A TOTAL COST ANALYSIS OF THE RETURN PROCESS ONLINE AND IN STORE

Master of Science thesis in the Master Degree Programme, Business and Innovation

HELENA HARRYSSON
LINETTE LANDIN

LUND UNIVERSITY
A TOTAL COST ANALYSIS OF THE RETURN PROCESS ONLINE AND IN STORE

Master of Science thesis in the Master Degree Programme, Business and Innovation

Copyright © Helena Harrysson, Linette Landin

Published by
Division of Packaging Logistics
Department of Design Sciences
Faculty of Engineering, Lund University
P.O. Box 118, SE-221 00 Lund, Sweden

ISRN 15/5135
Preface

This master’s thesis was conducted during the spring of 2015 and represents the final part of our five year master’s degree in Industrial Engineering and Management at Lund Institute of Technology, Lund University. The thesis was initiated by The Company to gain a greater insight into their returns management process and to specifically examine different return policies.

This project has been truly interesting and has opened up our eyes to areas of knowledge that we previously knew very little about. We would like to take this opportunity to thank the people who have helped and supported us on this journey.

First of all we would like to thank The Company for giving us the opportunity to work on this assignment and our supervisor at The Company for supporting us throughout the project and guiding us to the right people in our search for relevant information. We would also like to thank all the people that we have been in contact with through meetings and during our on site visits for your commitment and help.

We would also like to thank our supervisor at the University for getting us involved in this project and for supporting and motivating us in our work. Your expertise has been a great asset and always inspirational.

Lund, 2015-06-17

Helena Harrysson & Linette Landin
Abstract

Title: A Total Cost Analysis of the Return Process Online and in Store
Authors: Helena Harrysson
Linette Landin
Supervisors: Klas Hjort, Lund University
Daniel Hellström, Lund University
Steering Committee: Anders Urhed, The Company
Anne Kostiainen, The Company

Background: We become more and more connected to the Internet and companies need to use new channels to reach customers. Online shopping has become an important activity in customers’ shopping behaviour and there is a need for fashion retailers to examine their logistics process. Depending on which return policies a company have returns can generate a significant cost. It is interesting for companies to calculate the total cost of returns and to examine the effects of different return policies.

Purpose: To analyse and discuss the impact of online returns in store and pre-registered returns on the total cost of returns for The Company’s in Germany and the UK and to give suggestions of KPIs and future improvements regarding how the company can become more competitive in their return process.

Method: This master thesis will be written in cooperation with The Company. The project will include a descriptive study and an exploratory phase where identified casualties will be used to find suggestions for improvements in the return process. The study will follow a process mapping framework, which is used to describe the current state, “as-is”, and the future possibility, “to-be”. Part of the process mapping comprises a total cost analysis, used to determine the change of cost as a result of a decision-making.

Conclusion: The study provides calculations showing the magnitude of the savings generated by pre-registered returns and online returns in store.

Keywords: Returns managements, Return policies, Total cost analysis, Online returns in store and Pre-registered returns.
## Glossary and acronyms

| **Back office** | Is a generic name of an organization’s internal operations that are not visible to the general public. The back-office usually has no direct contact with the customer. |
| **Customer** | Refers to the individual who purchases a product and does not have to be the same individual who consumes it. |
| **Distribution centre** | DC, is a warehouse stocked with products to be distributed to stores, retailers and customers. The DCs that are described in this thesis only delivers to customers who have purchased online. The DC also handles unwanted products that have been returned by post. |
| **E-commerce** | Refers to the activity of trading products and services using an electronic network, like the Internet. |
| **Effective** | Is defined as doing the right things to accomplish a specific purpose. |
| **Efficient** | Is defined as doing things in the best possible manner, minimizing the waste of time, effort as well as material resources and having and using the right competencies for the task. |
| **Key Performance Indicator** | KPI, a way to measure the performance of an organisation or a process. By understanding what is important for the company one can choose which metrics to use as KPI and through these ensure that the company is making progress in working towards their goals. |
| **Merchandise card** | Is a credit note that the customer receives when returning an item. The credit note is valid one year after date of issue in any store on the local market. |
| **Online returns in store** | ORIS, refers to an item purchased online from a virtual store that is returned in a physical store. |
| **Online sales** | Is in this thesis defined as all the channels that doesn’t imply any physical contact with the product before purchase. That is sales made through mail order, e-mail, telephone, fax and online. |
| **Package** | One unit sent by the post, can either be a letter or a parcel depending on the package’s properties. |
| **Parcel** | Is a bundle of items sent as one unit by post. It can either be a letter or a parcel depending on the package’s properties. A parcel contains at least one item but gives no indication of how many items it contains. |
| **Return rate** | Can be defined in two ways, return percentage of parcels and return percentage of items. Return percentage for one parcel can only be either 0% or 100% whereas the return percentage for items can vary from 0% to 100%. |
| **Returns management** | Refers to the supply chain management process by which activities associated with returns, reverse logistics, gatekeeping and avoidance are managed within the firm and across key members of the supply chain. |
| **Reverse logistics** | RL, refers to the process of moving material from the point of consumption towards the point of origin. |
| **Traditional returns** | TR, refers to a return of an online purchases that is shipped back by post to the point of origin, the local DC. |
# Table of Contents

PREFACE .................................................................................................................. I

ABSTRACT ............................................................................................................... III

GLOSSARY AND ACRONYMS ............................................................................. V

1 INTRODUCTION ................................................................................................. 1
   1.1 BACKGROUND ................................................................................................. 1
   1.2 THE COMPANY ............................................................................................... 2
   1.3 PROBLEM DESCRIPTION ................................................................................. 2
   1.4 PURPOSE .......................................................................................................... 3
   1.5 OBJECTIVE ...................................................................................................... 3
   1.6 DELIMITATIONS ............................................................................................... 4
   1.7 OUTLINE OF THE REPORT ............................................................................. 4

2 METHODOLOGY .................................................................................................... 7
   2.1 METHOD & MATERIAL .................................................................................... 7
   2.2 PROCESS-MAPPING ....................................................................................... 9
   2.3 TOTAL COST ANALYSIS ............................................................................... 14

3 THEORETICAL FRAME OF REFERENCE .......................................................... 17
   3.1 THE FASHION INDUSTRY OF MODERN TIMES ....................................... 17
      3.1.1 A historic background .............................................................................. 17
      3.1.2 New demands of modern times ................................................................. 18
   3.2 E-COMMERCE ............................................................................................... 19
      3.2.1 Conditions for competitiveness ................................................................. 19
      3.2.2 E-commerce on the German and British markets .................................. 20
      3.2.3 Multi-Channels ...................................................................................... 21
   3.3 RETURNS MANAGEMENT ............................................................................... 23
      3.3.1 Return policies ......................................................................................... 24
      3.3.2 Reverse logistics ..................................................................................... 26
   3.4 CUSTOMER SATISFACTION AND CUSTOMER SERVICE ......................... 32
   3.5 ASPECTS OF CS IN RETURNS HANDLING .................................................. 33
   3.6 LEGISLATION ................................................................................................. 34

4 CASE DESCRIPTION ............................................................................................. 35
   4.1 DELIVERY ....................................................................................................... 35
   4.2 PAYMENT OPTIONS ....................................................................................... 36
   4.3 RETURNS ........................................................................................................ 39
      4.3.1 Traditional returns, TR ............................................................................ 39

5 THE COMPANY’S PROCESSES, AS-IS .............................................................. 43
Tables

Table 1. Criteria for letter and package ........................................43
Table 2. Delivered and returned in Germany ........................................57
Table 3. Delivered and returned in the UK ........................................57
Table 4. Exchange rates .....................................................................58
Table 5. Transportation cost per parcel .............................................60
Table 6. Total transportation costs of returns .......................................60
Table 7. Share of returns on total transportation cost .........................61
Table 8. Transportation cost of unclaimed parcels .............................62
Table 9. Warehouse cost per market ..................................................64
Table 10. Cost per sub activity in Booking activity per market ..............65
Table 11. Most frequently handled CS issues in Germany ..................66
Table 12. Most frequently handled CS issues in the UK ......................66
Table 13. CS errands connected to returns in Germany ......................67
Table 14. CS errands connected to returns in the UK .........................67
Table 15. Total cost of customer service per market ..........................68
Table 16. Administrative costs ..........................................................69
Table 17. Material cost per market ......................................................71
Table 18. Total cost of returns at DC ..................................................72
Table 19. ORIS share of total RIS .......................................................74
Table 20. Cost of ORIS .................................................................75
Table 21. Estimated cost development in five years ...........................78
Table 22. A total cost scenario of a future 5-year period in Germany ....83
Table 23. A Total cost scenario of a future 5-year period in the UK .......84
Table 24. Distributed voucher per market .........................................90
Figures

Figure 1. The process mapping framework information need

Figure 2. Continuous improvement of the process mapping framework

Figure 3. Sub steps of the as-is analysis

Figure 4. The PDSA-cycle

Figure 5. Components of Returns Management

Figure 6. Payment options

Figure 7. Distribution of Payment options

Figure 8. Returns by payment option

Figure 9. The return process at DC

Figure 10. The ORIS process

Figure 11. Cost centre included in the TCA at DC

Figure 13. Share of unclaimed parcels per market

Figure 14. Cost centre included in the TCA in store

Figure 15. Mispricing of ORIS
1 Introduction

This chapter provides a background to e-commerce and the costs of reverse logistics connected to online shopping. This chapter also states the purpose of the thesis, its delimitations and also provides suggestions for the reader of which sections to focus on depending on what fulfils the reader’s interests.

1.1 Background

As we become more and more connected to the Internet due to the development of digital services, the behavioural pattern of customers’ is changing. Companies need to use new channels to reach customers and to build brand awareness and e-commerce has become an important part of many companies’ strategies. As the number of Internet retailers increase and the competition grows, the evolvement of technology also gives rise to many new challenges. Customers are more willing than ever to visit new markets to find unique products, less willing to wait for their products and they request lenient shipping- and return policies and low prices when placing orders online.

Germany and the UK are the two most mature e-commerce markets in Europe. They are also two of the top five e-commerce countries in turnover globally. Apparels and footwear are the most popular product categories for online shopping and more than half of the online shoppers in these countries bought clothing or footwear online during 2013 (Ecommerce Europe, 2014). The fashion industry is distinguished by its short lifecycles and fashion apparel retailers compete on time to market and the ability to respond to rapidly changing fashion trends.

As online shopping has become an important activity in customers shopping behaviour there is a need for fashion retailers to examine their logistics process. One important part of the process is the reverse flow where returned products are handled. These activities are governed through returns management, which is an important part of the value creation and an important factor within the logistics process to pay attention to.

The expectations and return behaviour for online shoppers differ on different markets and companies often adapts to these factors in order to stay
competitive. In Germany and the UK lenient return policies are a standard condition and free returns and the options to return items purchased online in store are necessary. Depending on which return policies a company have returns can generate a significant cost. It is interesting for companies to calculate the total cost of returns and to examine the effects that different return policies have on the company’s long-term profitability.

1.2 The Company

The Company was founded in 1947 in Västerås, Sweden and today there are stores on 57 markets. The business concept consists of seeing to the demand of a wide segment, including women, men, children and teenagers and deliver “fashion and quality at the best price”.

After a long history of mail order the online store opened for the Swedish market in 1998 and since then it has become an important part of The Company’s business concept. In 2006 The Company initiated an expansion of their online platform and today there are online stores on 13 markets, including Germany, which was opened in 2007, and the UK, which opened in 2010. The goal is to have an online shop on every market where there is a physical store. To respond to the rapid development of the digital market The Company has made their online store fully mobile-adapted to simplify purchases made from a phone or a tablet.

To be able to distribute their products to customers who shop online as fast and cost-efficient as possible The Company has six distribution centres (DCs) spread across the world. The German market is supplied with products from a DC in Poland and the British market from a DC in Sweden.

1.3 Problem description

As one of the market leaders in the European fashion industry and one of the most well known brands, it is of great importance for The Company to stay relevant to its customers. This includes keeping up with changing demands and expectation regarding the purchasing process such as delivery and returns. As returns are a consistent part of The Company’s customer’s behaviour it is important that this return process is not overlooked in the value-creation process. By applying returns management a company can achieve a higher
level of cost-efficiency as well as effectiveness in the organization without compromising the value for the customer.

At the request of the company, the two markets that will be analysed are Germany and the UK. They are The Company’s largest markets in Europe but differ regarding customer behaviour and especially customers return behaviour. Both countries offer both returns in store and traditional transfer back to DC. Part of the problem is to map out the return process and calculate total cost of returns. This will serve as a foundation for the analysis that will follow where the focus will be on identifying key performance indicators and analysing the impact of returns in store and pre-registered returns.

1.4 Purpose

The purpose of this thesis is to analyse and discuss the impact of online returns in store and pre-registered returns on the return costs for The Company’s return process in Germany and the UK. It will culminate in suggestions of KPIs and future improvements regarding how the company can become more competitive in their return process.

1.5 Objective

The objective of this thesis can be formulated in four goals, which in turn can be specified through sub-goals:

1) Determine total cost of returns as they are handled today for The Company’s online business in Germany and the UK.
   a) Map and determine cost of returns handling in DC
   b) Map and determine cost of returns handling in store
2) Analyse what effect a higher return rate in store and pre-registered returns will have on the return process.
3) Identify KPIs for the return process
   a) Examine the effect of a higher return rate in store on the KPIs.
4) Based on the results, suggest improvements to The Company for future implementation.
1.6 Delimitations

The thesis will focus on describing and evaluating the return process from online sales in Germany and the UK, no other markets will be included. Both markets are highly adapted to the development of the e-commerce and the authors cannot guarantee that the result will be applicable on less developed markets. When developing appropriate recommendations for the future the authors have to take in consideration both internal and external factors. The external factors will be collected from each of the two markets and might differ to some extent from other markets.

The thesis will focus on the return process and not include any analysis of the forward flow. It is presumed that the returns process starts at the moment of the customer’s decision to return a product and ends when the customer is reimbursed. All activities performed by The Company in between these two activities are considered a part of the return process.

Costs of buildings, inventories and maintenance will be excluded from the total cost analysis under the assumption that these costs are fix and would exist regardless of how the returns are processed. Costs caused by non measured time, such as manual work due to inaccuracies in the process, downtime or waiting time are not included as the authors have no possibility to distinguish non value adding time from value adding time.

As The Company operates in a highly competitive and fast changing line of business the authors are aware that any premises that makes out the foundation for this thesis may change or evolve quickly. This will however not be a factor taken into consideration as the thesis focuses only on the current as-is situation.

1.7 Outline of the report

The report follows a structured and logical order. Every chapter is introduced with a short summary of the chapter’s content and objective. The outline is presented below with a short description of the content and what chapters to focus on depending on the reader's interest:

Chapter 1, Introduction, is an introductory chapter where the background to the problem is described. This chapter also states the purpose and the
objectives of the thesis and provides the reader an overall picture of the forthcoming content in the thesis.

Chapter 2, *Methodology*, gives a description of the nature of the project and introduces the research methodology followed throughout the thesis. This chapter might interest actors within the same industry who consider performing a similar study, or students with attention to learn more about research methodologies.

Chapter 3, *Theoretical frame of reference*, will serve to build a solid knowledge of the fashion industry, the e-commerce business and the main topic of this thesis, the returns management. This chapter will also outline how customer satisfaction is achieved and what legal requirements the online retailers have to relate to. This chapter is recommended for readers interested in learning more about e-commerce and the inevitable returns handling connected to online retailing.

Chapter 4, *The Company’s offer*, introduces the studied company and its offer to customers in regards to delivery, payment method and returns. This chapter might be interesting for readers who want to gain a picture of The Company’s offer and its current state on the two relevant markets.

Chapter 5, *The Company’s processes - as-is*, gives a description of the returns handling process at The Company at current state. This chapter walks the reader through the different activities in the returns process to get a picture of the work process and the resource allocation. This chapter is interesting for the reader who wishes to get an insight into a returns handling process or to build solid understanding of the different activities in the process before the total cost analysis in the following chapter.

Chapter 6, *Calculations*, aims to underpin all calculations made in the total cost analysis of the return process at The Company. The total cost is calculated for both markets separately, as well as calculating the cost for TR and ORIS separately. This chapter together with the following chapter are the most interesting sections for The Company since they generate a comprehension of the effects of returns. This chapter might also interest the reader who is curious about the cost of returns in the fashion industry.
Chapter 7, *Analysis and result*, uses identified areas of concern to find suggestions for improvements in the return process. The results from chapter 6 will be analysed to examine how the total cost of returns is affected by different variables. This section is especially interesting for The Company’s managers and business developers. It is also interesting for similar companies who wish to improve their returns handling process and lower the cost of returns.

Chapter 8, *Discussion and future work*, discusses the accuracy of the project and suggests subjects for future work. This chapter might be interesting for The Company in order to continue the development of returns management but also for students looking for an interesting topic for their master’s thesis.
2 Methodology

This chapter describes the approach to be used in order to meet the objectives previously stated in chapter 1. The methodology is a framework for the research process, which paves the road towards the fulfilment of the purpose. This chapter will provide a brief description of the choice of methodology and further a description of the chosen methodology.

2.1 Method & Material

This master thesis will be a case study written in cooperation with The Company. Gathering of empirical information will be made at the warehouse and head office in Sweden and at the British market. This information will be of both primary and secondary character since both internal documentation and personal interviews will be used. Written sources will provide secondary data to the theoretical frame of the thesis. The processing of the information will mainly be made at Lund Technical University, Sweden.

The sub-chapters of this chapter will describe the chosen methodology for this thesis. According to Höst, Regnell and Runesson (2006) the methodology is used to set up a framework for the research process but does not describe in detail how one should proceed. The choice of methodology should be based on the goal of the project, its character and its purpose. The purpose can either be descriptive, exploratory, explanatory or of a problem solving character. The purpose of this thesis is to map the return process, which can be described as a descriptive problem, and to analyse the impact of a higher return rate in store as well as pre-registered returns on total cost which can be described as an exploratory problem (Höst et al. 2006).

Descriptive and exploratory studies that aim to produce a first hand understanding of a certain situation suit especially well for the case study method according to Yin (2004). Case study research does not differ a lot from other types of research methods. All methods require reviewing literature, defining research questions and to set up analytical strategies. When using the case study method however, data collection and analysis should be made simultaneously (Yin, 2004).

The basis of the case study method constitutes of three steps. The first step is to define the case that is to be studied. The definition is normally based on the
literature that has been reviewed and the initial research question. The second step to decide whether to do single- or multiple case studies, which represents two different case study designs. A single case study requires a devoted attention to the specific case whilst multiple cases helps to strengthen the findings. The third step is to decide to what extent to adapt or minimizing theoretical perspectives. Generally less experience invite to greater use of theoretical perspectives, used as guidelines in the working process and to underpin the findings from the study (Yin, 2004).

The first phase of the project will consist of descriptive study of the e-commerce business, returns management and its premises. The purpose is to achieve a thorough understanding of the subject and create a frame of reference for the later parts of the project (Höst et al. 2006). Previous studies and dissertations as well as articles on the subject will be used to collect information. The literature study will be updated as the project develops to continuously include information about relevant subjects.

The second phase, which is the first part of the case study, will also have a descriptive purpose. It will focus on studying the process at The Company carefully to map out the current return process both at the DCs and in store. This phase will include a visit to the British market involved to identify differences between best practice and the reality. The German market will not be able to visit so suitable employees will be contacted to gather the necessary information. It is important to retrieve sufficient information from both markets to describe the current state of the return process at The Company.

To be able to make the necessary calculations regarding the cost and lead-time of the return process, The Company will be asked to supply the necessary information and statistics about the processes currently in use. This information will be valuable in the third phase where causalities between costs and activities in the return process are to be identified. This exploratory phase will generate a comprehension of the existing system and how various parameters are connected. With this comprehension it will be possible to determine options for future improvements regarding how the company can become more competitive by improving the return process. The causalities will form the framework for the next step in the process.
The last, exploratory phase will use the identified casualties to find suggestions for improvements in the return process. The suggested improvements aim to demonstrate to The Company how they can become more competitive in their return process.

2.2 PROCESS-MAPPING

One theoretical tool that will be used in the case study is a process mapping framework. The process mapping is used to describe the current state, “as-is”, and the future possibility, “to-be”. The process mapping helps to understand the work process and resource allocation be dividing the process into sub processes. Through this understanding it will be possible to identify sequences within the process that lack value-adding functions or sequences possible to streamline. The following theory regarding the process mapping framework is based on Subramaniam’s interpretation of the process mapping (Subramaniam, 2009). Since this project focuses on the reverse supply chain the model has been adapted to better suit the reverse flow.

Subramaniam theory is that the information needed in the process mapping comes in four formats. The first category of information is Key Performance Indicators (KPI). These are numbers that describe the deliverables from each activity and are often used to value a company’s operations. By measuring a few indicators one can get an idea of the company’s efficiency. The second category of information is information about suppliers. In this case, where we look at the reverse supply chain, the customer who returns an item can be seen as the supplier and typical input might be customers shopping behaviour, information about return reason or method of return. The third category describes volumes. This is the category that talks about the output of the process. The volume produced in a certain activity is highly dependent of the pace in the activity. In the case of returns management an interesting volume is for example the number of returns handled per hour. The last category is the information about the customer, which in this case is the returns handler due to the reverse supply chain. This category contains information about the activities in the returns handling process. The picture below (See Figure 1) illustrates this case specific information need.
When mapping a process it is critical to describe the process as it is. What activities that are included should be clearly identified with a beginning and an end of the process before the mapping is started. It is important to question why things are being done in a certain way. It is also important to lift the eyes when observing and not only see the activities separately but also the process as a whole. The process mapping gets its most accurate result when engaging the people involved in the process. The process mapping should be done at a high level, without allowing small details take up too much time or space.

The process mapping framework consists of 5 steps of continuous improvement leading to either business process improvement or business process reengineering (See Figure 2).
FIGURE 2. CONTINUOUS IMPROVEMENT AS A RESULT OF THE PROCESS MAPPING FRAMEWORK

Each of the five steps is described below:

1) **Identify best practices:** Identify best practices: In this step, delimitations for the process mapping are set up, where the process begins and where it ends. Context diagrams with sub processes should be studied and problems and opportunities for improvement identified for each sub process. The description of best practices should be verified by a third party to make sure that the process can be understood easily without further explanation. Important questions in this stage is what, why, how and when. In this stage it is also important to decide what to measure. Possible metrics are time, volumes, rates or costs. The advantages of using metrics are that it clearly highlights a certain activity’s contribution as well as revealing non-contributing activities and bottlenecks.

2) **As-is:** The as-is step includes four major sub steps as shown below (See Figure 3).

FIGURE 3. SUB STEPS OF THE AS-IS ANALYSIS
The first sub steps aim to select a specific process and to define the scope, i.e. all activities are defined based on how the result of the activity can change depending on the variables. These sub steps also include planning and scheduling of resources. Resources consist of both systems and persons and the scheduling aims to determine who and what system that is connected to what activity. It is important that the name of the systems is the same name as used in the organisation. The final part of this sub step comprises a construction of an estimated timetable with the tasks, people and time required in each activity.

The third sub step is the choice of technique and interview planning. The interview planning involves choice of interview method; focus groups or individual interviews. Current documentation over the process can be used to identify persons of interest for individual interviews. The normal approach is to start with group interviews to get the overall picture, this is however not applicable for the purpose of this thesis. During the interviews it is important to try to answer the question “Why?” since this question rarely is answered in existing documentation.

The final part of this step is to document the as-is process. All activities that transfer the input to output should be described and the actual process is mapped just the way it occurs. In this step no attention should be paid on how the process differs between the current documentation and reality.

3) **Analyse and evaluate:** The analyse aims to search for bottlenecks, redundant activities or unnecessary rework. After the analysis it is important to evaluate the improvement opportunities to determine what activities to focus on based on the potential for value creation.

4) **To-be:** The to-be process design takes its starting point in the as-is analysis made in previous steps. The as-is analysis identifies a range of factors, for example the differences between described and existing process, problem areas and opportunities for improvements. Together with input from senior management’s goals and visions, results from
benchmarks and requirements on performance a future process can begin to be developed.

5) **Implementation**: The final step in the process mapping framework consists of the implementation. The method for this depends on what changes are to be made but a model that is commonly used is the PDSA-cycle (See Figure 4).

![Figure 4. The PDSA-cycle](image)

The letters in the acronym stand for plan, do, study, act and describe the process of how one should precede the implementation of a change. The first step is to plan what changes that are sought and how to proceed to obtain these changes. The second step is to implement the plan as it is described in the plan. The third step is to study what impact the changes have brought and understand these effects. As a final step action is taken based on the result from the previous changes.
2.3 Total cost analysis

A total cost analysis (TCA) is the key to managing the logistics function (Waller and Fawcett, 2012). The TCA is used to determine the change of cost as a result of a decision-making. Some costs will increase, others decrease and it is important to determine which costs that will be affected in what way (Oskarsson, Aronsson & Ekdahl, 2006).

There are no definite right or wrong when deciding what should be included in the TCA. What costs that should be included depend on the extent of the analysis. Different authors have made different categorizations of the costs that normally form the base of a TCA, it can be divided into nine cost categories (Grant, Lambert, Stock & Ellram, 2006):

- Transportation costs
- Warehousing costs
- Order-processing and information systems costs
- Lot quantity costs
- Inventory carrying cost
- Capital-/opportunity costs
- Inventory service costs
- Storage space costs
- Inventory risk costs

This is a detailed categorization with little room for doubt about what costs belong to what category. The importance of the TCA is however not to place each cost under the correct cost centre but to make sure that all costs are included somewhere. In this thesis the following categories will be used:

- Administrative costs: costs of receiving orders, billing, payment of wages, financial follow up etc.
- Transportation costs: administration and performance of transportation that depends among others on distance, volume and weight.
- Warehousing- and handling costs: costs of running a warehouse, such as costs of the building, payment of warehouse workers, costs of equipment etc.
- Other costs: This category depends on what department the cost analysis focuses on but might include customer service costs and
packaging costs. Costs of shortages and delays can also be included in this category if measurable.

The result of the TCA can either be presented as a total cost or as a cost per item. If the second alternative is used is it of great importance to define the term “item”. Different departments within an organisation might have different variables in which they measure performance and this is important to bear in mind when gathering information about the process.

The TCA conducted in this thesis will not follow a scientific method and will be highly dependent on the information provided by The Company. The authors will have to make do with the numbers that The Company choose to share and these will be the basis for the cost centres involved in the TCA.

The authors will, through the process mapping framework, identify costs connected to returns handling. Each of these costs will be connected to a cost centre, which is intended to be further analysed in the TCA. Desirable would be to obtain full information of each cost centre to complete a thorough analysis, this is, however, beyond the authors’ control. The scope of the TCA will therefore evolve during the process where new costs might arise throughout the case study.
3 Theoretical frame of reference

This chapter constitutes the first part of the project and is based on literature studies. The theoretical frame of reference will serve to build a solid knowledge of the fashion industry, the e-commerce business and the main topic of this thesis, returns management. The theory will be an enabler to successfully conduct a solid analysis of the presented data in following chapters. This chapter will also outline how customer satisfaction is achieved and what legal requirements the online retailers have to relate to. These are all subjects to bear in mind when determining how a company can become more competitive in their return process and how to lower their total cost of returns.

3.1 The Fashion Industry of Modern Times

Fashion can be defined as an expression that is widely accepted by a group of people over time (Bhardwaj & Fairhurst, 2010). It can be characterized by several marketing factors such as low predictability, high impulse purchase, high volatility of market demand and above all, a short life cycle. The life cycle of fashion apparel, as most life cycles, consists of four phases: introduction and adoption of fashion leaders, growth and increase in public acceptance, mass conformity and finally the decline and obsolescence of fashion. The profit margin within the fashion industry is highly connected to the company’s market responsiveness. This means that it is essential for the fashion industry to act quickly and follow the fast changing trends (Christopher, Lowson & Peck, 2004). The fashion industry has significantly evolved over the last two decades, from a business of mass merchandise suitable for a long season to an emergence of small collections responding to current trends and constantly changing seasons.

3.1.1 A Historic Background

Until the late 1980s, fashion apparel retailers traditionally focused on forecasting consumer demand long before the time of consumption, a strategy called ready-to wear (Guercini, 2001). Success within the fashion industry came from having low costs and standardized styles. During the 1990s the customers started to become more fashion-conscious and the standardised models were no longer enough to keep them satisfied (Bhardwaj & Fairhurst, 2010). Fashion shows had up until that point only been meant for designers
and fashion managers, but from late 1990s and onwards they became more public and pictures from the shows could be seen in magazines. Customers started to ask for the fashion from the catwalk and big retailers such as Zara, H&M, Mango and Top Shop could offer their versions of the catwalk fashion within three to five weeks after the shows (Barnes and Lea-Greenwood, 2006). The trend changed from forecasting future trends to using real-time data of the customers’ demand. This evolution caused an increase in markdowns as the mass merchandisers had to become more competitive with prices (Bhardwaj & Fairhurst, 2010). The challenge turned from achieving cost efficiency in production to keeping the lead time down to be able to respond quickly to customer demands.

3.1.2 NEW DEMANDS OF MODERN TIMES

The focus of the fashion industry has successively changed from a production-oriented focus to a more consumer-oriented focus. Today, the fashion apparel retailers compete on time to market and the ability to respond to rapidly changing fashion trends. Taplin (1999) calls the response to this evolvement “fast fashion”. It is no longer sufficient for competitive players to offer one autumn/winter collection and one spring/summer collection. The customers expect the collection to change every other week to match their own new behaviour to visit stores, both real and virtual, more often (Taplin, 2006).

The fashion industry has not stopped to evolve. The environmental awareness has increased the customers demand for more sustainable fashion through fair trade and organic materials. It also seems like customers are more willing to pay for environmentally friendly fast fashion, which creates a new pricing opportunity for the fashion industry (Sustainable Brands, 2012). The behavioural pattern for customers’ is also changing due to the fact that we become more and more connected with the development of digital services. This increases the need for companies to use new channels to reach customers and build brand awareness.
3.2 E-COMMERCE

Today’s customers have higher demands than ever before concerning availability, comfort and delivery time when purchasing products (PostNord, 2014a). The evolvement of technology also gives rise to many new challenges and puts new demands on companies. The number of channels through which to reach customers increases which means that companies need to reach the customer through each and every one of them to stay competitive. E-commerce, which is the collective term for commercial transactions conducted electronically on the Internet, enables shopping around the clock, 7 days a week. This makes e-commerce an interesting market for both customers and companies.

3.2.1 CONDITIONS FOR COMPETITIVENESS

The organisation Ecommerce Europe estimates the number of B2C websites in Europe to grow at a speed of 15-20% per year. At the same time, the total sales in e-commerce in Europe are expected to increase by an average of 9% per year until 2017 (European travel commission, 2015). This means that the competition on the market increases at a higher speed than the consumer spending and that a flexible organisation and competitive advantages gain a greater importance.

There are constantly new trends in online shopping that companies need to keep up with such as new payment methods or more flexible shipping- and return policies (Brusch & Stuber, 2013). In 2012 a study made by comScore (2012) was conducted to provide insights into customers’ online shopping behaviour. The study analysed data from more than 3100 U.S. online shoppers who made online purchases at least twice every three months. The survey showed that the product price and shipping fees were almost equally important when making a purchase decision and that the two main aspects customer wanted the retailer to improve were “free/discounted delivery” and “ease of returns/exchanges”. More than 63% of the customers looked at the retailer’s returns policy before making a purchase. An easy-to-find- and understandable return policy increased the customer satisfaction and the likelihood for new purchases. It was not just the lenient return policy that was of importance, but also the overall return experience. The customers requests pre-printed return labels (or easy-to-print labels), automatic refund, an easy procedure, ability to return in store and flexibility on how to ship the return to retailer. The worst
return experience was generated from having to pay from the return and would most unlikely lead to a new purchase from that retailer or recommendations of the company (comScore, 2012).

3.2.2 E-commerce on the German and British Markets

Germany and the UK are the most mature e-commerce countries in Europe where almost 4 out of five citizens bought goods online in 2013 (PostNord, 2014b). These two countries are the very leaders of the e-commerce sales with a share of 29.4% and 17.4% of the European B2C e-commerce market (Ecommerce Europe, 2014). Germany and the UK are also part of the top five e-commerce countries in turnover globally. The British e-shopper spends in average €953 per year, which makes them the highest online spenders in the world (PostNord, 2014b).

Europeans do most of their online shopping from the domestic market but tendencies show that the geographic boundaries are being increasingly blurred. Customers are more willing than ever before to visit new markets via the online channel to find unique products. However, there are distinct behavioural differences between European consumers depending on their country of origin. The biggest difference lies in choice of payment method and how long the customer is prepared to wait for delivery. For example, German customers prefer to pay by credit while British shoppers prefer to pay by card. More than 96% of the British online shoppers pay by either PayPal or bank card, which can be compared with German shoppers where the corresponding number is 52% (PostNord, 2014b). These differences require that e-commerce companies can be flexible and offer different services on the different markets where they want to operate.

In both Germany and the UK apparels and footwear are the most popular product categories for online shopping. More than half of the online shoppers in these countries bought clothing or footwear online in 2013 (PostNord, 2014b). The clothing and footwear category is however unique since it often requires the product to be sold with a lenient returns policy since the customer cannot try the item before purchase.

In addition to lenient return policies, fast delivery and low prices are also critical success factors for the online apparel retailer. Almost four out of five online shoppers in both Germany and the UK expect delivery within 5 days.
The delivery is not only expected to be fast, but also free. The terms of delivery are highly affected by the national legislation, which in turn are regulated by the directives of the European Union. German and British shoppers request mainly free delivery (PostNord, 2014b).

3.2.3 Multi-Channels
Multi-channel is a concept that comprises of all the possible channels for companies to reach their customers. It includes the e-commerce channel and the m-commerce channel (which will be discussed later in this chapter) as well as the more traditional means of communicating and connecting with the customer such as physical stores (Fulgoni, 2014). To be competitive in the current market climate, companies not only need to be innovative with their products, but also with their routes to market (Binder, 2014).

As it becomes more common for companies to use a multi-channel approach, customers have developed a new behaviour of their own, “channel hopping” between different platforms, creating new purchasing patterns (Binder, 2014). This increases the importance of mutual touch points between the online and the offline shops to create a seamless experience for the customer. This means that all channels should reflect each other. The mobile app should resemble the webpage, which in turn should resemble the interior and the feeling of a physical store. The multi-channel strategy is not about being displayed in as many channels as possible but giving the customer a uniform experience in all channels used (Newman, 2014).

Several studies show that customers who use many channels in their shopping are more valuable than the customers who stick to only one channel (Ansari et al. 2008; Kumar & Venkatesan 2005; Myers et al. 2004; Neslin et al. 2006). Employing a multi-channel approach is therefore a way to ensure that this valuable customer segment can reach its full potential (Binder, 2014).

At the same time as e-commerce increases, a relatively new industry is booming on the market: m-commerce. M-commerce refers to the shopping made through mobile internet, a channel of growing importance due to the changing shopping behaviour entailed by the constant connection to the internet through our smartphones (Ecommerce Europe, 2014). The increase of m-commerce has changed the shopping behaviour of customers and the smartphone has become a critical shopping tool. In Germany, 76% of the
smartphone users have researched a product or service on their device and 32% has made a purchase on their phone (Our mobile planet, 2013a). The corresponding numbers in UK are 73% and 39% (Our mobile planet, 2013b).
3.3 Returns management

As previously mentioned one area in the online shopping experience where customers want to see improvements is in the return process (comScore, 2012). The activities with which companies handle the return process are governed through returns management, which manages all logistic operations connected to the return from the user to the supplier. The authors have concluded that the most important activities in returns management are the set-up of return policies and reverse logistics. The authors have built the figure below (See Figure 5) to provide an overview of the concept of returns management and its sub activities. Each of the sub activities will be further described in the following chapters.

**Figure 5. Components of Returns Management**
3.3.1 RETURN POLICIES

A liberal return policy is considered an important strategic tool for companies in the e-commerce business (Rogers and Tibben-Lembke, 2001). Customers consider the returns possibilities when making a purchase decision, which forces the companies to compete through generous, return policies. In a recent study made by Brusch and Stüber (2013) of the German e-merchant it was clear that a lenient return policy is the most important delivery related factor for customers shopping fashion and accessories online (Brusch & Stüber, 2013). Customers who shop through e-commerce don’t have the possibility to examine and try ordered products before they have been delivered and the poor perception of the characteristics of the products create incentives for the customer to return parts of the delivery after inspection since the products might not meet the expectations. It was also clear that the customers who returned the most products also spent the most in a long-term perspective.

3.3.1.1 RETURN FEE

Product returns are an expensive issue for online retailers and return policies are set up to affect the use of the return opportunity. An often used policy by retailers is the equity-based policy, saying that the company pays if they are to blame for the return and otherwise the customer pays. This policy is considered to be a fair agreement for both retailer and customer. However, recent research has showed that the free return option in either case increases customer satisfaction, word of mouth, commitment and repurchase intentions which increases the incentive for the seller to bear the cost of returns (Bower and Maxham, 2012). The research made by Bower and Maxham (2012) shows that customers paying for their product returns are less likely to repurchase. The fee condition caused a decrease in post return spending by around 90% while a free condition gave rise to an increase of up to 4 times more spent in 24 months (Bower and Maxham, 2012). This result contradicts the economic research suggesting that retailers should toughen their online shipping and return policies. Offering free returns seem to be the winning long-term policy according to recent research.
3.3.1.2 Acceptance Guidelines

Customer returns belong to the category of returns for which it is very important to establish acceptance guidelines. These guidelines determine whether a return should be accepted or not. The decision of acceptance is often based on if the return is made within the timeframe for right of withdrawal, if the product is defective or if there are any sign of wear from use.

The requirements of acceptance differ considerably between different industries but also between different companies. The customer always has 14 days right to withdraw in distance contracts, i.e., where the agreement was concluded outside the company’s premises. The company is according to law obliged to inform the customer about exceptions when the right of withdrawal does not apply. The right of withdrawal does not apply to a number of products, for example products that have been sealed of health or hygiene reasons and the seal has been broken by the consumer (Hallå Konsument, 2015).

The apparel industry has a larger need to accept returns with signs of use than other industries, due to the need to try the product. This generates a cost of refurbishment that other industries in a higher extent can avoid through dismissing of returns. Acceptance of returns is however one way to create customer satisfaction and therefore has its advantages.
3.3.2 Reverse Logistics

In 1999 Rogers et al. defined reverse logistics to be all activities contributing to the movement of products from the point of consumption towards the point of origin (Rogers & Tibben-Lembke, 1999). That includes both the process of planning, implementing and recapturing or creating value from the returned goods. Reverse logistics is important both from an environmental and value reclamation point of view and the positive effects of are considered to be many; customer satisfaction, decreased resource investment levels and reductions in storage and distribution costs. The volume of the business has been identified as a key driver of reverse logistics strategies and companies dealing with economies of scale can benefit especially well from reverse logistics. As an increasing number of companies offer lenient return policies to increase customer satisfaction reverse logistics is no longer an optional activity (Chad, Patricia, Daugherty & Richey, 2001).

3.3.2.1 The Reverse Flow

The flow of reverse logistics is very different from the forward flow since it is much more reactive than the forward logistics (Rogers & Tibben-Lembke, 2002). The reverse logistics is a result of customers’ actions and therefore less visible. It is not a consequence of planning or decision making, which makes the uncertainty higher (Guide et al., 2000). There is however a connection between forward and reverse logistics. When the sales and the forward logistics increase, the returns and the reverse logistics also increase after a certain time lag (Rogers & Tibben-Lembke, 2002). This relationship can be used to forecast the amount of returns and thereby the resource consumption in the area of returns handling at a future date.

3.3.2.2 Barriers to Effective Reverse Logistics

Even though returns management has turned out to be an important tool in many industries, there are barriers to execute reverse logistics (Rogers & Tibben-Lembke, 2001). The main barrier is its importance relative to other issues. Processing returns does not generate revenue directly after handling in contrast to for example processing new orders and it is therefore often down prioritized. This tactic ignores the fact that not processing returns effectively is a cost in itself since the value of the product will decline the more it has to wait.
The second most commonly cited barrier is that the companies’ strategies prevent them from executing effective reverse logistics. This could for example be caused by a policy saying that all returned items should be destroyed since the cost of handling them exceeds the value of reselling them (Rogers & Tibben-Lembke, 2001).

The third most important barrier is the lack of reverse logistics information systems. The information systems are commonly stretched to their maximum and the queue for new applications is often long, why more revenue generating issues are prioritized (Rogers & Tibben-Lembke, 2001).

3.3.2.3 Different structures of the returns network

Reverse logistics is highly industry-specific with tailored solutions to fit the specific industry and the customers’ requirements (Chad et al., 2001). It can be handled either internally or externally by a third party. Handling the returns internally allows the company to keep control over the process while it also requires internal capabilities and expertise. A third party can seem better suited to handle the reverse logistics due to prior experience and greater volumes allowing economies of scale. However, this requires close cooperation between the parties to ensure both effectiveness and efficiency (Chad et al., 2001).

The flow of reverse logistics can take two paths, either through a distributor or by returning the products in store. Both alternatives include a plurality of approaches and which one to use depends entirely on the company's returns policy. If a distributor sends a return back to the supplier, the destination of the product can either be a distribution centre (DC) or a centralized return centre (CRC). The DCs are commonly used only for forward logistics but can also be used in reverse logistics to handle returns as well (Rogers & Tibben-Lembke, 2002). There are however often a great temptation to focus the resources in the DC on the forward logistics since this is more strongly connected to the stream of revenue. If the product instead is sent directly to a CRC the risk of down prioritization is eliminated and it becomes easier to guarantee that the returns will be handled within an approved time frame.

For unwanted items that are returned in store there are a few different options. The two main approaches of returns in store is either that the returned items are collected on so called milk-runs or that the returned items are displayed for
sale in store (Rogers & Tibben-Lembke, 2002). If the returned item is not to be sold in store, the store collects the item and sends them to either DC or CRC with trucks making “milk-runs”, that is going from store to store, always in the same order.

### 3.3.2.4 Reasons for Returns

As described in the definition, reverse logistics can involve a wide range of activities (Rogers & Tibben-Lembke, 2001). What activities that are involved in the processes depend on the reason for the product being in the return flow. The reasons why a return occurs are many and does not only depend on the product characteristics but also on its position in the supply chain. The return flow can be divided into five categories according to Rogers, Croxton, Garcia-Dastugue and Lambert (2002); asset returns, customer returns, environmental returns, marketing returns and product recalls. The position in the supply chain and the characteristics of the return determine if the product is sellable on the secondary market.

Asset returns consist of the recapture and repositioning of an asset. These are often products that the company asks the customer to return, such as expensive packaging or equipment that is to be used again (Rogers, Croxton, Garcia-Dastugue & Lambert, 2002). These products are often used by the company itself but could also be sold for recycling or energy recovery.

Customer returns are the returns that normally stand for the largest part of the total amount of returns and arise when the end customer returns the product to the supplier because of remorse of the purchase or a defective product. However, the customer returns percentage varies considerably between different industries since it depends on how easy it is to create a fair idea of the product via the Internet (Rogers et al., 2002). In the catalogue sales and e-commerce of apparel the rate of returns is 35-50% (Rogers & Tibben-Lembke, 1999). The secondary market of customer returns is large and includes among others brokers, outlets and charity.

Environmental returns are returns caused by for example hazardous materials used in the product. These differ from other returns since they often depend on political directives or regulations. In the EU, the disposal of this kind of products is the producer’s responsibility (Rogers et al., 2002). Since these
products are taken off the market due to hazardous effects the opportunities on the secondary are market limited.

Marketing returns are often caused by low sale rates. This means that the product is returned from a position forward in the supply chain and does not include the customer. This type of returns could also be relevant after upgrades of the product (Rogers et al., 2002). Even if these products didn’t get sold, they might contain parts that are suitable to be used in new products or consist of material appropriate for recycling and therefore contribute to value-recovery.

The last category, product recalls, are normally caused by safety or quality issues. These can either be initiated by the government or by the company itself (Rogers et al., 2002). What secondary markets that are appropriate for these products are highly affected by the reason of the recall. National regulations differ widely and products stopped in one market might be sellable in another. These products might also be suitable for charity or recycling.

3.3.2.5 Gatekeeping

Gatekeeping is the screening process in which a company decides which products enter the return flow and how (Mollenkopf, 2010). A company that works effectively with gatekeeping realises that not all returns should be handled in the same way, but that the reason for the return can act as a gatekeeper early in the return process to guide different types of returns to different end-stations. Generally, when the cost for the company is larger than the value of the product, it is more cost effective to credit the customer but not require that the product be returned. These products, which are unprofitable to send into the return flow, are called “unwanted” returns. To proactively avoid unwanted returns, the gatekeeping process aims to ensure that only products that fulfil predetermined requirement, often based on future market value, are accepted into the reverse flow. Another aim is to make sure that the products that are sent upstream in the flow are guided to the correct point (Hjort, 2010).

The need for gatekeeping is based, in large part, on the fact that every transport of a product between a customer and a supplier is a cost, either for the customer, for the company, or for both parties. A returned product generates a second transportation and if the customer wants to exchange the returned product for another one a total of three transportations, and three
transportation charges, have been made to deliver the final product to the customer. In addition to transportation costs, every returned product that makes its way back to the company or supplier is an expense for the company as costs for handling activities, warehouse space etc. are incurred. To be able to reduce these costs it is of high importance to make disposition decisions early in the return process, as there is a level of time-sensitivity for most returned products (Mollenkopf et al., 2007). Returned products without a defect need to be re-inserted into the downstream flow to be sold again as soon as possible to ensure that the market value doesn’t decline too much and unwanted returns need to be avoided. Since the distance between company and customer is greater in e-commerce, disposition decisions and gatekeeping are particularly important for these types of supply chains (Hjort, 2010).

3.3.2.6 Avoidance

Avoidance can be defined as any processes that might influence returns (Hjort, 2010) and develop a “sell-right, not more” approach (Mollenkopf, 2010). It can thus consist of many different activities that in different ways use information to proactively avoid future returns. In relation to gatekeeping, avoidance is applied throughout the organisations work with the product, including the development phase and the selling phase and not only after the product has been sold. Gatekeeping can be viewed as a way to improve the efficiency of a company whereas avoidance can be viewed as a way to improve effectiveness of a company (Hjort, 2010). Since avoidance is accomplished before the sale of the product has been made, it is not a part of reverse logistics. To some extent, this is what separates reverse logistics from returns management, where all activities and processes are taken into considerations to improve the return process.

Customer returns, which are the largest part of returns, are to a high extent uncontrollable, which leads them to often be referred to as unavoidable returns (Rogers & Tibben-Lembke, 2001). There are however opportunities for improvements that leads to a decrease in customer returns and avoidance can include activities such as improved quality, better information about the product such as improved product descriptions, size-guides and fair photos and better service (Hjort, 2010). By applying avoidance a company can resolve many of the gatekeeping issues and thus control costs better (Mollenkopf, 2010).
3.3.2.7 **Pre-registered returns**

Pre-registered returns can be used for multiple purposes but with the common goal of increasing efficiency and decreasing the costs of the return process. It works as a gatekeeping activity, sorting out unwanted returns from the returns flow (Hjort, 2013). By asking the customer to pre-register the returns online the company acquires the necessary information to direct the returns to the right end-location. Pre-registered returns also work as a way to plan for future action as it enables the company to sell on incoming returns (Hjort, 2013). This makes it easier for the purchase department to plan orders of new products and to reduce the cost of products in stock.

The use of pre-registered returns can also generate timesaving in the handling of returns at the DC. Letting the customer enter information about the return early in the return process takes away one of the tasks that traditionally would be executed at the DC.

Pre-registered returns can also potentially initiate additional sales from returns. In a previous study made at The Company the effect of potential additional sales from pre-registration was estimated. In the worst case set up in the study it was assumed that pre-registration would increase the total amount of exchange orders with 10%. In the best case however the total amount of exchange orders would increase by 20%. The study showed that the net sales in Germany would increase by 144.3 million SEK in the worst-case scenario and by 467 million SEK in the best-case scenario. The corresponding numbers for the UK was 6.5 million SEK in the worst-case scenario and 22.6 million SEK in the best-case scenario.

---

3.4 Customer satisfaction and customer service

As the e-commerce industry grows so does the competition. The number of B2C websites in Europe increases with 15-20% per year and the total sales in e-commerce are expected to increase by an average of 9% per year until 2017 (European travel commission, 2015). This means that the number of actors on the market increases faster than the consumer demand, creating a greater need for companies to gain competitive advantages to attract new customers as well as retaining existing customers (Fang, 2014). One way to differentiate towards customers and achieve higher customer satisfaction is through customer service.

Customer satisfaction happens when a business successfully fulfils the customer’s expectation of a product or service (Hjort, 2010). This in turn leads to customer loyalty and trust, which is a key factor in retaining existing customers and attaining their future business (Fang, 2014). The fundamental factor is thus how to manage customer expectation, which is the factor on which the customer makes their decision to purchase a product or not. It is important that companies work towards an alignment between different areas of business to ensure that the customers experience matches their expectation. As companies evolve their businesses to include more platforms, such as e-commerce and m-commerce with a multi-channel approach, there is a whole new set of expectations to take into consideration. It is critical that companies applies a multi-channel strategy so that the online experience matches the offline experience to provide a consistent image to the customer about the company’s brand. All channels of support, phone, email, chat etc. needs to send the same message to customers to create a successful strategy (Binder, 2014).
3.5 Aspects of CS in Returns Handling

Returns might represent a failure to live up to the customer’s expectations. How a company handles returns is therefore a way for them to improve customer relationships. By working with customers to resolve issues created by dissatisfaction with a product, a company can improve a customer’s loyalty to the firm (Mollekopf, 2010).

One way to work with the customer is to find out the reason for the return. If a customer returns a defective product, this can draw attention to a quality problem that the company has missed (Mollekopf, 2010). A product that is returned with no indication of a defect implies instead that it did not live up to the customer’s expectations and that the company has reason to improve their communication of the product to the customer. By learning about the reasons for the returns a company has better chances of reducing their returns in the future and thus improving their customer satisfaction at the same time as reducing costs by avoiding returns.
3.6 Legislation

Laws and regulations regarding the customers’ rights are constantly evolving, often in favour of the customer. The EU regulates the market of e-commerce where the directive on electronic commerce (EUR-lex, 2000) and the directive on consumer rights (EUR-lex, 2011) are central. The directive on electronic commerce aims to provide freedom of trade within the union. It sets up an Internal Market framework for electronic commerce, which provides legal certainty for business and consumers alike (EUR-lex, 2000). The directive of consumer rights will guarantee a high level of consumer protection in the EU. It will guarantee consumers fair treatment, products which meet acceptable standards and a right of redress if something goes wrong. The directive of consumer rights from 2011 was revised in 2014. One of the main results from this revision was that the time for the customer to pull out from an online purchase was changed from 7 to 14 days. The trader must also reimburse the customer within 14 days of cancellation and if the traders want the customer to pay for the return are they obliged to inform the consumer beforehand (EUR-lex, 2011).

The directives set up a minimum limit for the member countries domestic legislation. On this basis, it is up to each country to make their own interpretations of the directives, which means that some countries will have tighter regulations than others. In Germany and Finland the customer is allowed to return whatever they have purchased free of charge which means that the seller is not allowed to charge any return freight cost (Hjort, 2013). In UK does no such interpretation exist but this is anyhow a normal procedure on the British market. The directive on consumer rights makes it evident that the legislation can be a strong driver of return policies and also that the circumstances for players in e-commerce may vary significantly in different countries despite the common EU directives.
4 Case description

The Company is one of the market leaders in the European fashion industry as well as being a very well known brand. They operate on 57 markets through physical stores and on 13 markets through their online channel, including Germany since 2007 and the UK since 2010. The expectations on a fashion apparel retailer as well as customers’ return behaviour differ on different markets and The Company needs to constantly evolve and develop their offer to stay competitive. The Company operates under the policy to always adapt to the specific market in terms of how products get delivered to and from customers and under what conditions. This section will describe the offer of online shopping and returning at The Company for the German and British markets.

4.1 Delivery

When placing an order from The Company’s online shop there is an additional delivery cost for the customer. For German customers there is a delivery cost of 4.90 € and for British customers the delivery cost is £3.90. This cost is the same regardless of the size or weight of the parcel but the value of the order must exceed 7.00 € to be processed for the German market and £6.00 for the British market.

Larger parcels are delivered through the courier Hermes to the customers delivery address. Smaller parcels are delivered by DHL to a post office for the customer to collect. The expected delivery time is 3-5 working days on both markets.

---

### 4.2 Payment options

The Company offers different payment options to comply with the different needs of the customers (See Figure 6). In the UK there are four different payment options: card payment or one of three credit options: payment slip in parcel (PSIP), monthly invoice or monthly instalments. In Germany there is also the option of paying in cash on delivery (COD) with an extra fee of 6€³.

**Table: Payment Options**

<table>
<thead>
<tr>
<th>Payment Option</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly instalments</td>
<td>• Possibility to split payments over 11-13 months</td>
</tr>
<tr>
<td>Monthly invoice</td>
<td>• All purchases and eventual returns on one invoice to be paid next month&lt;br&gt;• Extra fee of £ 1.25 in the UK and 1 € in Germany</td>
</tr>
<tr>
<td>COD</td>
<td>• Only available in Germany&lt;br&gt;• Extra fee of 6 €</td>
</tr>
<tr>
<td>Credit card</td>
<td>• Card is debited when the order is dispatched&lt;br&gt;• No extra fee</td>
</tr>
<tr>
<td>PSIP</td>
<td>• Pay within 20 days in the UK, 14 days in Germany&lt;br&gt;• No extra fee</td>
</tr>
</tbody>
</table>

**Figure 6. Payment options**

³ Urhed, A.
How customers choose to pay differs a lot on the different markets (See Figure 7). Most of The Company’s customers in the UK, 59% in 2013, pay with card when they place an order online as opposed to the German customers where the corresponding number is as low as 3%. The trend on the German market is instead to pay by credit. The two payment options, invoice and payslip in parcel summed up to 81% in 2013⁴.

**Figure 7. Distribution of Payment options**

The terms for paying with payment slip in parcel is 20 days in the UK and 14 days in Germany. The monthly invoice gives customers the option to add all purchases and possible returns to one invoice in the middle of the following month. This gives the customer up to 45 days to make their payment for an additional fee of £1.25 in the UK and 1 € in Germany⁵.

---

⁵ Urhed, A.
The choice of payment method has a noticeable effect on the return rate (See Figure 8). Customers who pay with card return items to a lesser extent than customers who pay by credit. As much as 53% of German customers who use an invoice or payment slip in parcel, return something from their order\textsuperscript{6}.

\textbf{Figure 8. Returns by payment option}

\textsuperscript{6} Roberts, O. (a), Sales Analyst online division at The Company, Internal document: ”Helena & Linette”, 2015-03-04.
4.3 Returns

Returns are free on both markets, regardless if the customer chooses to return traditionally via post to DC or in store. The reason for the free return is however different as free returns are regulated by law in Germany whereas The Company’s policy of free returns in the UK is a choice to comply with market standard\(^7\). After receiving the order, customers have 28 days to return any items they do not wish to keep\(^8\).

Almost 90\% of the German customers have sometime returned something that they have bought in The Company’s online shop. The corresponding number for the British customers is approximately 60\%. A survey made in December of 2013 showed that 13\% of the German customers and 20\% of the British customers are dissatisfied with the return experience\(^9\).

4.3.1 Traditional Returns, TR

Depending on whether the parcel was delivered by DHL or through the courier Hermes there are two different ways to return a parcel by post. On both markets, smaller packages that were delivered by DHL need to be sent through a post office\(^10\).

German customers whose parcel was delivered by Hermes can either call The Company’s customer service to arrange a free pick-up by the courier or drop of the parcel at the courier’s pick-up point\(^11\).

Hermes doesn’t have any pick-up point in the UK. To still offer the customer the choice between pick-up and drop off all parcels delivered by Hermes in the UK contains two return labels, one that is valid for Hermes and one that is valid for DHL. This gives the customer the possibility to choose whether to

---

\(^7\) Roberts, O. (b), Sales Analyst online division at The Company, Interview, 2015-02-23.
\(^8\) Urhed, A.
\(^11\) Fransson, E.
call The Company’s customer service and arrange a pick-up or to drop the parcel off at the nearest post office\textsuperscript{12}.

Both British and German customers will receive a refund within 14 days via the same method used to pay. If the customer returns something that he/she wants to exchange to a garment of another size or colour there is no additional delivery fee\textsuperscript{13}.

4.3.1.1 ORIS – Return reason codes

When the customer returns via post they are instructed to fill out the reason for the return on the return note. There are 10 options to choose from. The customer can assign different return reasons for each item but only one reason per item\textsuperscript{14}.

The reasons available to choose from are that the item is too small, too big, not what the customer expected, that the item was faulty in some way, that the shape or colour changed after washing the item or that The Company delivered the wrong item to the customer or didn’t include the item in the delivery at all.

4.3.1.2 Online returns in store, ORIS

Both German and British customers can return items purchased from The Company’s online channel in store. The policy of online returns in store (ORIS) is the same for both markets: the customer can return their items to any store for a full refund\textsuperscript{15}. The customer needs to bring the delivery note to the store as a receipt.

A survey made during the first half of 2015 showed that only 68% of The Company’s British online shoppers were aware of the option to return to store\textsuperscript{16}. ORIS is a market standard on the British market and established competitors offering the service has a share of ORIS that exceeds 50% of the

\textsuperscript{12} Fransson, E.
\textsuperscript{13} Urhed, A.
\textsuperscript{14} Nilsson, S. (a), Business Architect at The Company, Email conversation, 2015-02-20.
\textsuperscript{15} Urhed, A.
total number of returns originating from online. Until late 2014 the UK had a policy where all customers who returned something in store that they had bought online received their refund to a merchandise card but as of November 2014 customers who have paid with card are instead offered a refund back to their card. The customer in the UK tends to prefer a refund to their card or in cash and a refund to a merchandise card might cause a disappointment and generate dissatisfied customers\(^\text{17}\). One fifth of the UK customers are dissatisfied with their ORIS experience\(^\text{18}\).

A German customer who chooses to return their items in store is offered a merchandise card for the same value of the returned items. On the German market ORIS is not a market standard and customers therefore accept a refund on a merchandise card to a larger extent\(^\text{19}\). In Germany 6% of the customers are dissatisfied with their ORIS experience\(^\text{20}\).

---

\(^\text{17}\) Emanuelsson, C. (a), Online Manager at The Company, Interview, 2015-05-06.
\(^\text{18}\) Tanja (b).
\(^\text{19}\) Taghavi, D. (a), Online Marketing Responsible online division at The Company, Interview, 2015-06-04.
\(^\text{20}\) Tanja (a).
5  The Company’s processes, As-Is

This chapter will constitute of the second phase of the report where the return process at The Company will be mapped and described. The goal is to understand the work process and the resource allocation by dividing the process into sub processes and identify sequences within the process that lack value-adding functions or sequences that are possible to improve. The starting point of the process is when the customer initiates a return and the end point is when reimbursement to the customer has been made and the item is available for reselling. In the following sections each activity will be described to provide a detailed view of the return process.

5.1 DELIVERY

The delivery from The Company’s DC to the customer is not a part of the return process but a brief description of this activity will still be made to give the reader a broader understanding of the process and to put these costs in relation to the cost for transporting returns.

The Company uses two delivery services to ship parcels to customers in Germany and the UK. Depending on the size and weight of the parcels The Company uses Hermes or DHL. Hermes is used for parcels sent as packages and DHL is used for parcels sent as letters\(^\text{21}\). The table below (See Table 1) presents the criteria for whether a parcel is sent as a letter or a package.

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Letter</td>
<td>Package</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>0-0,99</td>
<td>1,0+</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>0-14</td>
<td>15+</td>
</tr>
<tr>
<td>Value (SEK)</td>
<td></td>
<td>0-499</td>
</tr>
</tbody>
</table>

\(^{21}\) Holm, C. (a), Statistician online division at The Company, Email conversation, 2015-03-20.
5.2 Returns

There are many activities and costs connected to the return process for The Company. The market with the highest return rate is Germany where 44% of the items ordered online in 2014 was returned. The corresponding number for the UK was 14%. This significant amount of returns indicates that returns management can be an important part of the business strategy to optimize customer satisfaction as well as profit margin for The Company.

5.2.1 Traditional returns, TR

Traditional returns are the returns that are sent back to DC for handling. How the different activities in the DCs are run has a large effect on the return process. The time spent on activities relating to returns amount to nearly one third of the time spent at the DC and an efficient return process is a critical factor in order to create a profitable e-commerce business.

5.2.1.1 Transportation

As previously stated, The Company uses two different companies to deliver parcels to customer. How the parcels are sent back to the DC depends on how the customer chooses to return; if they arrange a pick-up by the courier Hermes, drop off at a Hermes pick-up point or drop off at a post office for the parcel to be transported back to DC by DHL.

---

22 Holm, C. (b), Statistician online division at The Company, Internal document: "Delivered and returned", 2015-02-17.
23 Klaar, Å., Logistics Controller online division at The Company, Email conversation, 2015-02-25.
24 Fransson, E.
5.2.1.2 The return process at DC\textsuperscript{25}

The Company has several DCs. The Swedish DC handles UK returns while the Polish DC handles German returns. The purpose of this process is to handle the returned items as effectively as possible and to make the returned items re-sellable in the online sales channel. The process for handling returns at DC can be divided into three main activities. The opening activity, the booking activity and the restoring activity, which in turn consists of a number of, sub activities (See Figure 9).

\textbf{Figure 9. The return process at DC}

5.2.1.2.1 The opening activity

The first step when a parcel arrives back at the DC is to receive and prepare the parcels to ease the unpacking. The shipping staff unload the packing units from the delivery truck and the packing units are placed in the incoming area. If the opening area is occupied the incoming parcels are marked by date and placed in a temporary storage area. If the opening area is available the parcels are opened and prepared for the booking activity. When the parcel has been opened is it placed in a plastic crate and transported on a conveyor belt to the booking station. Normally the customer has used a pre-paid return label and the return fee will be charged from the customer in connection with the reimbursement. If the customers have not used the pre-paid label but instead paid for the return themselves, the return staff add a notice on the return note so that the customer can be correctly charged later on.

5.2.1.2.2 The Booking Activity

The next step of the return process is to book the returned items. This process can be divided into two sub activities: one administrative activity that entails booking the return reason codes and exchange orders and one practical part that includes refreshing and repacking the products. In case of suspected customer fraud or problematic returns are the returns handled in a separate process at the back office.

The first step in the booking process is to open the order in the computer by scanning the barcode of the return note. The return reason code supplied by the customer for each item is registered in the system for possible future use in developing The Company’s work with their collections. If the customer has paid for the return or wishes to update any personal information this is also registered. A confirmation that The Company has received the return is sent automatically to the customer when the registration is finished.

If the customer has requested a new item on the return note the return staff register an exchange order. No shipping cost is added to the exchange order if the customer wants to change the size or colour of the item. If the customer however asks for a new item the order is handled as a new order.

The purpose of the third step is to determine whether the item is re-sellable or not. Sellable items that are of a desirable quality are refolded and repacked in a neat way. A new label with a barcode is printed and attached to the new packaging. The non-sellable items are sorted out and handled in a separate process.

The processes for the Swedish and the Polish DCs are assumed to be identical in all activities except for the booking activity. In Sweden one return, i.e. one parcel, is normally handled by one person. In Poland however the booking activity is divided between three people; one person who books the return reason codes and changes the order if necessary and two people who check the quality of the item, refresh it and repack it.
5.2.1.2.3 The Restoring Activity

The last activity in the process is to restore the items. The purpose of this activity is to place the returned items at a pick location in the DC. The process contains different sorting procedures depending on the item’s properties and the information specified in the barcode. Items that are deemed too small, too big, very hard or heavy, fragile or items that roll on the conveyor belt must be sorted out and handled manually. The rest of the items are placed on a conveyor and automatically pre-sorted by a scanner reading the barcodes attached to the item.

The barcode gives information about the warehouse location for that specific item. The items are transported to different numbered chutes where a pick trolley is placed for the next step in the process. From the chutes the items are manually sorted into a pick trolley, which is divided into a number of compartments with specific numbers. The label attached to the item’s packaging gives information about where in the trolley to place the item. The compartment in the trolley where the item is placed is determined to make the refill activity as systematic and effective as possible. Finally the staff use the trolley to refill the pick location with the returned items after which the items are available to be collected for a new order.

5.2.1.3 Discarded Items

The booking activity at the DC includes a quality check of the items that have been returned. If the item is defective or unsellable for any reason, it is discarded\(^{26}\). Items can also be discarded based on lack of storage. To keep up with the demand for storage space for the new products that are added to The Company’s collection every week there is an on-going activity of making sure that items that are low in stock and will not be restocked are cleared from the storage facilities. This is often achieved through lowering the price of the specific product and adding it to the sale\(^{27}\). Eventually, the items that have not been sold is taken out of the stock and sorted as discarded. The discarded items amount to 4% of the returned items\(^{28}\).

\(^{26}\) Bengtsson, K., Surplus Controller online division at The Company, Interview, 2015-02-23.
\(^{27}\) Bengtsson, K.
\(^{28}\) Klaar, Å.
5.2.1.4 Unclaimed parcels

An unclaimed parcel is a parcel that is not collected by the customer and that is therefore sent back to DC without being opened. The customer has 14 days to collect their parcel and these 14 days are an obvious bottleneck for the flow of products. Uncollected parcels are therefore an interesting factor to take into consideration when analysing the return process, as the lead-time for items included in an unclaimed parcel in average is longer than that of a regular return. The unclaimed parcels on the German and the British markets were 3.6% and 4.2% respectively in 2014\textsuperscript{29}.

When unclaimed parcels are received at the DC they are separated from the other returns to be handled differently in the booking activity. When the barcode of the return note of an unclaimed parcel is scanned the belonging items are automatically added to the stock. The packaging material of items from an unclaimed parcel is normally undamaged and doesn’t need to be examined and repacked so the items can be restored directly\textsuperscript{30}.

The EU consumer rights directive requires The Company to repay the amount that the customer has paid if the customer regrets the purchase. The only fee The Company is allowed to charge is the cost of return freight (Hallå Konsument, 2015). Many companies however offer a lenient return policy and do not charge the customer.

\textsuperscript{29} Roberts, O. (c), Sales Analyst online division at The Company, Internal document: “Return reason codes pieces”, 2015-03-04.
\textsuperscript{30} Nilsson, S. (b).
5.2.2 Online returns in store

In both Germany and the UK The Company offers the customers the option to return items they have bought online in store. Online returns in store (ORIS) is market standard in the UK while it in Germany can be considered as quite a unique offer\(^{31}\). In Germany the ORIS amounted to 2.6% of the total returns in store in 2014 and in the UK the corresponding number was 4.4%\(^{32}\). This section will give an understanding of how the ORIS process works and what activities support it.

5.2.2.1 Transfers between stores

The Company has a number of different collections that focuses on different target groups. The vast amount of products that this entails means that it is impossible for every store to carry The Company's entire range of products. To be able to still offer customers the option to return items from any collection to every store there is a system in place to transfer items between stores in the UK. Depending on the amount of returns there are scheduled transfers on a regular basis to make sure that each store can keep a uniform selection that is suitable for their range\(^{33}\). However, this transfer system does not exist in Germany where transfers are made solely in specific cases with men's garments that are returned in a store that only carries women’s collections etc. since these items would not be sellable otherwise\(^{34}\).

\(^{31}\) Taghavi, D.


\(^{33}\) Emanuelsson, C. (b).

\(^{34}\) Taghavi, D.
The guidelines for handling ORIS are to handle these returns in the same way as regular store returns. The process for ORIS differs on different markets because of different customer expectations as well as the difference in customer behaviour, especially regarding payment method.

The ORIS-process is intended to follow the following structure (See Figure 10).

**Figure 10. The ORIS process**

As the model shows the main factor that determines how to handle the return is which payment method the customer chose when they made the order. In the UK the majority of the orders, 59%, are made with card whereas 97% of the German orders are paid with credit.

The first step of an ORIS is that the customer initiates a return by bringing an item to the store along with the delivery note. The delivery note is needed because staff need to be able to check the returned items against a receipt. If the customer does not have the delivery note with them a store manager can call the customer service team to retrieve the necessary information about the online order. When the delivery note is presented staff checks the date on the note to make sure that it has not been more than 28 days since the order was

---

35 Emanuelsson, C., (a).
37 Andersson, T.
placed. If there is any incorrect or missing information a manager must make a decision about how to proceed.

The second step in the process is that the staff check the items that are to be returned against the delivery note. Size, description and order number on the Kimball or washing label must match between the item and the delivery note to make sure that the correct item is being returned. The staff then cross out the returned item from the delivery note and scan the barcode on the delivery note.

The third step of the process is to check the payment method. If the customer paid with card then the same card must be brought to store if the customer wants to get a refund to their card. Staff validate the card against the delivery note by checking that the card details matches.

If the customer paid by credit they get a refund to a merchandise card that will be able to be used in a store at a later date. If customers who have paid by credit want a full refund to their bank account they will have to send the item back to DC.

The next step is to give the delivery note back to the customer. The customer is always given back the delivery note as a receipt, even if all items on it has been crossed out. A manager needs to approve the return if it has a value of more than 50 GBP\textsuperscript{38}. Items that are delivered from the online DC doesn’t have a price on them so when the return has been finalized staff writes the price on the kimball with a pen so that the item can be put out on the shop floor to be sold again.

\textsuperscript{38} Emanuelsson, C., (c), Online Manager at The Company, Email conversation, 2015-05-27.
There are several situations when the staff have to deviate from this fundamental process to be able to handle more difficult situations. One of these situations is when a customer wants to return an online-unique item that only is sold in the online shop and not in store. These products are not registered in the store’s system and therefore needs to be handled manually by a manager.

Other special cases are when the customer wants to return a faulty item. When this happens on the German market, the policy is to give the customer a full refund to a merchandise card except in the cases where the customer paid with a card, then the refund will be made to that card\textsuperscript{40}. In the UK The Company need to comply with a law that states that the customer has a right to either get a refund to their card if that was their payment method, or to get a refund in cash, if they paid by credit. When the customer wants to return a faulty item the law also states that no proof of purchase is required and therefore the customer can make this return without the delivery note.

The transfer system also plays a part in the ORIS-process. Just as returns generated from purchases in store, the ORIS are sorted based on which collection they belong to and, if need be, transferred to the appropriate store. The one exception is online unique products where the store that receives the return needs to find a way to sell that product the best way they can.

\textsuperscript{39} Emanuelsson, C., (a).
\textsuperscript{40} Taghavi, D. (b), Online Marketing Responsible online division at The Company, Email conversation, 2015-06-11.
5.3 Reimbursement to customer

The Company offers a wide range of payment methods: card payment, monthly invoice, monthly instalments, payment slip in parcel (PSIP) and cash on delivery (COD). The different payment methods require different handling at the back office to reimburse the customer.

There are three main ways to refund the customer depending on what payment method was used. The first alternative is a refund to the customer’s card. This is normally done automatically by the computer system and therefore requires little manual handling. The refund to card is made if the customer used card as payment method. The second alternative is used when the customer has paid with either bank account or invoice and is a refund to the customer account at The Company. This means that a credit note is saved on the customer’s account, which can be used for future payment. The last alternative is a refund to the customer’s bank. This alternative is used if the customer paid with PSIP or COD.\footnote{Martinsson, G., Responsible accounting online division at The Company, Interview, 2015-05-22.}
5.4 CUSTOMER SERVICE

A large share of incoming calls to customer service (CS) in the UK, approximately 30%, concern returns. Of these, 57% are made to get help with booking a pick-up of return with the courier Hermes\textsuperscript{42}. In Germany only 12% of the CS errands concern returns\textsuperscript{43}. The big difference is caused by customer behaviour on the two markets. The German customer prefer to leave the parcel at a local pick-up point while the British customer to a higher extent arranges pick-up at their house.

Customers are in general satisfied with the CS at The Company. During the first two months in 2015, more than 85% of the customers in UK stated that they were satisfied\textsuperscript{44}. The corresponding number for German customers is nearly the same, 84%\textsuperscript{45}.

\textsuperscript{44} Berntsson, H. (a).
\textsuperscript{45} Berntsson, H. (b).
5.5 Vouchers

Two of the return reason codes at The Company entails that the customer has been mistreated and should be compensated. The customer is then compensated with a voucher with a value of £5 in the UK and 5€ in Germany. The handling of the voucher varies depending on whether the customer has placed an exchange order or asks to receive the money back. The voucher will be printed on the delivery note and sent with the order if the customer has placed an exchange order. The Company will however have to handle the voucher separately if the customer asks for their money back. An agent in the booking activity will register the return reason code and send a print order to the back-office. CS in Sweden owns the right to distribute vouchers to the whole Joshua market, including Germany and the UK. The vouchers are printed and manually placed in an envelope to be sent by post. The voucher has a discount code that is connected to the customer’s ID. The voucher is consequently personal and has its expiry date one year after the printout.

---

47 Joshua market refers to the market of Austria, Denmark, Finland, Germany, Holland, United Kingdom, Norway, Sweden and the United States.
6 Calculations

This chapter is the final part of the second phase in the project and constitutes of the total cost analysis, TCA. This section aims to underpin all calculations made in the total cost analysis of the return process at The Company, both in store and in the DC, on the British and German markets. The total cost of returns on the two markets will be calculated separately but in parallel to facilitate the comparison. The total cost analysis of the return process at DC and the return process of online returns in store will initially be handled separately but later set in relation to each other.

6.1 Total cost analysis, return process at DC

The number of delivered- and returned items has increased constantly on both markets during the last three years. The relationship between delivered and returned has remained almost constant with a return rate of approximately 43% in Germany and 14% in the UK\(^48\). The return rate in 2014 for both markets are presented in Table 2 and Table 3 below:

**Table 2. Delivered and returned in Germany**

<table>
<thead>
<tr>
<th>Delivered &amp; returned</th>
<th>Return rate</th>
<th>Germany</th>
<th>Delivered</th>
<th>Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>43%</td>
<td>82 750 276</td>
<td>35 727 645</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>43%</td>
<td>89 818 821</td>
<td>38 710 919</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>44%</td>
<td>102 731 037</td>
<td>45 113 447</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3. Delivered and returned in the UK**

<table>
<thead>
<tr>
<th>Delivered &amp; returned</th>
<th>Return rate</th>
<th>UK</th>
<th>Delivered</th>
<th>Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>15%</td>
<td>8 769 089</td>
<td>1 308 754</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>14%</td>
<td>9 370 582</td>
<td>1 289 850</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>15%</td>
<td>10 784 990</td>
<td>1 561 875</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in the tables above the German market is approximately ten times the size of the British market. There is also an obvious difference in return behaviour on the two markets; the German customer returns almost 3 times as much as the British customer.

\(^{48}\) Holm, C. (b).
The TCA (total cost analysis) of the return process at DC will consist of five cost centres that have been identified in the returns process at The Company: transportation costs, warehouse costs, customer service costs, administrative costs and material costs (See Figure 11).

**Figure 11. Cost centre included in the TCA at DC**

These costs were identified by using the process mapping framework, previously described in Chapter 2.2. What information that has been included depends on the numbers provided by The Company. This means that The Company has set up the frames for the TCA.

Each of the five cost centres will first be accounted for separately and finally aggregated to calculate the total cost and the cost per item. The TCA is based on numbers collected by The Company in 2014. The same numbers have also been gathered for 2012-2013 to make sure that the numbers of 2014 gives a fair representation of the circumstances. All calculations made are based on the unit of items and Swedish crowns, SEK (unless otherwise specified). All numbers presented below originates from the year of 2014 unless otherwise stated.

The exchange rates used have been retrieved from the central bank of Sweden 2015-05-08, 12:24 (Riksbanken, 2015) and is presented in Table 4 below:

**Table 4. Exchange rates**

<table>
<thead>
<tr>
<th></th>
<th>EUR</th>
<th>£</th>
<th>PLN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1,00 €</td>
<td>9,10 kr</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>1,00</td>
<td>11,29 kr</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>1 PLN</td>
<td>2,17 kr</td>
<td></td>
</tr>
</tbody>
</table>
6.1.1 Transportation costs

The cost of transportation normally represents the largest cost centre in a TCA of a logistics system. Transportation costs usually include costs from both administrative work connected to the transportations and the actual transports. In this TCA only the cost of actual performance of the transport is included since the administrative costs connected to returns have not been possible to distinguish from the transportation costs in general.

The transportation costs for The Company to ship to and from the UK and Germany depend on the contract set up with the two distributors that operate on both markets; Hermes and DHL. The contracts with Hermes and DHL are based on an agreement with a fixed cost of each delivery and return on both markets. Whether the unit is distributed with Hermes or DHL is determined by the weight and height of the parcel. If the parcel is larger and heavier it is sent in a carton as a package with Hermes and if it is smaller and weighs less it is sent in a plastic bag as a letter with DHL.

Delivering with DHL to the UK constitutes 36% of the orders and costs 28.23 SEK. With Hermes the cost is 37.39 SEK per package. The corresponding costs for Germany are 15.37 SEK with DHL which constitutes of 22% of the orders and 20.47 SEK with Hermes\(^\text{49}\) (See Figure 12).

\[\text{Figure 12. Share of transportation per distributor and market}\]

\(^{49}\) Holm, C. (a).
The pricing of returns set up by the agreement is shown in Table 5 below and differs from the pricing of deliveries:

**Table 5. Transportation cost per parcel**

<table>
<thead>
<tr>
<th>(SEK)</th>
<th>Germany Delivery</th>
<th>Germany Return</th>
<th>UK Delivery</th>
<th>UK Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHL/Letters</td>
<td>15,37</td>
<td>22,29</td>
<td>28,23</td>
<td>28,23</td>
</tr>
<tr>
<td>Hermes/Package</td>
<td>20,47</td>
<td>20,47</td>
<td>37,39</td>
<td>37,39</td>
</tr>
</tbody>
</table>

As can be seen in the table above, both deliveries and returns are less expensive in Germany. The quite obvious differences might depend on the more complicated transportation process between Sweden and the UK. All units being shipped either to or from the UK must be carried by either boat or airplane, which are means of transportation that are considerably more expensive than truck.

The table below compiles the total cost of transportation of returns on both markets. Note that the majority of parcels are sent as letters in the UK whilst in Germany the larger part is sent as packages (See Table 6).

**Table 6. Total transportation costs of returns**

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nbr of returned parcels</td>
<td>10 540 525,00</td>
<td>589 386,79</td>
</tr>
<tr>
<td>Share of letters</td>
<td>0,04</td>
<td>0,57</td>
</tr>
<tr>
<td>Cost per letter (SEK)</td>
<td>22,29</td>
<td>28,23</td>
</tr>
<tr>
<td>Cost of letters (SEK)</td>
<td>9 396 734,69</td>
<td>9 483 629,85</td>
</tr>
<tr>
<td>Share of packages</td>
<td>0,96</td>
<td>0,43</td>
</tr>
<tr>
<td>Cost per package (SEK)</td>
<td>20,47</td>
<td>37,39</td>
</tr>
<tr>
<td>Cost of packages (SEK)</td>
<td>207 111 703,29</td>
<td>9 475 438,64</td>
</tr>
<tr>
<td>Total cost (SEK)</td>
<td>216 508 437,98</td>
<td>18 959 068,49</td>
</tr>
<tr>
<td>Average Cost per piece (SEK)</td>
<td>4,80</td>
<td>12,14</td>
</tr>
</tbody>
</table>

There is a considerable difference in transportation cost per returned piece. The cost for the German market is 4,80 SEK and for the British market it is 12,14 SEK. The great difference between delivery cost and return cost in Germany causes returns to account for as much as 42% of the total

---

50 Fransson, E.
transportation costs in Germany. The corresponding number for the UK is only 18% as shown in Table 7 below:

**Table 7. Share of returns on total transportation cost**

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Cost/Piece</td>
</tr>
<tr>
<td>Cost of delivery (SEK)</td>
<td>295 421 225,90</td>
<td>2,88</td>
</tr>
<tr>
<td>Cost of returns (SEK)</td>
<td>216 508 437,98</td>
<td>4,80</td>
</tr>
<tr>
<td>Total transportation costs</td>
<td>511 929 663,88</td>
<td>7,67</td>
</tr>
<tr>
<td>Share of returns:</td>
<td>42%</td>
<td>63%</td>
</tr>
</tbody>
</table>

One conclusion regarding the transportation cost that can be made at this stage of the analysis is that the transportation cost per piece is higher in the UK than in Germany but the share of transportation costs caused by returns is considerably lower in the UK than in Germany. It is also interesting that while Hermes in both Germany and the UK and DHL in the UK offer the same price for delivery and return, DHL in Germany has a return cost that is 45% higher than the delivery cost.

As a consequence of a recent change in EU legislation\(^{51}\) online retailers are no longer allowed to charge customers for unclaimed goods. The number of unclaimed returns is low on the two relevant markets, 4.21% in the UK and 3.60% in Germany compared to for example the number of unclaimed returns in Finland which is as high as 19.90%. It is not only Finland that has a high number of unclaimed parcels, the same tendency shows in the rest of the Nordic countries, see Figure 13 below:

---

\(^{51}\) Roberts, O. (b).
Even though the number of unclaimed parcels is low in both Germany and the UK it gives rise to an unnecessary cost with no value-adding function. The cost of unclaimed parcels for the German market was more than eight million SEK while it for the British market was less than one million SEK as can be seen in Table 8.

**Table 8. Transportation cost of unclaimed parcels**

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation cost</td>
<td>216 508 437,98</td>
<td>18 959 068,49</td>
</tr>
<tr>
<td>Share of unclaimed parcels</td>
<td>3.6%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Transportation cost of unclaimed parcels</td>
<td>7 794 303,77</td>
<td>798 176,78</td>
</tr>
<tr>
<td>Cost per returned piece</td>
<td>0,17</td>
<td>0,51</td>
</tr>
</tbody>
</table>

**Figure 13. Share of unclaimed parcels per market**
6.1.2 Warehouse costs

Traditionally the warehouse costs should include all costs generated from running a DC, i.e. costs of the warehouse building, payment of warehouse workers, costs of storage and handling equipment and costs of internal transportation. In this analysis however, only labour cost of warehouse workers will be included since the assumption has been made that the other costs would exist even without returns.

The return process has been divided into three main activities: opening, booking and restoring (See Table 9). The pace of the activities varies between these activities and some are more time consuming than others. The wage cost will be calculated for each activity separately and later summarized. The work pace includes A-hours only\textsuperscript{52}, which is the time that can be directly connected to the specific activities. B-time is time spent on administrative work, manual handling and division meetings. The B-time is calculated separately and it is not possible to distinguish which of the three activities that should be burdened by this cost.

The number of working hours and the cost of working hours for the return process for the German and the British markets are presented separately in Table 9 below. The DCs are located in Poland and Sweden and it is therefore the wages of the Polish and the Swedish return staff that is used to calculate the warehouse costs.

\textsuperscript{52} Holm, C. (a).
There is a significant difference in the labour costs on the two markets. The cost per piece for the German market is almost one fifth of the cost for the UK market. It is clear that the wage is a highly influential factor on the cost of returns handling. Putting the warehouse cost in relation to the transportation cost one can see that the warehouse cost amounts to 85% of the transportation costs in the UK and 45% of the transportation costs in Germany.

The booking activity consists of two major sub activities, administrative work comprising of booking the return reason codes and exchange orders and practical work comprising of refreshing and repacking the products. One third of the time in the booking activity is spent on booking the return reason codes\(^{53}\) (See Table 10). This part of the booking procedure could be partially eliminated by pre-registered returns, which will be further discussed in Chapter 7. The cost of both phases in the booking activity is presented in Table 10 below:

---

**Table 9. Warehouse cost per market**

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nbr of pieces handled</td>
<td>45 113 447,00</td>
<td>1 561 875,00</td>
</tr>
<tr>
<td>Average wage (SEK)</td>
<td>60,00</td>
<td>276,00</td>
</tr>
<tr>
<td>A-hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pace Opening</td>
<td>354,00</td>
<td>584,00</td>
</tr>
<tr>
<td>Working hours opening</td>
<td>127 439,12</td>
<td>2 674,44</td>
</tr>
<tr>
<td>Cost opening (SEK)</td>
<td>7 645 991,90</td>
<td>738 146,40</td>
</tr>
<tr>
<td>Cost/piece opening</td>
<td>0,17</td>
<td>0,47</td>
</tr>
<tr>
<td>Pace Booking</td>
<td>45,00</td>
<td>47,20</td>
</tr>
<tr>
<td>Working hours booking</td>
<td>1 002 521,04</td>
<td>33 090,57</td>
</tr>
<tr>
<td>Cost booking (SEK)</td>
<td>60 148 469,64</td>
<td>9 132 997,88</td>
</tr>
<tr>
<td>Cost/piece booking</td>
<td>1,33</td>
<td>5,85</td>
</tr>
<tr>
<td>Pace Restoring</td>
<td>130,00</td>
<td>168,00</td>
</tr>
<tr>
<td>Working hours restoring</td>
<td>347 026,52</td>
<td>9 296,88</td>
</tr>
<tr>
<td>Cost restoring (SEK)</td>
<td>20 820 624,11</td>
<td>2 565 937,50</td>
</tr>
<tr>
<td>Cost/piece restoring</td>
<td>0,46</td>
<td>1,64</td>
</tr>
<tr>
<td>B-hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working hours others:</td>
<td>77 736,14</td>
<td>13 067,95</td>
</tr>
<tr>
<td>Cost others (SEK)</td>
<td>4 663 951,88</td>
<td>3 606 753,72</td>
</tr>
<tr>
<td>Cost/piece others</td>
<td>0,10</td>
<td>2,31</td>
</tr>
<tr>
<td>Total cost (SEK)</td>
<td>93 279 037,53</td>
<td>16 043 835,50</td>
</tr>
<tr>
<td>Cost per piece (SEK)</td>
<td>2,07</td>
<td>10,27</td>
</tr>
</tbody>
</table>

---

\(^{53}\) Klaar, Å.
<table>
<thead>
<tr>
<th>Booking</th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost</td>
<td>Cost/piece</td>
</tr>
<tr>
<td>Administrative work</td>
<td>20 049 489,88</td>
<td>0,44</td>
</tr>
<tr>
<td>Practical work</td>
<td>40 098 979,76</td>
<td>0,89</td>
</tr>
</tbody>
</table>
6.1.3 Customer Service Costs

Customer service is responsible for answering customers’ questions and solving customer issues in such a manner that the customer feels satisfied afterwards. Customers are overall satisfied with customer service on both markets but there are apparent differences in which questions that are more frequently asked. The three most frequently handled issues by CS are presented in Table 11 and Table 12 below\textsuperscript{54,55}.

Table 11. Most frequently handled CS issues in Germany

<table>
<thead>
<tr>
<th>Issue</th>
<th>Share of total nbr of errands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment</td>
<td>35%</td>
</tr>
<tr>
<td>Order</td>
<td>25%</td>
</tr>
<tr>
<td>Delivery</td>
<td>14%</td>
</tr>
</tbody>
</table>

Table 12. Most frequently handled CS issues in the UK

<table>
<thead>
<tr>
<th>Issue</th>
<th>Share of total nbr of errands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns</td>
<td>29%</td>
</tr>
<tr>
<td>Delivery</td>
<td>26%</td>
</tr>
<tr>
<td>Order</td>
<td>15%</td>
</tr>
</tbody>
</table>

CS errands concerning returns are the most frequently handled issue in the UK. In Germany errands concerning returns are not even in the top three with 10,5%. Instead errands concerning payments are highly frequent in Germany. This is a result of a payment culture in Germany where credit options are highly preferred over paying by card.

The most frequent subject in the UK is undoubtedly “booking of collection” with 57% of all calls to CS connected to returns. A customer who has received a parcel from Hermes is offered the service to get their return picked up at their delivery address. The customer needs to notify The Company about the return, which in turn books the pick-up with the courier. Table 13 and Table

\textsuperscript{54} Berntsson, H. (a).
\textsuperscript{55} Berntsson, H. (b).
14 below give a more detailed account about the distribution of errands concerning returns\textsuperscript{56,57}:

**Table 13. CS errands connected to returns in Germany**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Share of total nbr of errands</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to return</td>
<td>26%</td>
</tr>
<tr>
<td>Is my return processed</td>
<td>24%</td>
</tr>
<tr>
<td>Return note request</td>
<td>14%</td>
</tr>
</tbody>
</table>

**Table 14. CS errands connected to returns in the UK**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Share of total nbr of errands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book collection</td>
<td>58%</td>
</tr>
<tr>
<td>Is my return processed</td>
<td>15%</td>
</tr>
<tr>
<td>How to return</td>
<td>8%</td>
</tr>
</tbody>
</table>

Frequently asked questions on both markets are “Is my return processed?” and “How to return?”. This implies that there is potential for improvements in the communication with the customers. The high frequency of errands concerning “Book collection” also suggests that there are improvement opportunities. These are issues with potential for further analysis.

Customer service also handles unclear returns, for example returns that are missing information and therefore require direct customer contact to be properly managed. Unclear returns require approximately 28 hours per week in Germany and 15 hours per week in the UK\textsuperscript{58}.

The cost of CS has been calculated based on the number of hours spent on CS connected to returns and the average wage of a CS agent. The costs of CS on both markets are shown in Table 15 below:

\textsuperscript{56} Berntsson, H. (a).
\textsuperscript{57} Berntsson, H. (b).
\textsuperscript{58} Johansson, A.S., Economical responsible online division at The Company, Email conversation, 2015-06-09.
As can be seen in the table, the cost per piece in the UK is almost 26 times higher than the cost per piece in Germany. The main cause of the great difference is the high share of “Book collection” errands in the UK. This is clearly an issue where there is a lot of room for improvements. A cost of almost 3 SEK per return can have a high impact of the profitability when offering lenient returns policies. The cost for the German market is considerably lower. The highest share of CS errands in Germany, 35.1%, concerns payments. This generates a cost of more than 15 million SEK per year, which corresponds to 0.34 SEK per returned piece.

CS is an important function when working to keep customers satisfied. Therefore it is not reasonable to expect this cost to be zero. There is however always room for improvement and a clearer communication of how to return could decrease the cost of CS connected to returns.

Table 15. Total cost of customer service per market

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average wage CS</td>
<td>191.03</td>
<td>135.50</td>
</tr>
<tr>
<td>Nbr of CS errands</td>
<td>185 317,00</td>
<td>77 544,00</td>
</tr>
<tr>
<td>Hours spent on CS errands</td>
<td>222 000,00</td>
<td>99 200,00</td>
</tr>
<tr>
<td>Share of errands connected to returns</td>
<td>0,11</td>
<td>0,29</td>
</tr>
<tr>
<td>Hours spent on return errands</td>
<td>23 310,00</td>
<td>29 065,60</td>
</tr>
<tr>
<td>Cost of return errands</td>
<td>4 452 974,57</td>
<td>3 938 400,43</td>
</tr>
<tr>
<td>Cost per return</td>
<td>0,10</td>
<td>2,52</td>
</tr>
<tr>
<td>Cost of unclear returns</td>
<td>278 143,76</td>
<td>105 690,31</td>
</tr>
<tr>
<td>Cost per return</td>
<td>0,01</td>
<td>0,07</td>
</tr>
<tr>
<td>Cost of returns (SEK)</td>
<td>4 731 118,32</td>
<td>4 044 090,74</td>
</tr>
<tr>
<td>Cost/piece (SEK)</td>
<td>0,10</td>
<td>2,59</td>
</tr>
</tbody>
</table>
6.1.4 Administration costs

As previously stated in Chapter 5.5, two of the Company’s return reason codes generate a voucher. If the customer has not requested an exchange order but instead wants their money back, the distribution of the vouchers is handled manually. The manual handling of vouchers consumes resources both in terms of labour and material. The voucher handling requires 75 minutes on a daily basis for the German market and 15 minutes for the British market. This results in 185,000 vouchers distributed on the German market and 40,000 vouchers on the British market\(^{59}\). All vouchers are sent by post, which generates a cost of postage, envelopes and paper. Table 16 below presents the cost of manual handling of vouchers for both markets:

**Table 16. Administrative costs**

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit price</td>
<td>Cost</td>
</tr>
<tr>
<td>Working hours</td>
<td>135,50</td>
<td>197,288,58</td>
</tr>
<tr>
<td>Postage</td>
<td>4,73</td>
<td>875,112,16</td>
</tr>
<tr>
<td>Envelope</td>
<td>0,25</td>
<td>46,250,00</td>
</tr>
<tr>
<td>Letter paper</td>
<td>0,11</td>
<td>20,350,00</td>
</tr>
<tr>
<td><strong>Total Cost:</strong></td>
<td>1,139,000,74</td>
<td>0,03</td>
</tr>
</tbody>
</table>

The cost of administration is barely measurable in Germany and low in the UK. It is possible to conclude that this is not the cost centre with largest possibilities for improvements.

\(^{59}\) Johansson, A.S.
6.1.5 Material Costs

The return process involves a number of consumable products, for example garment rollers, markers, plastic bags and labels. The majority of the consumable products are however not possible to distinguish from the usage in other departments and the cost of these products are therefore not included in this TCA.

Plastic bags and labels are two of the consumable products that are possible to relate directly to the number of returns. All products that are handled in the booking activity are relabelled, regardless of whether they are unclaimed- or claimed returns. Unclaimed returns are enclosed by an unbroken plastic bag and do not need to be refreshed or repacked. These returns therefore only require a new label whereas all other items are repacked into new plastic bags after refreshing.

Each parcel delivered to customer contains at least one return label, which is to be attached to the parcel if the customer decides to return any product. This is to make it easy for the customer to return unwanted products. Since all customers receive return labels, regardless if they decide to make a return or not, the cost of return labels is connected to the number of deliveries on each market but distributed on the number of returns.

The Company buys 1000 labels for the price of 22.55 SEK. This price is the same on both markets. The plastic bags come in two different sizes but the average price for one bag has been estimated by The Company to be 0.15 SEK on the German market and 0.30 SEK on the UK market. The cost of a return label is approximately 0.5 SEK on both markets but UK customers who get their package delivered as a parcel receives two return labels for reasons previously mentioned why the cost of return labels is higher per piece in the UK. These numbers give rise to the costs presented in Table 17 below\textsuperscript{60}.

\textsuperscript{60} Klaar, Å.
The cost of consumable materials does not seem to affect the TCA significantly. The high cost of return labels however affects the total cost of materials significantly since it accounts for more than 70% of the total cost of consumable materials on both markets. It should however be noted that the return label is attached to the delivery note which would be sent to the customer even if the return label was not. But if there were no return label on the delivery note the cost of the delivery note would be considerably lower since it could be printed on a regular paper. The higher cost per piece for the UK in material costs is of course directly relatable to the price of the plastic bags.

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price per unit, Plastic bag (SEK)</td>
<td>0,15</td>
<td>0,30</td>
</tr>
<tr>
<td>Number of plastic bags</td>
<td>10 161 066,10</td>
<td>1 496 120,06</td>
</tr>
<tr>
<td><strong>Cost plastic bags (SEK)</strong></td>
<td><strong>1 524 159,92</strong></td>
<td><strong>448 836,02</strong></td>
</tr>
<tr>
<td>Price per unit, Label</td>
<td>0,02</td>
<td>0,02</td>
</tr>
<tr>
<td>Number of labels</td>
<td>45 113 447,00</td>
<td>1 561 875,00</td>
</tr>
<tr>
<td><strong>Cost labels (SEK)</strong></td>
<td><strong>1 017 308,23</strong></td>
<td><strong>35 220,28</strong></td>
</tr>
<tr>
<td>Price per unit, Return label</td>
<td>0,50</td>
<td>0,50</td>
</tr>
<tr>
<td>Number of return labels</td>
<td>15 107 505,44</td>
<td>4 262 020,14</td>
</tr>
<tr>
<td><strong>Cost return labels (SEK)</strong></td>
<td><strong>7 553 752,72</strong></td>
<td><strong>2 131 010,07</strong></td>
</tr>
<tr>
<td>Total cost (SEK)</td>
<td><strong>10 095 220,87</strong></td>
<td><strong>2 615 066,37</strong></td>
</tr>
<tr>
<td>Cost/piece (SEK)</td>
<td>0,22</td>
<td>1,67</td>
</tr>
</tbody>
</table>
6.1.6 **The total cost at DC**

All costs that have been calculated in this section of the TCA regarding the cost of returns at DC have been summarized in the table below. The TCA consists of five cost centres; transportation-, warehouse-, customer service-, administration- and material cost. The table below presents the summary of the TCA of returns at DC. Cost, Cost/piece and Share of total cost is presented.

**Table 18. Total cost of returns at DC**

<table>
<thead>
<tr>
<th>(SEK)</th>
<th>Germany</th>
<th></th>
<th></th>
<th></th>
<th>UK</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost</td>
<td>Cost/piece</td>
<td>Share</td>
<td></td>
<td>Cost</td>
<td>Cost/piece</td>
<td>Share</td>
<td></td>
</tr>
<tr>
<td>Transportation:</td>
<td>216 508 437,98</td>
<td>4,80</td>
<td>66%</td>
<td></td>
<td>18 959 068,49</td>
<td>12,14</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Warehouse:</td>
<td>93 279 037,53</td>
<td>2,07</td>
<td>29%</td>
<td></td>
<td>16 043 835,50</td>
<td>10,27</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>Customer service:</td>
<td>4 731 118,32</td>
<td>0,10</td>
<td>1%</td>
<td></td>
<td>4 044 090,74</td>
<td>2,59</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Administration:</td>
<td>1 139 000,74</td>
<td>0,03</td>
<td>0%</td>
<td></td>
<td>327 497,35</td>
<td>0,21</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Materials:</td>
<td>10 095 220,87</td>
<td>0,22</td>
<td>3%</td>
<td></td>
<td>2 615 066,37</td>
<td>1,67</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>325 752 815,44</td>
<td>7,22</td>
<td>100%</td>
<td></td>
<td>41 989 558,46</td>
<td>26,88</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

The most obvious conclusion that can be made from viewing the table is that the total cost per piece differs significantly on the two markets. The most resource demanding cost centre on both markets is transportation.
6.2 Total cost analysis, Return process in store

The TCA of the return process in store will solely consist of the costs of wages (See Figure 14) due to the lack of information from The Company. The cost of wage is based on a compensation system that exists between the online division and the store division. The store division receives an annual compensation from the online division, which is meant to be the equivalent to the wage payments for working hours spent on ORIS in store. The compensation is the product of hourly wages, working hours and the number of ORIS.

![Diagram showing cost centre included in the TCA in store]

Figure 14. Cost centre included in the TCA in store

The possible cost of transportation due to product transfers will be ignored due to the fact that online returns in store are not separated from store originating returns. The same holds for material costs.

Online returns in store (ORIS) represent a small part of the total number of returns in store but the number is increasing. Only 2.6% of the total number of returns in store in Germany during 2014 originated from online. The corresponding number in the UK was 4.4%\textsuperscript{61}. Table 19 shows how the share of returns was divided to DC and store during 2014.

\textsuperscript{61} Andersson, T.
### Table 19. ORIS share of total RIS

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of return parcels to DC</td>
<td>8,973,117.00</td>
<td>537,893.00</td>
</tr>
<tr>
<td>Number of return parcels via Store</td>
<td>643,220.05</td>
<td>133,576.53</td>
</tr>
<tr>
<td>ORIS share of total RIS (#pieces)</td>
<td>2.6%</td>
<td>4.4%</td>
</tr>
</tbody>
</table>
6.2.1 Cost of ORIS

The costs of ORIS will, as previously stated, only consist of the cost of wage based on the number of hours spent on handling ORIS. Other costs connected to returns, working hours spent on product transfers, consumable materials, cost of the repurchase of the products etc. are not possible to assign on returns that originates from online or returns that originates from store. The cost of ORIS will only consist of the cost of wage based on the number of hours spent on handling ORIS. The time consumption of handling one ORIS has been estimated by The Company to be 2,5 minutes per parcel\(^{62}\), which corresponds to approximately 0,042 working hours. The average wage, including all social fees, of a sales agent in store is £10,80 in the UK\(^{63}\) and approximately 11,50€ in Germany\(^{64}\). The wage cost of ORIS is presented in Table 20 below were both total cost and cost per piece are presented.

<table>
<thead>
<tr>
<th>Table 20. Cost of ORIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Number of returned parcels</td>
</tr>
<tr>
<td>Number of returned pieces</td>
</tr>
<tr>
<td>Pieces/Parcel</td>
</tr>
<tr>
<td>Average time spent on handling</td>
</tr>
<tr>
<td>Average wage, store agent</td>
</tr>
<tr>
<td>Total cost of wage</td>
</tr>
<tr>
<td>Cost per piece</td>
</tr>
</tbody>
</table>

The total cost of handling ORIS is low compared to the cost of handling a return at the DC. The cost of an ORIS is only 1,73 SEK per piece in the UK and 0,86 SEK in Germany whilst the cost of returns at DC is 27,20 SEK in the UK and 7,22 SEK in Germany. These numbers clearly show that ORIS could provide significant savings for The Company. It should though once again be mentioned that not all costs connected to ORIS are presented and the savings would probably not be quite as large as the figures above indicate. The return process is however not only about costs but also about having satisfied customers and to generate additional sales. Effects from changes in the return process will be further discussed in the following chapter.

\(^{62}\) Andersson, T.

\(^{63}\) Emanuelsson, C. (b).

\(^{64}\) Taghavi, D. (a).
7 Analysis and result

This chapter is included in the final phase of the project where identified areas of concern are used to find suggestions for improvements in the return process. In this chapter the results from chapter 6 will be analysed to examine how the total cost of returns is affected by different variables. It will also include analysis regarding different factors in the return process both at the DC and in store where there is room for improvements or further research.

7.1 Total cost of returns in DC and store

In the previous chapter all costs connected to the return process, both at DC and in store, were calculated. In this section these costs will be further analysed and discussed with respect to the effect of variable factors. The purpose of this analysis is to give an understanding of the present situation and to build a solid foundation for the recommendations. The analysis is built on the simplifying assumption that current circumstances persist, i.e. no account is taken of changes in market size etc., unless otherwise specified.

As previously seen in Chapter 6, the German customer returns almost 3 times as much as the British customer. The former German law that allowed the customer to return online purchases free of charge can explain this tendency. Legal changes have been made but the demand for lenient return policies remains. This makes it hard for the retailers to change their return policies. The law has never regulated free returns in the UK but there is a culture among online retailers, and thus also an expectation among customers, to offer free returns as well as returns in store.

The total number of delivered and returned orders has increased continuously during the last three years and the trend is expected to persist in the years to come. The amount of delivered and returned orders on both markets has had a comparable increase in size, which roughly can be estimated to 10%. In this TCA only variable costs have been included which means that the number of returned items can be assumed to be directly proportionate to the cost per piece. This means that the costs of returns can be expected to increase by about 10% yearly if no changes are made. Table 21 below shows how the costs would increase over a 5-year period from 2014.
The cost of returns would, with the present growth on both markets, increase by nearly 50% in five years, which corresponds to an increase of 150 million SEK in Germany and nearly 20 million SEK in the UK. The potential increase of the cost of returns creates incentives to find new solutions in the return process that could limit the increase.

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>330 181 413,09</td>
<td>39 851 879,73</td>
</tr>
<tr>
<td>2015</td>
<td>363 199 554,40</td>
<td>43 837 067,71</td>
</tr>
<tr>
<td>2016</td>
<td>399 519 509,84</td>
<td>48 220 774,48</td>
</tr>
<tr>
<td>2017</td>
<td>439 471 460,82</td>
<td>53 042 851,92</td>
</tr>
<tr>
<td>2018</td>
<td>483 418 606,91</td>
<td>58 347 137,12</td>
</tr>
<tr>
<td>Change in 5 years</td>
<td>146%</td>
<td>146%</td>
</tr>
</tbody>
</table>

**Table 21: Estimated cost development in five years**
7.2 **Effects of an increased amount ORIS**

ORIS has been an option on the British and the German markets for the past five years but it has remained the least common way to return. The reason why this option has not been more popular with the customers could be caused by the previous limited possibilities of reimbursement from an ORIS. Until late 2014 the only reimbursement that existed for ORIS was a merchandise card. Development of the information system has now enabled the British customers to get their money back if they paid by card used when placing the order online. An increase of ORIS can be expected due to this progress.

7.2.1 **Re-selling of ORIS**

One of the main concerns regarding ORIS from The Company’s perspective has been the potential loss from not being able to sell returned items at full price in store. The assumption that ORIS would be more difficult for stores to sell and therefore generate less revenue than regular returns was based on the idea that it was hard to integrate the returns from online sales with the store system. However, it was clear from the visit to the British market that this was not the case. ORIS are treated as far as possible in the same way as regular returns. In the UK, items that are not included in the store’s collections are simply transferred to another store. This system is however not used to the same extent in Germany where only certain products are transferred. This means that there is an ambition to sell the returned products at the original price and that they generally are not a negative influence on the revenue.

In some cases however, the assumption about discounted prices is true. The online channel is not as bound by seasons as the stores are which for example can entail swimwear being available for sale in December through the online channel but not in store. Returns like these, that have no natural place on the store shelves, need to be handled either by selling them at a discount or by storing them in the storage area until a more appropriate season.

Another issue connected to ORIS is the online unique items. These products are not a part of the store system and it is therefore difficult for stores to keep track of the number of pieces of online unique items in store. Since the online unique products are rare in comparison to other merchandise and since there is no transfer system in place for these products, a store typically generates single pieces of these products making them harder to sell. The issue with this seems to be that there is not a clear strategy in place for how to handle online
unique products in store. One suggestion would be to allocate specific stores to where all online unique products are transferred so that these items as far as possible were gathered in the same store.

7.2.2 Store capacity

During the authors’ visit to the British market both store managers and store agents appeared to have a positive attitude towards ORIS. They did not experience any lack of capacity in the stores to be able to handle the returns from online purchases. An increased amount of ORIS would however require more manpower in store to effectively manage the returned items and the staff would need to be trained in how to handle ORIS correctly. This entails clear instructions of how to process a return at the till, how to reimburse the customer depending on which payment method he/she used when making the payment and how to properly price the item. Guidelines for these activities would need to be developed for a more effective ORIS-process. It should also be clear that an increased amount of ORIS would have a bigger effect on the stores in Germany than the same increase would in the UK due to the return behaviour on the German market where more than 40% of all items are being returned.

Further development of the product transfer system would also need to be developed. The system would need to include more frequent transportations and well thought out routes in order to minimize both transportation costs and environmental impact. More frequent transportations would be evident since most stores have a very limited storage space and lacks the capacity to store products not included in the store’s range of products.

One issue regarding the store capacity that could be developed to make the return process more efficient for both customers and staff is the store’s computer system, especially its inability to handle the alternative payments methods. At the moment store agents experience insecurity in how to handle orders paid with monthly instalments.

The current process requires that ORIS that exceeds a value of 50 GBP are approved by a store manager in connection with the return. If the amount of ORIS were to increase significantly, there could be a need to change this system since it otherwise could be too time-consuming for the store manager.
7.2.3 Additional sales

Every visit to one of The Company’s sales channels is an opportunity to build on the customer relationship as well as make sales. When the customer returns an item to The Company via post this opportunity is lost, as it doesn’t entail any continued contribution to the forward flow. Giving the customer the opportunity to return items purchased online in store instead allows for an opportunity to turn the return into a new sale. ORIS is a great way for The Company to further engage with the customer to find out their needs and give assistance to make sure that the relationship with the customer is not harmed by any dissatisfaction on the customers’ part.

Building on the activity of ORIS is also an opportunity for The Company to further build their brand in allowing for new ways to differentiate them in a tough climate.

7.2.4 Benefits for the customer

As previously mentioned increasing ORIS would have clear benefits for The Company’s customers. First and foremost, it would give the customer a wider range of options when choosing how to return. Since availability and comfort are two important qualities that customers look for when purchasing online these factors need to be consistent with the return process as well.

The authors visited a store on the British market where there was a separate till that focused only on returns. If ORIS were to increase it would be of great benefit to The Company to have a separate till in the stores for returns, as this would make the return process more efficient for the customer.

7.2.5 Effects of an increased amount ORIS on total cost

The high cost of returns at DC implies that there is room for improvements in the return process. The final section in the previous chapter showed the large difference in cost between returns at DC and ORIS, which implies that The Company would be more profitable from an increased share of ORIS since it would reduce the total cost of returns.

Transportation is the highest cost per item connected to returns at DC, which alone is seven times higher than the total cost of ORIS in the UK. In Germany the transportation cost is three times as high as the total cost of ORIS. The cost of wage per item at DC exceeds the cost of wage in store by 1,21 SEK in Germany and 8.54 SEK in the UK. When taking all cost items at DC into
consideration previous calculations show that an ORIS in the place of a return at DC would save The Company 6,36 SEK in Germany and 25,47 SEK in the UK per item. Once again it should though be mentioned that part of the cost connected to ORIS has been excluded due to lack of information of the distribution between store originating returns and ORIS.

ORIS represents a small part of the total number of returns in store on both markets, 2.6% in Germany and 4.4% in the UK, why the effects of ORIS on the stores can be difficult to determine. Nevertheless nearly 20% of the returns originating from online on the British market were returned in store during 2014. The corresponding number in Germany was less than 1%. It is interesting to examine what the effect would be from a greater number of ORIS both on DC and on stores.

Tendencies show that the amount of ORIS is expected to increase. Established competitors on the British market offering the same service has a share of ORIS that exceeds 50% of the total number of returns originating from online. It is reasonable to expect the same share of ORIS on the British market for The Company in the near future now that customers can receive their refund back to their card.

The trend in Germany is more difficult to predict. ORIS is not a market standard on the German market and customers are therefore not requesting a further developed ORIS process. The big share of credit payment in Germany and the subsequent consequence that most customers who return in store get their refund to a merchandise card is a potential obstacle if The Company wanted to increase ORIS. If the information system however were further developed it would be reasonable to think that the share of ORIS could increase to current levels in the UK (19.9%), alternatively somewhat lower.

A scenario has been set up to further investigate the effect of an increased amount ORIS on the total cost of returns. The scenario extends over a 5-year period in which the amount of ORIS is assumed to increase to 15% in Germany and 50% in the UK. This means that the amount of ORIS would grow yearly by approximately 3% in Germany and 6% in the UK. These numbers are based on the potential increase of ORIS as discussed above. Note that the total number of returns has been kept constant and no consideration has been given to a possible market growth. Note also that the administrative
cost has been kept constant due to the inability to estimate how the number of vouchers would change with an increased amount of ORIS. The cost of wage in the following scenario does not include B-hours since these do not correlate directly to the amount of returns.

The cost of returns at DC in Germany has been calculated for a period of 5 years in the table below. Table 22 shows how the cost is reduced per year. Year “0” refers to 2014.

**Table 22. A total cost scenario of a future 5-year period in Germany**

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage cost:</td>
<td>88 619 200.54</td>
<td>86 066 333.99</td>
<td>83 513 467.45</td>
</tr>
<tr>
<td>Transportation cost:</td>
<td>216 263 257.37</td>
<td>210 033 329.41</td>
<td>203 803 401.46</td>
</tr>
<tr>
<td>Material cost:</td>
<td>14 064 117.10</td>
<td>13 658 969.98</td>
<td>13 253 822.86</td>
</tr>
<tr>
<td>Administration cost:</td>
<td>4 557 338.10</td>
<td>4 426 054.18</td>
<td>4 294 770.26</td>
</tr>
<tr>
<td>Total cost at DC:</td>
<td>318 794 267.55</td>
<td>309 610 713.47</td>
<td>300 427 159.39</td>
</tr>
<tr>
<td>Total cost in Store:</td>
<td>332 401.49</td>
<td>1 654 444.81</td>
<td>2 976 488.13</td>
</tr>
<tr>
<td>Year</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Wage cost:</td>
<td>80 960 600.90</td>
<td>78 407 734.36</td>
<td>75 854 867.81</td>
</tr>
<tr>
<td>Transportation cost:</td>
<td>197 573 473.50</td>
<td>191 343 545.55</td>
<td>185 113 617.59</td>
</tr>
<tr>
<td>Material cost:</td>
<td>12 848 675.74</td>
<td>12 443 528.61</td>
<td>12 038 381.49</td>
</tr>
<tr>
<td>Customer service cost:</td>
<td>4 163 486.34</td>
<td>4 032 202.42</td>
<td>3 900 918.50</td>
</tr>
<tr>
<td>Administration cost:</td>
<td>1 219 855.92</td>
<td>1 219 855.92</td>
<td>1 219 855.92</td>
</tr>
<tr>
<td>Total cost at DC:</td>
<td>291 243 605.31</td>
<td>282 060 051.23</td>
<td>272 876 497.15</td>
</tr>
<tr>
<td>Total cost in Store:</td>
<td>4 298 531.44</td>
<td>5 620 574.76</td>
<td>6 942 618.08</td>
</tr>
</tbody>
</table>

The table shows that an increase of ORIS to 15% in five years would reduce the yearly cost of returns at DC by 14%. This means that The Company could save more than 139 million SEK in 5 years. At the same time as the costs at DC would decrease the cost in store would increase. The cost of wages in store would under a period of five years increase by over 2000%. This corresponds to a cost of almost 20 million SEK over five years.
The corresponding cost of returns at DC in the UK has been calculated in Table 23 below:

**Table 23. A Total cost scenario of a future 5-year period in the UK**

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage cost</td>
<td>12 451 391.15</td>
<td>11 517 536.81</td>
<td>10 583 682.48</td>
</tr>
<tr>
<td>Transportation cost</td>
<td>18 604 719.66</td>
<td>17 209 365.69</td>
<td>15 814 011.71</td>
</tr>
<tr>
<td>Material cost</td>
<td>484 613.23</td>
<td>448 267.23</td>
<td>411 921.24</td>
</tr>
<tr>
<td>Customer service cost</td>
<td>3 942 931.71</td>
<td>3 647 211.84</td>
<td>3 351 491.96</td>
</tr>
<tr>
<td>Administration cost</td>
<td>230 614.57</td>
<td>230 614.57</td>
<td>230 614.57</td>
</tr>
<tr>
<td>Total cost at DC</td>
<td>35 714 270.32</td>
<td>33 052 996.14</td>
<td>30 391 721.95</td>
</tr>
<tr>
<td>Total cost in Store</td>
<td>734 714,12</td>
<td>955 128,36</td>
<td>1 175 542,60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage cost</td>
<td>9 649 828.14</td>
<td>8 715 973.80</td>
<td>7 782 119.47</td>
</tr>
<tr>
<td>Transportation cost</td>
<td>14 418 657.74</td>
<td>13 023 303.76</td>
<td>11 627 949.79</td>
</tr>
<tr>
<td>Material cost</td>
<td>375 575.25</td>
<td>339 229.26</td>
<td>302 883.27</td>
</tr>
<tr>
<td>Customer service cost</td>
<td>3 055 772.08</td>
<td>2 760 052.20</td>
<td>2 464 332.32</td>
</tr>
<tr>
<td>Administration cost</td>
<td>230 614.57</td>
<td>230 614.57</td>
<td>230 614.57</td>
</tr>
<tr>
<td>Total cost at DC</td>
<td>27 730 447.77</td>
<td>25 069 173.59</td>
<td>22 407 899.41</td>
</tr>
<tr>
<td>Total cost in Store</td>
<td>1 395 956.83</td>
<td>1 616 371.07</td>
<td>1 836 785.31</td>
</tr>
</tbody>
</table>

The total cost of returns at DC would decrease by 2.6 millions per year, which corresponds to a total cost saving of almost 40 million SEK in five years. The total cost of returns at DC would be reduced from 35 million SEK to 22 million SEK, a decrease of 37%. The cost of wages in store would however increase during the same period from 0.7 million SEK to 1.8 million SEK, approximately with 250%, which generates a cost of 3.3 million SEK over five years.

A summary of the savings at DC and the higher costs of wage in store show that an increased amount of ORIS could save The Company approximately 120 millions in Germany and 36 millions in the UK over five years.

The high rate of returns in Germany is however a problem. Even if only 15% of the total number of returns in Germany was returned in store it is equivalent to nine times the amount from a 50% share of ORIS in the UK. A 50% share of ORIS in the UK would generate almost 0.8 million returns in store whilst a 15% share of ORIS in Germany would generate 6.8 million returns. Since the
number of stores in essence is the same on both markets. The pressure of ORIS on the two markets would be incomparable. If the pressure from ORIS should be the same on both markets, there is only room for 1\% increase from present level on the German market.

---

65 Emanuelsson, C. (a).
66 Taghavi, D. (a).
7.3 Effects of Pre-Registered Returns

Pre-registered returns are a way of separating product and information. In the return process this would entail that information about the returned product was available to The Company before the product itself reached the DC. This would generate benefits for both customers and The Company. It would create two different flows that would increase the control of the product flow back to DC, which among other things would improve inventory management. It would also enable a more lean process at the DC, shortening lead-time for exchange orders and the opportunity to develop gatekeeping activities.

7.3.1 Increased Customer Involvement

Pre-registered returns would entail that the customer went online to register the return reason codes. Not only would this reduce the workload at the DC, primarily in the booking process (this will be discussed further on in the chapter), but it would also give the customer the opportunity to update personal information, browse the online shop and thus possibly generate additional sales and increase the average value of an exchange order. However, pre-registered returns creates additional work for the customer and it would be important for The Company to create incitements for the customer to pre-register the return.

7.3.2 Gatekeeping

The separate flows of products and information would make it possible to handle unsellable items earlier in the return process, which is items that are faulty or items that are no longer a part of the collection. These items could be separated from the flow directly after the opening activity at the DC and wouldn’t need to continue to the booking activity. As previously stated in Chapter 5 the discarded items at The Company amounts to 4%, which means that time savings in the booking activity could be gained through an efficient gatekeeping of these products.

Another possibility would be to not enter the unwanted returns into the returns flow. If the customer wanted to return a faulty item or an item that for some other reason did not have any value for The Company the customer would pre-register the item online and could then get the option to discard the item themselves which would decrease transportation. However, this would possibly increase the risk of customers trying to exploit the system for their own gain.
7.3.3 **Shortened Lead-time**
Pre-registering returns would potentially have a positive effect on the forward flow. Customers who want to exchange an item would enter the information about what item to exchange and the DC would be able to prepare the new order so that it was ready to send to customer as soon as the return was processed at the DC. This would shorten the delivery time for exchange orders and improve customer satisfaction.

7.3.4 **Additional Sales**
As mentioned in Chapter 3, a previous study made at The Company showed that the total amount of exchange orders potentially could increase by 10-20%. Such a change would correspond to an increase in net sales of 144-467 million SEK in Germany and 6-23 million SEK in the UK. Pre-registered returns are in other words not only a way to lower The Company’s cost but also a way to generate additional sales.

7.3.5 **Effects of Pre-Registered Returns on Total Cost**
Pre-registered returns would allow for a higher level of efficiency in the DC as the most time consuming activity, the booking activity, would be made considerably leaner. The booking activity consists of two sub activities as described previously in Chapter 5, one administrative part and one practical part. The administrative part includes booking of return reason codes and booking of exchange order. This consumes one third of the time in the booking activity, which means more than 334 000 hours in Germany and 11 000 hours in the UK per year.

The Company could potentially reduce their costs significantly in the booking activity. In a perfect world, where all customers were willing to register their return online, the cost of the booking activity would be reduced by one third of the current cost. The cost saving would then be 20 million SEK per year in Germany and 3 million SEK in the UK which corresponds to approximately 0,45 SEK per item in Germany and 3,90 SEK per item in the UK.

It is obvious that the strategy of pre-registered returns could generate cost savings. In the discussion of pre-registered returns system development costs have not been discussed. It can however be assumed that the payback time is short when considering the large gain presented above which only represents a small part of the total market.
7.4 Other areas of improvement

7.4.1 More specific information on the delivery note

One time-consuming activity in the ORIS-process was the ambiguity regarding the 28 days that the customer has to return their items purchased online. According to The Company’s terms and conditions the customer has 28 days after the order is received to return any item they do not wish to keep. The delivery note however, only states that the customer has 28 days to return and does not specify 28 days from what time. An encountered belief by staff in the store was therefore that only returns made 28 days after the customer placed the order was to be approved.

Specifying the last day to return on the delivery note to make it more in accordance with a store-receipt could solve this confusion. This would make the return process in store more consistent as well as save time for staff when calculating the last return date as well as any disagreements with the customer about the ambiguity.

7.4.2 Better method for pricing the returned items

The Kimball on the items that were originally sold online does not have a price on it. The current ORIS-process therefore includes writing the price on the Kimball manually. This gives the Kimball a heterogeneous and unprofessional look.

![Figure 15. Misprricing of ORIS](image)
Products that are missing from the store's computer system are normally priced based on the price of a similar item. This non-exact way of pricing carries the risk of pricing the same item differently as well as the obvious risk of mispricing the item, which can cause confusion for both the customer and the employees. The most correct solution to pricing the items accurately is to call customer service to get the right price, however this method is not always applicable in stressful situations or when there is a long queue in the store. To solve this problem The Company is working on a new method, which will make it easier for staff to price the items as well as give the Kimball a more professional and unified look. This method entails making it possible to print stickers with the price to put on the Kimball.

7.4.3 EXAMINE THE RETURN REASON CODES

When a customer returns an item via post to The Company they specify their reason for returning each item on the return note. This activity is not necessarily very time-consuming for the customer but booking the return reason codes at the DC is as previously mentioned a time-consuming activity for The Company.

As far as the authors have been able to conclude the information about the return reason codes is only collected as statistics and doesn’t have any specific purpose within the organisation. Moreover the information retrieved from the return reason codes is very vague. Return reason code number three is the most frequently used return reason and states “not what I expected”, which can mean virtually anything.

The authors believe that the use of return reason codes should be reviewed in order to conclude if the time spent on the booking activity is well-spent time. The booking activity shall only be carried out if its data can be used insightfully. This would require that the return reason codes were revised to provide clearer information about the return reason. If formulated appropriately the return reason codes can be a great way to get input from customers as a complement to customer surveys.

The abolition of the return reason codes would generate the same cost-saving effects as the introduction of pre-registered returns, which have been calculated previously in this chapter. An abolition could then save the company 20 respectively 3 million SEK per year in Germany and the UK.
This reinforces the argument that The Company should find appropriate use for the return reason codes to motivate the continued usage.

7.4.4 IMPROVE PROCESS FOR VOUCHERS

As previously described in Chapter 4 vouchers can be distributed to the customer in two ways, either by post or together with the delivery note. The table below shows the total number of distributed vouchers and the total number of utilized vouchers per market.

Table 24. Distributed voucher per market

<table>
<thead>
<tr>
<th></th>
<th>Germany</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of distributed voucher</td>
<td>372 704,00</td>
<td>22 197,00</td>
</tr>
<tr>
<td>Number of utilized vouchers</td>
<td>8 933,00</td>
<td>1 385,00</td>
</tr>
<tr>
<td>Utilization rate</td>
<td>2,4%</td>
<td>6,2%</td>
</tr>
</tbody>
</table>

As can be seen in the table the degree of utilization is very low, only 2% in Germany and 6% in the UK, it is however not possible to determine which utilized vouchers that were distributed with which method. The explanation for the low utilization is unknown but might be a consequence of the voucher codes printed on the delivery note not being used. These vouchers require a manual action since the customer need to fill in the discount code when placing a new order and this is easy to forget. It is also reasonable to think that the delivery note with the discount code is thrown away when the customer has received the order and has decided to keep the products.

All vouchers sent by post are handled manually, which evidentially generates cost of wage and postage. Many working hours are spent on the administration of vouchers in vain since only 2-6% of the distributed vouchers are utilized on the relevant markets. The Company should improve the process of voucher handling to eliminate the non-value adding time spent in the back office. One solution would be to use the email address that all online customers must connect to their online shopping account to receive information about the order. The information system of returns could automatically send a voucher by email to the customers who have entered any of the return reason codes that indicate a mistreated customer.
7.4.5 Review refund of additional fees
The conditions for refunds when making an ORIS are described on The Company’s webpage where it is states that no refund of additional fees, such as delivery fee, can be made in store. The directive on consumer rights in distance selling however declare that the customer should be fully refunded, including delivery cost, if returning the entire order (Hallå Konsument, 2015). The company need to look over their refund policies in store to make sure that the customer is correctly refunded.

A refund that includes the delivery cost would however create difficulties. Today, the store reimburses the customer the same price that the customer paid, independent of the price in store. This means that the store sometimes pays more and sometimes less for the returned item. If the store was to refund the delivery cost the return would in most cases result in a loss for the store. Store managers are however taught to consider ORIS as something positive as they get a new product to sell. It would however be hard to motivate the store managers to accept the cost of delivery refund when the store’s profitability is measured in total sales and The Company would need to find a way to compensate the stores for this expense.

7.4.6 Clearer information about payment methods
As previously stated there is a strong correlation between payment method and return rate, where paying by credit more often results in a return. Offering a wide range of payment solutions is a competitive advantage for The Company, which enables the customer to receive and try the product before making the actual payment. However, the many different payment options seem to be a problem for many customers. In Germany, where the share of credit payments accounts for more than 80% of all payments, CS errands that concern payment solutions are the most frequent (35%). It seems like the various payment methods make the customer feel insecure in how to proceed through the payment. Clearer communication at The Company’s website could probably remedy the number of errands to CS connected to payment.

Paying by credit is also a problem when the customer wishes to make an ORIS. These payments can only be refunded with a merchandise card. The customer in the UK tends to prefer a refund to their card or in cash why a refund with a merchandise card might cause a disappointment and generate dissatisfied customers. The customer in Germany however accepts a refund on
a merchandise card to a larger extent. This might be due to the fact that ORIS is a unique offer on the German market and that customer demands therefore not are as developed as on the British market.

7.4.7 INTRODUCE MEANS OF CONTROL ON RETURNS

The cost of returns at DC has been proven to be considerably higher than the cost of ORIS. The customer's possibilities to return have been improved by ORIS why tougher requirements could be set on returns to DC. The Company could continue to offer the same services but lower its costs by introducing means of control on returns and guiding customers toward the return method that is least costly for The Company. ORIS and the use of pre-registered returns have been proven to generate cost savings for The Company. A potential way to create incentives for the customer to pre-register the return is to offer free return on pre-registered returns and otherwise charge a fee for the return. Such a strategy gives the customer two possible ways to return for free, ORIS and pre-registered returns, while simultaneously improving several factors for The Company.
7.5 Suggestions of KPIs for the return process

To be able to evaluate The Company’s return process it is important to use appropriate KPIs. One suggestion for The Company is to better track the effect that returns have on the customers’ behaviour, in particular their buying behaviour. This could be made by monitoring how many of the returns that generate new purchases, both through the store and the online channel. For ORIS this would entail measuring the amount of purchases in store that follows a return. This would be difficult to do today but the authors believe that The Company in the future will need to develop a system to track their customers across channels, which would enable the possibility to follow the customers’ behaviour relating to returns. It would be easier to track the purchases that are generated through pre-registered returns since the online platform registers the customers’ purchase and return history.

Another suggestion of a KPI that is affected by returns is the way by which a store’s success is measured. Today it is measured by their result divided by the number of store agents. Since a return is booked as a negative post there is a risk that the store managers and store agents view returns as a threat to their positive result. The current solution to this risk is to highlight the benefits of returns to the store; every return is an opportunity to convert the store visit into a purchase as well as build The Company’s brand and relationships with the customer. It also gives the store another product to sell. Even though these incentives seem to be enough not to see returns as solely a negative activity a suggestion for furthering this view of returns as a value adding activity is to change the way in which a store’s success is measured. The authors therefore suggest that instead of valuing a store’s success by its result it is measured solely on sales. This would mean that receiving an ORIS didn’t affect the store negatively but rather was seen only as a possibility to sell another product and increase the revenue. The sales should be divided on the number of sales agents as already made, to keep the cost of employees down. Different stores have different ranges of products, which most likely also affect the sales. This could also be taken into consideration when measuring the store’s success so that stores with a more exclusive and expensive collection gets comparable with stores with basic and cheap collections.
8 Discussion

The thesis aimed to examine the effect on the total cost of the return process caused by pre-registered returns and an increased amount of online returns in store. The activities related to the return process was divided into sub-sections; opening, booking and restoring. Studying the calculations in Chapter 6 and 7 made it evident that all cost-centres in the return process at DC would be affected by an increased amount of ORIS and pre-registered returns. The authors’ ability to investigate the effects of these factors was however limited and conclusions were only drawn from the booking activity. This was partly caused by the inability to divide the opening and restoring activities into sub activities, which limited the authors’ opportunities to determine which specific moments that were most affected by the change in the return process.

The two markets that were relevant in this study, Germany and the UK, are connected to two different DCs. To be able to make the total cost analysis as accurate and complete as possible, it would have been necessary to make visits to both DCs and markets to acknowledge any differences in the return process. However the authors only got the opportunity to visit the UK DC and the UK market. This creates some uncertainty among the authors on whether the described procedures described in the thesis are accurate for both markets. The thesis was however written under the assumption, stated by The Company, that the two DCs operate in a next-to identical manner and that the routine for ORIS is the same on both markets.

The authors have had no possibility to calculate the paces in the return process themselves. The authors have however been assured that the paces in the return process supplied by The Company are representative of the real process. The same assumption is according to The Company, applicable on the return process in store on the two markets. All calculations made have therefore been based on the assumption that both the return process at DC and the return process in store are next-to identical on the two markets, this is however something that the authors can not guarantee.

The result of this thesis depends heavily on the information The Company has agreed to share with the authors. The analysis is based entirely on existing statistics provided by The Company, which inevitably affects the objectivity and the result of the thesis. The authors have had no possibility to retrieve
information directly from The Company’s database and therefore have had no opportunity to examine neither accuracy nor trustworthiness.
9 Recommendation for future work

The previous chapter, *Analysis and result*, provided a number of potential areas for improvement at The Company. However, many of these areas require further inquiry to provide good guidance towards improved returns management.

The result of this thesis would be of greater relevance if all costs had been able to gather to include in the TCA. A suggestion for future work therefore includes a more detailed and thorough cost analysis to gain further and more specific insights into how ORIS and pre-registered returns would affect the cost of returns for The Company.

ORIS would, as previously stated, increase the capacity needs in store and probably require improved product transfer systems. Transfer system is developed in the UK but conspicuous by its absence in Germany. Future research could help to determine whether an implementation of a transfer system would be profitable.

The thesis has determined that ORIS and pre-registered returns are more cost-effective than traditional returns to DC. Another potential area for future work is to examine how to create incentives for the customer to return in a way that is the most beneficial for The Company. Future work could investigate what incentives that are most efficient and the least negative for the customer experience.

The authors believe that an important future study would be to examine and develop the return reason codes. It would be interesting to determine what return reason codes that could generate the most accurate information about the returns and how this information could be treated in most efficient way.

Another suggestion for future work would be to apply the models of a TCA of ORIS and pre-registered returns on other companies to gain a more general insight into how these two activities affects the cost of returns in e-commerce. Future studies would be able to point to how these activities affect the future of the e-commerce business as well as both the affect on the cost for companies the customers’ experience.
References

Books


Articles


**INTERNET**


Dissertations

