on the minimization of its impact on the environment. The secret is to calculate the most exactly possible the necessary quantities to satisfy the demand. And as the products are sold in flat packages, it is possible to minimize the “lost spaces” by transporting and stocking more products. And by increasing the “occupation rate”, the transport cost by unit decrease. For instance, the Vallö watering can, in opposition to the other ones presented in the market, has been designed to be stackable, what has highly increased the number of watering cans transported by container, and as a matter of fact has decreased the transportation costs, and the final price of the product.

**IV.2.a.4. Distribution**

In every country, the logistic service tries to find solutions which will enable to reduce the costs and the delivery delays, besides improving the availability of the products in the stores. This means to ensure that it will offer a good quantity of articles in a selling place adapted to each daytime at a reasonable price. By making the merchandize flux efficient, the logistic service prepares the store to increase the sales and to enable the clients to shop easily. In the stores, the orders are daily, and the quantity varies with the importance of the commercial activity. To increase the availability of its products worldwide, IKEA uses franchising. The franchises are granted only to organizations and/or individuals that have a strong knowledge about the local market and that can secure a strong market position and market penetration in the given territory.

Finally, the customers are highly involved to set low costs. In fact, IKEA stores are often located in the suburbs of the big cities, where the soils are the cheapest. And, here, the customers pick up and choose by themselves the products that they want in the self-service area of the stores. All products in the store are supported by price and product information that is clearly marked on large, easy-to-read tags. There are, of course, knowledgeable co-
workers available to customers when needed. Then, the customers bring the products home and assemble it using the assembly notice\textsuperscript{20}.

The IKEA store concept

The IKEA store is where the IKEA products are sold. Visitors are encouraged to take their time and to get comfortable with IKEA home furnishing solutions and products in realistic room settings and real-life homes. They can compare in this place styles and prices.

IKEA tries to make the shopping process enjoyable as possible, for everyone. For instance, the kids can play in the supervised play area. There are also restaurants within the store which offer Swedish and local dishes. Then, inside the IKEA store, there are hundreds of inspirational displays - from realistic room settings to real-life homes, all with product combinations that provide fresh ideas and know-how on contemporary interior design. While exploring the store, visitors may be inspired to pick up a few extra products. The IKEA store is organized in such a way that visitors will not only find what they came for, but also be inspired by unexpected ideas and low-priced products as well.

The IKEA store provides everything that is needed for convenient shopping: pencils, notepads, tape measures, store guides, IKEA catalogues, shopping bags, strollers and trolleys. They can also benefit of the low cost home delivery that IKEA proposes if they consider it more convenient.

\textsuperscript{20} http://www.ikea.com/ms/fr_FR/about_ikea/PDF/student_themes/prix_bas05.pdf, connection on the 08/03/12
V. Analysis

This part presents the analysis that realized from the data we have collected.

V.1. The material flow

V.2.a. Procurement

One case is about a reseller, the other one about a manufacturer and a distributor. In consequence, they are not really located in the same level in the logistic process. So we will begin with IKEA, to then study the Swedish car reseller.

IKEA selects its suppliers according to the quality of their products and to their prices: it wants the most aesthetic for the lowest price. However, it has also other requirements. The supplier has to comply with the Behavior Code IKEA (IWAY). We don’t think that this Code really helps the company to achieve low costs, but it shows the importance for it to be environment-friendly, and to guarantee that its partners have the same behavior. In fact, we have seen that Bloomberg (2002) explains that companies select their suppliers, among other things, according to their price and their quality\textsuperscript{21}. That proves that the company uses the suppliers’ low cost material to set up attractive prices. However, this is not at all costs, in other words by sacrificing the environment.

In fact, IKEA demands the best materials possible to be able to produce attractive products. Finally, we can say that the (many) IKEA’s suppliers are located in different countries, and that some are really quite far from the stores (30% of the supplies come from China). With each one of its suppliers, IKEA aims at developing strong relationships and work in the long-term. This enables it to sign long-term contracts which will give the company enough certainty to order huge volumes. These ones will enable the company to realize economies of scale, and then to reduce the final consumer price. However, it always remains an exigent client, “professional and honest within its transactions”\textsuperscript{22}.


\textsuperscript{22} http://www.ikea.com (/ France / Tout sur Ikea / espace étudiants)
In contrary, REJMES doesn’t seem to demand from its suppliers to comply with some rules. Its suppliers, which are much more, in this case, partners, seem to be the same since the creation of the company. It has developed with them strong relationships which enable it to get really interesting offers. We can notice here that these relationships have enabled the company to get price discounts, which helps it to reduce the final product price.

V.2.b. Operations

IKEA is price oriented all throughout the logistic process, at each step. At the production level, it tries to reduce costs by producing huge volumes, which enables it to realize economies of scale.

However, as in the procurement process, the company has to be sure that it doesn’t deal with product or material quantities which are more important than necessary. When the company has stock, it has to make inventory (what have been mentioned by Renders (2006)\(^23\)), which means other costs. In consequence, the logistic managers have to find the right balance between high volumes and economies of scale; and costs related to inventory.

This dilemma is also visible while dealing with orders. In fact, REJMES undertakes sometimes warehousing in its locals. But in some cases, they have to order cars from their suppliers in the case where there is no the demanded product in the store. It is quite difficult to evaluate how many products should be stored as REJMES never knows how many cars it will sell. So it has to balance the benefit gained but ordering large volumes (sales promotion) and the inventory costs, as with the risk of overstock.

V.2.c. Transportation

REJMES doesn’t undertake any transportation activity. However, we can notice that in opposition to IKEA, its suppliers (for instance Volvo), realize by themselves transport

\(^{23}\) Renders B., and Heizer J., (2006), Principles of operations management, p. 3
activities, in the aim of reducing risks. We can link this reality to Bloomberg (2002), who explains that one important factor regarding the choice of the carrier is the risk.  

IKEA undertakes its transport activities. Its aim is to reduce the costs and the delays related to transportation. As it has suppliers and customers in several countries (and continents), many means of transport are required. We see here that the transportation mean can change from a situation to the other, according to the price and the risks that they imply. As for its suppliers, IKEA ask its transport partners to comply with an environment-friendly attitude. This has 2 main benefits: to reduce the energetic consummation and to be able to tell its customers that it is environment-friendly.

Then, to reduce costs, IKEA searches all ways to minimize “lost spaces” which enable to increase the cost-effectiveness of the transportation. In fact, the more products are transported on one way; the lower is the cost per unit. In this purpose, IKEA works on the rationalization of the transportation. One good idea is about the shape of the packages: in fact, they have found that using flat packages enables to increase the occupation rate and to make the transport of the products easier. So this new concept enables to save time and costs.

V.2.d. Distribution

Companies can choose to sell their products in their own stores or to outsource the sales, using in this case intermediaries. For instance, Volvo cars are sold, for instance in Halmstad by REJMES, while IKEA uses franchise. It is always important to attract “visitors” to make them enter the stores, and to create pleasant store which will make the client look at the different products. Different means can be used. REJMES realizes for instance special event, while IKEA reproduces entire home-ambiance, as it offers food and kids-garden within the store.

---


Distribution is the core activity of REJMES: they realize it by their own. We can add that they receive the cars directly from their suppliers: in consequence, they are, for instance to Volvo, the only “intermediary”. REJMES uses its sales force\textsuperscript{27} to sell the cars. It realizes these sales in one of its stores, located in diverse cities in Sweden. Furthermore, the development of the Internet has led it to develop new tasks: attracting customers (and selling products) through its website. In fact, nowadays, much less people are actually in the stores. The sales have not decrease, but the consumer habits have changed: they prefer now to study and to compare the cars on Internet, and then go into the stores, if they don’t decide to buy the car on Internet. It is thus important that distribution companies adapt themselves to these changes. In this way, as it is for REJMES, a fact which could seem dangerous for the business can in contrary create opportunities.

IKEA undertakes as well distribution tasks. As it integrates all the main logistic processes, it is able to work on each one to increase the satisfaction of the clients while decreasing costs. The goal is to increase the availability of the products in the stores to increase sales and facilitate the shopping process. In general, the orders are daily and the quantity varies with the importance of the commercial activity. As we have seen previously, this enables to reduce costs due for instance to inventory. IKEA uses also franchise worldwide. This let it increase the availability of the products and to better know its different markets, as the franchisers are supposed perfect knowledge about their local market. We can consider these companies as intermediaries. IKEA will then also make sure that they are consistent with the values of IKEA, proposing quality products at the right price.

Moreover, the IKEA case shows us that involving customers let achieve lower costs. In fact, if the company can persuade its public about the advantages that each part will get working together, the company and the customer will be highly satisfied. We see however the importance of organizing a comfortable environment to make the buying process more attractive. The customers are invited to assemble by their own their furniture, which is quite easy, following the assembling notice. In this way, IKEA decreases the work needed on a product and then, all the costs related to it (wage, place …). Moreover, the stores are “self-

\textsuperscript{27} Kotler K., Armstrong G., Saunders J. and Wong V., (2005), “Setting channel objectives and constraints”, \textit{Principles of marketing}, p. 872
service”: the customers are invited to choose by themselves the product they want, as they can ask for technical support.

V.2. The information flow

V.3.a. Meeting customers’ needs

As we have seen, REJMES doesn’t undertake any marketing research. Instead, it organizes some events. There, it will be able to speak with its customers, and to better know about what they don’t like about the cars, what they expect and which features they would like to have. Moreover, any client, while his car or afterward can ask REJMES to add some extra features. Here, the customers tell directly their need, and the company fixes it in one of their factories. It is also there that the cars are sent if it needs some reparation.

V.3.b. Evaluating the customers’ demand

This part is about how the companies gather information to evaluate the customers’ demand – and to be able to satisfy it. REJMES uses its past performances to evaluate the future ones. Moreover, measuring the number of its website’s visitors enable it as well to have an idea about the demand. We can add that buying customers lists from its competitors helps also the company to better know the size of the market. For IKEA, it seems that they rely as well on the knowledge of their franchisers to find out this information. Anyway, they will make the orders daily, which enable them to better handle the demand.
VI. Conclusion

This part presents the final conclusion of our research and our answers to our research questions.

To remain competitive, companies have to develop a visible competitive advantage. We have decided to focus on how a company should manage logistics to reduce the total costs, without however sacrificing the quality and meeting customers’ expectations.

V.1. Achieving lower prices

This research has been executed using empirical information from IKEA and REJMES, 2 Swedish companies which have to deal with logistics. It has enabled us to discover how their managers deal with logistics to reduce costs. At the procurement stage, we have found that the selection of the supplier has to be led carefully. In fact, the supplier has to be able to procure the company with good products at the lowest cost possible. Then, developing long-term relationship is important for a company to get some assurance and to be able to invest in huge volumes. In fact, if a company (as we have seen with REJMES) orders great amounts of products, it can get interesting discounts.

In the same time, the company has to calculate the necessary quantities it needs. This should be done considering procurement and production. This will enable the company to save costs related to warehousing. It is also important to not spoil resources during the production process.

Regarding transportation, there exist as well many ways to reduce costs. First, the choice of the carrier, and even if the company desires to outsource the transportation activities, is of prime importance. In fact, as show us the 2 cases, it seems that doing this activity by itself enables the company to save costs and to minimize risk. But these companies are quite huge. It might be then difficult for smaller ones to do the same. IKEA has presented as well an original idea: to build intelligent packages. This enables to save space, and thus, to transport more products on one trajectory. This reduces the transport cost per unit.
It is as well possible to cut costs at the distribution level. In fact, IKEA has found a way to decrease the costs linked to the distribution. The costs related to distribution are generally due to the arrangement of the products and to the work realized by the employees. In consequence, IKEA has shown that some of these costs can be cut by involving the customers. That is the reason why we find in these stores products which are assembled and which are in free-service. This enables to save labor costs, among other things.

V.2. Meeting customers’ expectations

Saving costs to propose the lowest costs possible to customers is really important. However, the company has to constantly get some information from these customers to know what they want and then, decide how to organize logistics and what to ask from its suppliers.

It’s at the distribution level that the company has contact with the customers. We have seen several ways to communicate with these customers. For instance, REJMES organizes special events to meet and discuss with the customers and Volvo undertakes marketing researches. The company needs an efficient after sales service, in case where the customers have a problem with the product (REJMES) or if they need advice to use their product (IKEA).

Moreover, the companies know that there are 2 basic expectations of the customers: quality and availability. This is the reason why, at the procurement level, the company has to check the quality of its raw material and products. It is important to always ask the suppliers to provide the best products. For instance, for REJMES, customers expect perfect products. And the company has to be able to give them some guarantees about what they buy. Here we see the importance to deal with reliable suppliers.

This explains also why it is so difficult to determine the quantities which have to be ordered and kept in warehousing. As we have seen with REJMES, companies can use past performance to figure out the future ones.

But to meet the customers, it is as well really important to attract them into the stores. That is the reason why for instance, IKEA has developed the IKEA store concept, which define san
enjoyable environment while shopping. Then, to make the customers communicate about what they really think about the product, the company has to show empathy and to listen carefully to them.

V.3 Recommendations for further studies

The emphasis of this study has been placed on the way that a company handles logistics to meet customers’ expectations and to reduce overall costs; a study which aims on the costs of production should be interesting. By this way, the study focuses on how do companies select the best production process in order to make profits and propose to the customers the best price for them.

It could be also interesting to compare our study to the point of view of a supplier. Actually, some companies need suppliers to transport their product, but how do the suppliers manage their logistics in order to make their own profit and to stay competitive on the market? Do they have the same approach in the selection of their logistics?

Finally, in our dissertation, we have focused on two big companies which are IKEA and REJMES, a reseller of Volvo, Renault and Land Rover in Halmstad. It may be interesting in a further research to see if those methods can be relevant for companies which work on local market.

V.4 Criticism of our dissertation

We think that improvement can be made on the empirical data. By that, we mean that we have collected information from a reseller of cars and it should be interesting to have the point of view of a supplier and of a transporter to compare the results.

Afterwards, we think that an interview it is a good way to collect information because we talked directly to a manager. But we think also that making an observation of the company’s actions can be relevant also to see how long takes this process and how the company reacts if
there is a problem. But to collect relevant data in this way, an observation on a long period seems to be necessary.
REFERENCES

Literature

- Lambert M. D., The development of an inventory costing methodology : a study of the costs associated with holding inventory, (National council of physical distribution management: Chicago Ill.), 1976
Internet based articles

- http://www.ikea.com (/ France / Tout sur Ikea / espace étudiants), connection on the 08/03/12
- http://www.cscmp.org, connection on the 08/01/21
- http://writing.colostate.edu, connection on the 08/04/10
ANNEX

1. How do you select your suppliers?

The cars that we sell are Volvo, Renault and Land Rover. We buy all the components from these companies to be able to resell the cars with guaranty, which we could not do if we were buying the components from another supplier. This enables us also to benefit from some promotions from our suppliers. For example, if we buy more than 1000 cars from Volvo, we can get a more important discount, than if we buy for instance only 800.

2. Do you outsource (some of) your transportation activities? Why?

We don’t take in charge the transportation. It’s our suppliers who deal with it. If we take the example of Volvo, they outsource sometimes, but generally they use their own transportation system, which enables them to lower risks linked to transportation.

3. Do you outsource (some of) your distribution activities? Why?

No, we sell the cars that we’ve bought in our own stores. We are resellers: this is our main activity. And we sell to the public, as we do it to other companies.

4. How do you interact with your customers to discover their needs?

We don’t realize “marketing research”. We generally buy the cars that our suppliers sell to us. They undertake their own marketing research. However, we organize some special events to meet our clients. For instance, we use the list of our customers (people who have purchased at least once in one of our stores) and we buy lists from our “competitors”, for instance the Audi house. We send letters to all these customers, describing our new products and inviting them to try the cars, as offering some discounts. In this way, the customers discover the new models. On a general basis, 5 out of 50 contacted customers will purchase after such an event. Moreover, when they buy their car, the customers can ask us for extra features. We buy these accessories from our suppliers (the car brands) and we can fix it in one of our factories. This
refers only to some options. For instance, we cannot add the conditional air or change the color. It is also in these factories that we repair our customers’ cars, after the purchase.

5. How do you control your responsiveness to the customers’ demand?

We analyze past performances, and take it as a basis for the future ones. Moreover, our website enables us to have an idea about the number of people who might be interested by a purchase. In fact, until 5 years ago, there were much more people in our stores. But now, many of them go first on the Internet to get information about the cars and to compare them. Moreover, especially for the youth cars, many people buy directly from the Internet. The development of the internet is not a threat for us: is just a change in the marketing. In fact, we don’t sell less than before; it’s just that there are less people in our stores.

6. How can you manage to respond quickly to the demand or to an order?

It depends. We handle some warehousing here, but we also order the product to the supplier when a customer desires something that we do not have in our stores. After an order, the car will generally be ready within 4 weeks. It is quite difficult to know how many cars we should order in advance, because we do not know exactly how many we are going to sell. For instance, as I have said before, if we buy more than 1000 cars, we will get high discount. But that means also that we will have higher inventory costs.