

**Improving Inventory Turnover and Working Capital Management
by Business Model Innovation**

Case Company

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ABSTRACT

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<p>The objective of this research is to examine the Case Company's possibilities to develop its current business model in order to improve the Company's inventory turnover and working capital management. The focus is on the operational management, more closely, on the Company's supply chain and production process. The Case Company is a medium-sized company operating in the retail industry.</p> <p>The research method in this research is qualitative. The case study method is chosen to the main research method in this research in order to gain the in-depth understanding of the specific problem in the Case Company. The theoretical framework is created by relevant books, articles and studies of business model innovation, supply chain and working capital management. The empirical data is collected through interviews, documents and the writer's own working experience.</p> <p>The results of this research indicate that the Case Company has the possibility to improve its inventory turnover and working capital management. By developing its supply chain the Company could add the responsiveness. Moreover, by optimizing batch sizes, the Company could improve its inventory turnover and thus, its working capital management.</p> <p>Chapters 5 and 6 are not published in their full length in the Library version. The empirical data analyses and the development and implementation plan are regarded as confidential information. Furthermore, the questions of the interviews and the transcripts are published only in the full version of the thesis.</p>	
Keywords: inventory turnover, working capital management, supply chain, business model innovation, retail industry	

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1 INTRODUCTION

1.1 Background and motivation

The recessive economic situation in Europe has caused challenges for many companies also in Finland. On the one hand, the challenges can be related to the decreased demand. On the other hand, the economic situation has caused prudence amongst investors. During last autumn 2013 and spring 2014 some companies declared bankruptcy because of lack of trust amongst investors. In one case investors' trust against a company ended and in the second case a company faced challenges with its funding and banks' trust came to an end. Because the Case Company is dependent on external funding especially, banks' prudence has been recognized in the Company.

Companies' permanent and seasonal requirements are funded by short- and long-term liabilities. By managing the operating assets and by minimizing the length of cash conversion cycle companies can minimize their need for liabilities and thus, are able to achieve savings in costs. (Gitman & Zutter 2012, 608.) Nonetheless, companies operate within strategic networks. In this kind of network, a company can be in a powerful and controlling position or can be a subject to others' control or, alternatively, multiple parties can have strong influence over each other (Ritter & Wilkinson & Johnston 2003, 175). For small-and-medium-sized companies (hereinafter SMEs), such as the Case Company, this kind of power can cause challenges concerning for example their capability to operate without liabilities. If owners or investors are not able to invest more than currently in a company and if financial companies are not interested in funding the company's needs, consequences can be fatal for the company's future as it is highlighted earlier. For this reason, taking into account the Case Company's dependence on external funding it is necessary to invest in the reasons how to improve the efficiency in the turnover of capital.

One of the assets where the capital can be tied up is an inventory. It is a common understanding that the holding of inventories is expensive but correspondingly, without

inventories companies cannot operate (Waters 2003, 10). According to Waters (2003, 44), inventories and inventory management have an obvious strategic role in companies. On the one hand, inventories are “a buffer between a production and a sale” and on the other hand, inventories impact on the financial performance of companies. By optimizing inventory levels, companies are able to free capital for more productive use and thus, can decrease the need for external funding. (Waters 2003, 44-45.) Conversely, inefficiency in inventory can cause challenges to cash management. Therefore, it can be argued that inventories have an important strategic role in companies. However, it is necessary to expand the discussion to cover a supply chain to understand cause and effect relationships existed in inventory management.

The concept of supply chain as perceived by Waters (2003, 11) describes the materials’ journey through suppliers to final customers including series of activities and organizations. A product’s supply chain can consist of many activities done in-house or outsourced. Strategic decisions made at companies cover the activities that they do in-house and those that are possible and beneficial to outsource. Quinn and Hilmer (1996, 69) argue for the need of evaluation of the potential to capture competitive advantage and the potential of the vulnerability. Both, outsourcing and insourcing have risks and costs but intelligently combined core competences and the strategic outsourcing can provide improved financial performance and good responsiveness to the customers’ needs (Quinn & Hilmer 1996, 73). However, the decisions concerning the supply chain are only one part of a company’s value creation.

The concept of business model describes the logic between different areas of businesses such as customers, offers, infrastructures and financial viability. In addition to the logic, the business model describes how a strategy is implemented through organizational structures, processes and systems. (Osterwalder & Pigneur 2010, 15.) In the competitive global environment, companies are compelled to redesign their scales of products and services but also their way of doing businesses, called business model innovation. Giesen, Berman, Bell and Blitz (2007, 1) argue that there is a strong correlation with operating profit and business model innovation compared to other kind of innovations. Teece (2010, 173) points out the business model innovation’s possibilities to be a pathway to competitive advantage. However, business model innovation exclusively is

not enough. Instead, strategies would be needed to be developed but also implemented through companies' activities. Kaplan and Norton (2008, 1) argue for the importance of connecting a strategy's vision and guidance to operations because by operational excellence alone companies cannot allegedly enjoy sustainable success.

Thus, holistically speaking in order to improve inventory and working capital management, it is necessary to pay attention to choices made in strategy processes instead of focusing on isolated activities. The theories of inventory management and control offer many quantitative models used in managing and forecasting companies' purchasing. However, if production process ipso facto is a problem inventory management models do not offer solutions to the problem. Therefore, it is necessary to invest in theories of supply chain and business model innovation strategies. Furthermore, it is necessary to focus on implementation through a company's operations in order to solve problems existed in the production process. Based on these reasons, it is possible to notice that any book or study or research does not cover the research area of this thesis. In addition, it cannot be identified any gap in the earlier research. Consequently, the theoretical framework is built by using a number of different sources.

1.2 Case Company background

Since its establishment in 1998, the Case Company has designed, imported and sold technical textiles, shoes and equipment aiming to fulfill the needs of people actively involved in outdoor activities. The Company's business idea has been since its establishment to produce products in low-cost countries by using contract providers and sell the products itself through its own shops and online shops. Because the importing is managed without importers, the Company is able to offer the products at competitive prices. Last years have been challenging for the Case Company from the financial point of view. The past years have been unprofitable and the Company has shown loss. In 2013 the Company's turnover was 21.8 million euros and the EBITDA was -1.7 million euros (Case Company 2013).

By the strategic choice to outsource all production activities the Case Company has achieved competitive cost prices but the current business model ties up capital since making an order. This causes challenges for the Company's working capital management and pushes need for external funding. The power of contract producers is strong in the Case Company's situation and can be realized e.g. in the payment terms. Pre-payments are needed to start production. Furthermore, the production process takes time from six to seven months which means that during a season, such as winter from November to February, it is not possible to make complementary orders. In addition, the final payments of the orders have to be made before import documents from the manufacturers are surrendered and ordinary importing and customs clearance can start. To demonstrate the inefficiency in the Company's inventory turnover it can be noted that the turnover rate is 1.5 which in the consumer business is inevitably too slow.

The retail industry, where the Case Company operates, is susceptible for economic changes because the demand varies strongly when the economic situation changes. According to Christopher (2011, 99), one of the biggest challenges in today's business environment is increasing levels of volatility of demand. In the Case Company's situation, it is difficult to forecast the customers' demand. Furthermore, the demand is seasonal and varies strongly. Moreover, factors which are totally out of the Case Company's control, such as weather, have strong influences on the customers' behavior and consequently, on the demand. In addition to the variation on the demand, the inefficiency and inflexibility in the current supply chain cause challenges which are culminated in the working capital challenges and in the low inventory turnover.

The Case Company launches new products or new models for every three seasons which are spring/summer, autumn and winter. All products are designed in the head office in Finland. All products go through a sampling process and as a result of the sampling process is the new product with definitive materials and colors. The minority of the Case Company's product scale is offered all the time regardless of seasons. For these products, the inventory management and control models could offer possibilities to optimize the inventory levels. However, taking into account the lead time about six months and the strong variation in the demand, it can be noticed that reorder levels would be needed to be kept at quite a high level. For these reasons, by implementing the

inventory management models the Company's challenges are not solved. Instead, it is necessary to focus on the Company's production activities and supply chain in order to find solutions for how the Case Company could improve the efficiency in the inventory turnover. The developments would have positive influences on the cash flow and moreover, would decrease the dependence on external funding.

1.3 Research objectives and questions

The main objective of this research is to find out how to improve the inventory turnover and the working capital management by developing the business model of the Case Company. In addition to the business model development, the Case Company's management is provided with strategic alternatives related to the improvements concerning the activities in the supply chain. This research addresses the following research questions:

1. How can the business model innovation be managed and implemented in general and in the retail industry?

The first research question focuses on the theoretical background of the study. The different aspects of strategic planning concerning the business model and its implementation are evaluated and analyzed in theoretical part of this research. More specifically, the business model innovation strategies in general and especially, in the retail industry are examined and analyzed. Moreover, a business model canvas, which is used in evaluating and redesigning the Case Company's business model, is included in the theoretical part of this research. In addition to the strategic planning, the research focuses on the implementation linking the business model to strategy and operational activities.

2. How do the strategic decisions concerning the supply chain impact the inventory turnover and the working capital management?

The second research question uses the theories of supply chain, inventory and working capital management in examining the relationships between these operations. By answering the second research question it is possible to build a holistic picture of the cause and effect relationships concerning the operational activities. Based on the in-depth evaluation of the literature and previous research concerning business model and supply chain management, the first and second question can be answered in the literature review.

3. How the Case Company's business model and supply chain could be efficiently re-organized in order to create and appropriate value?

The third research question looks into the Case Company's possibilities to redesign its current business model and supply chain in order to create and appropriate value. The starting points to the analyses are the Company's current business model and supply chain. Based on an in-depth review of the literature, previous research and benchmarking as well as the empirical data, the possibilities for improvements are identified. In examining the Case Company's possibilities to develop its current supply chain, business process re-engineering is used. In addition, in evaluating the Company's business model, the business model innovation canvas is used.

4. How could the reorganizing impact the inventory turnover and the working capital management?

The fourth research question focuses on demonstrating the influences which the reorganizing could have. On the one hand, the effectiveness in the inventory and the improvements concerning the cash flow, on the other hand, are the objects of the interest. However, the dependence on external funding, which is the Case Company's big challenge is taken into account in answering the fourth research question. The third and fourth research questions are answered in chapters five and six which are confidential in the Library version.

1.4 Research methodology and scope

In this research, the case study method allows the researcher to gain a deep understanding of the specific problems in the Company's inventory turnover and production process. In addition, the case study method enables the researcher to collect evidence from many sources with the help of research techniques such as interviews and literature.

This research focuses on the improvements concerning the Case Company's business model. Despite the fact that the main emphasis is on the Company's value appropriation meaning operational effectiveness and efficiency, value creation is taken into consideration in order to create the holistic picture of the business model innovation. Furthermore, the focus is on the strategic planning concerning the supply chain and on the strategic alternatives which would increase the efficiency in the form of inventory turnover. From the cash management's point of view, the focus is on the short-term financial planning although the influences can be extended to the long-term financial planning also.

1.5 Structure of thesis

The methodology of this research, including data collection and analysis, is introduced more closely in the second chapter. The theoretical part of the text has two approaches. The third chapter is devoted to the working capital management and the supply chain. In the fourth chapter the focus is on the innovation in general. In addition, the focus is on the strategic management including the definitions of main strategic concepts. Furthermore, the business model innovation canvas and the business model innovations in the retail industry are described in the fourth chapter.

The empirical data analyses are discussed in chapter five. Moreover, the development and improvement plan for the Case Company is described in chapter six. The conclusions are finalized in the seventh chapter.

2 RESEARCH METHODOLOGY

2.1 Qualitative case study

The most suitable research approach taking into account the objectives of this research is qualitative approach. This approach could be seen as the good approach when the emphasis is on understanding and a purpose is on providing the in-depth information of a few characteristics (Ghauri & Grønhaug 2005, 110; Hair & Money & Samouel & Page 2007, 152). When a research interest is in gaining insights and constructing explanations or theory, the qualitative approach can be relevant (Ghauri & Grønhaug 2005, 202). In addition, the qualitative approach can be useful for inductive and exploratory research. As a result of the inductive and exploratory research can be hypothesis and explanations which later can be tested with quantitative methods. (Ghauri & Grønhaug 2005, 111.) Despite the fact that this research includes numerical data, such as ratios calculated from annual statements, the main focus is on analyzing causes and effects instead of results in the numerical form. The Case Company's opportunities to improve efficiency in its inventory turnover by developing its production process and supply chain is identified by analyzing relevant literature on e.g. business model innovations as well as by examining the Company's possibilities to make strategic changes concerning the specific activities.

In order to achieve the objectives of this research and to examine the specific problem in the real-life context, the case study method is chosen to the main research method. By the case study method it is possible to contribute knowledge of individual, group and organizational phenomena among other things (Yin 2003, 1; Hair et al. 2007, 203). The case study method enables an in-depth exploration from multiple perspectives of a complex and unique project, program or system. Therefore, the main objective for the case study is to generate the in-depth understanding of the specific problem as pointed out above. (Simons 2009, 21.) Furthermore, the case study method can be preferred when the research questions "how" and/or "why" are to be asked, and when the focus is on a contemporary phenomenon with the real-life context, and when a researcher has little or no control over an event (Yin 2003, 5-9; Ghauri & Grønhaug 2005, 115). For

research in management and business subjects, the qualitative methodology and the case study method contribute powerful tools (Gummesson 2000, 1). In this research, the case study method together with the qualitative approach allows the researcher to examine the organizational processes in the specific real-life context. Moreover, the method enables the researcher to find solutions to the challenges faced in the Case Company and to create holistic and meaningful suggestions for the management of the Company.

The case study method has strengths but some limitations as well. A major strength of case studies is an opportunity to use many sources of evidence (Yin 2003, 97). A possibility to study a specific and complex process in depth is recognized to be the strength of this method. In addition, the possibility to demonstrate influences, to explore contested viewpoints, and to document multiple perspectives are seen as the strengths. (Simons 2009, 23.) In contrast, the case study method is criticized based on the lack of rigor and generalizability (Yin 2003, 10-11). On the one hand, the flexibility with respect to time and research techniques is seen as the strength (Simons 2009, 23) on the other hand, massive and unreadable documents which are achieved during a long time have been a subject of debate (Yin 2003, 10-11). The possibility to generate knowledge but also demonstrate influences as well as the possibility to use many sources in data collection is the strengths identified also in this research. Instead, by developing procedures which are followed systematically and by documenting all evidence achieved by using different research techniques, it is possible to increase the rigor of this research. From generalization point of view, this research is not an exception. The single case study does not provide enough information to be generalizable in the industry. However, this case study provides meaningful results for the Case Company.

2.2 Data collection

Yin (2003, 85) points out the six sources of evidences used in case studies which are documentation, archival records, interviews, direct observation, participant-observation and physical artifacts. In this research, the data is collected from multiple sources with the help of research techniques of interviews and analysis of documentation. In addition, the researcher's own working experience is used in this research. In the

research process the literature review is done and written firstly followed by the empirical data collection. Based on the literature review the topics and the questions for interviews are created.

The essential empirical information is achieved by interviewing the managers of the Case Company. Interviews in case studies are commonly of an open-ended nature where facts but also opinions are asked from interviewees (Yin 2003, 90). In this research, the interviews were semi-structured but facts as well as opinions were asked in accordance with the open-ended nature of the questions. The face-to-face group interview with the Finnish managers was organized in February 2014 by speaking Finnish. The translation of the transcripts into English was carried out by the researcher. The Skype interview with the respondent located in China was organized in March 2014 by speaking English. The research topic was introduced to the interviewees at the beginning of the interviews. The both interviews were recorded and the answers were saved as a transcript and provided to the researcher for further utilization.

The interviewees were selected by the position held by the person in the Case Company. In addition to the position, the interviewees' capability and interest in decision making concerning e.g. the production and supply chain was emphasized in the selection. Three of the four interviewees were the shareholders of the Company and thus, the members of the board. In addition, the interviewees worked at the time of the interviews for the Case Company as Chief Executive Officer (hereinafter CEO), Chief Financial Officer (hereinafter CFO) and Purchase Director. The managers with the different positions and capabilities related to a long-term strategic planning, financial, and operational experiments provided information from different perspectives. In addition to the experiments, the ownerships increased an interest in the research in general. One of the four interviewees worked for the subsidiary in China as Executive Vice President at the time of the interview. By interviewing this manager it was possible to achieve the realistic and valuable perspective of the environment where the suppliers and manufacturers of the Company act. From the researcher's point of view the diverse experience combined with the researcher's own experience of the Case Company helped to create a holistic picture of the production process.

Yin (2003, 90) argues for an “informant” who can suggest sources of corroboratory or contrary evidence and enable the access for this kind of information. For this reason, according to him the person can be critical to the success of the case study. In this research the CEO, who was the mentor for the researcher as well, enabled the researcher to get an access to the needed information. By this support it was possible to use many sources of evidence in order to increase the validity of the study.

Documents can be used to collaborate and augment evidence of other sources (Yin 2003, 87). In this research the documentation consisted of information acquired from the enterprise resource planning system (hereinafter ERP) of the Company as well as the strategy overview. The documentation includes information of inventory levels and suppliers. Accordingly, the strategy overview includes information of the Company’s business idea and principles which guide the Company’s operations. Moreover, the annual reports of the Company are used in analyzing and calculating the ratios of the inventory and working capital.

Because the Case Company was the researcher’s employer the own working experience was used in this case study. The own experience enabled the researcher to provide a cross-check on data and therefore, to increase the validity of this research. Consequently, data triangulation (Yin 2003, 98-99; Ghauri & Grønhaug 2005, 221-222) was used in this study in order to achieve a holistic outcome concerning the objectives of the research. In the data triangulation, the different facts achieved by different research techniques were compared and analyzed.

According to Gummesson (2000, 58), a preunderstanding achieved by working in an organization can be an advantage for a researcher in order to increase the validity of the research as well as to decrease time used to acquire relevant data. Nevertheless, the questions of subjectivity and objectivity are arisen when the researcher works for the Case Company. Even though the researcher worked for the Case Company during the research, a study leave and a preceding maturity leave enabled to remain distanced from the Case Company of this research. Accordingly, the neutral role enabled to avoid that the organization’s interest became the researcher’s interest. However, the subjective nature exists but the wariness of doing subjective interpretations, such as

reinterpretations and misinterpretations, was recognized by the researcher. In addition, the objectivity was acknowledged in this research by emphasizing the importance of the proper research design and by using the several information sources from different viewpoints. Based on the collected data, conclusions and interpretations were drawn up.

2.3 Data analysis

Yin (2003, 109-110) emphasizes the need of analytic strategy as a part of case study protocol to enable a researcher to conclude a research process. Relying on theoretical propositions, thinking about rival explanations and developing a case description are the analytic strategies discussed by Yin (2003, 109-115). The analytic strategy in this research is to follow the theoretical propositions. The theoretical part of the research focuses on evaluating the different business innovation strategies in general and in the retail industry. Moreover, the business model canvas is included in the theoretical framework. In addition to the business model theories, the other approach in the literature review is to find out strategic alternatives to improve efficiency in the inventory turnover through the developments of supply chain. In addition to the literature and earlier researches, by benchmarking the fashion industry's pioneer the main ideas, which can be utilized in the empirical part, are collected. Based on the theoretical propositions the empirical data is collected. Furthermore, the theoretical propositions are the basis on which the empirical data is reflected in the analysis.

In order to gain insights of the collected empirical data Miles's and Huberman's systematic way, including three interlinked processes for the data analysis (1994, cited by Ghauri & Grønhaug 2005, 206-207; Hair et. al 2007, 292-297; Simons 2009, 120), is used in this research. This systematic approach divides the qualitative data analysis to three components including data reduction, data display and conclusion drawing/verification (Miles & Huberman 1994, cited by Ghauri & Grønhaug 2005, 206-207; Hair et. al 2007, 292-297; Simons 2009, 120). In the first step, the data was organized to a more manageable and understandable format by simplifying and transforming the data. Moreover, the irrelevant issues were eliminated. In the second step, the similarities and differences were grouped in order to make a comparison

between the interviews, documents and observation. In addition to the comparison, the displaying of main facts enabled the researcher to find linkages between the theories and the empirical findings. In the third step, the conclusions were drawn up but also the verifications were done by evaluating the conclusion's logicality, justifiability and realism. By this process it was possible to achieve the objectives of the research and create the best possible conclusions.

Because in the research the focus was on the production process where the money is more or less tied up in the activities it was justifiable to use a logical analysis in this research. According to Yin (2003, 130-133), by organizational-level logic models it is possible to trace events and build chronological sequences. The changes in the production process and supply chain are linked to the inventory which is linked to the working capital management of the Company. For this reason, the logic model was used in illustrating and demonstrating the effects of the changes in the production process cause for the Company's inventory turnover and working capital.

3 WORKING CAPITAL MANAGEMENT AND SUPPLY CHAIN

3.1 Main concepts of working capital management

The inventory turnover and working capital are the financial measurements which this research aims to improve in the Case Company. Because an inventory is one element included in working capital management it can be argued that working capital management and especially, the inventory is the main parameter which is the area of the interest in this research.

Despite the fact that accounting and financial reporting is mainly standardized, based on the international standards for example, the different terms of ratios are used in different sources. For this reason, the main concepts of working capital management, used in this research, are defined at first. In addition to the concepts, formulas for calculating the main ratios are needed to be discussed.

The concept of working capital management, ipso facto, is defined as a managing of a company's current assets and liabilities. To current assets are included inventories, account receivables, marketable securities, and a cash at bank or/and in hand. Accordingly, to current liabilities are included notes payables, such as a short-term bank loans or limits, accruals, and account payables. The difference between the current assets and current liabilities, instead, is called a net working capital. (Gitman & Zutter 2012, 600-601.) This difference between the monetary value of current assets and liabilities is also referred to as a working capital (Berry & Jarvis 2006, 454). The net working capital, used in this research, can be positive or negative depending on the balance between the assets and liabilities. In general, the bigger the margin between the current assets and the current liabilities, the better a company can pay the invoices as they come due (Gitman & Zutter 2012, 601).

The formula for calculating the net working capital is as follows:

$$\text{Net working capital} = \text{Current assets} - \text{Current liabilities} \quad (1)$$

A cash conversion cycle (hereinafter CCC) measures the time which a company requires in order to convert cash invested in its operations to cash received as a result of its operations. (Gitman & Zutter 2012, 603-604.) In other words, the CCC measures the time between the date when a company starts to pay to its suppliers and the date when the company starts to collect the money from its customers (Garcia-Teruel & Martinez-Solano 2007, 164). The CCC is used as the powerful metric for assessing how well a company manages its working capital (Grosse-Ruyken & Wagner & Jönke 2011, 15). In this research, the CCC is used but the terms working capital cycle (Berry & Jarvis 2006, 457) and operating cash cycle (McLaney 2009, 353) are also used to determine the time between the cash outflow and inflow. In calculating the CCC, an average age of inventory (hereinafter AAI), an average collection period (hereinafter ACP), and an average payment period (hereinafter APP) are taken into account. (Gitman & Zutter 2012, 603-604.) In addition, in a manufacturing business an inventory can be divided more closely to various stages of completion from raw materials to finished products (McLaney 2009, 352).

The inventory turnover is one of the activity ratios measuring how the assets are used to create profit (Berry & Jarvis 2006, 273). By the inventory turnover can be measured how effectively products or materials change in an inventory. The inventory turnover can be expressed in the number of times or days. The latter expression is the same as the above introduced concept of average age of inventory (Gitman & Zutter 2012, 74).

The formulas for calculating the CCC, the average periods, and the inventory turnover are introduced below. It is important to note that in calculating the average collection and payment periods, it is necessary to use credit sales and purchases in order to get realistic results.

$$\text{CCC} = \text{AAI} + \text{ACP} - \text{APP} \quad (2)$$

$$\text{AAI (or inventory turnover in days)} = 365 / \text{Inventory turnover} \quad (3)$$

$$\text{ACP} = \text{Account receivables} / (\text{Annual credit sales} / 365) \quad (4)$$

$$\text{APP} = \text{Account payables} / (\text{Annual credit purchases} / 365) \quad (5)$$

$$\text{Inventory turnover} = \text{Cost of goods sold} / \text{average inventory} \quad (6)$$

The CCC can be zero, negative or positive. If a collection period, a payment period and an inventory period are exactly in balance the CCC is zero. The negative CCC indicates that a company is able to receive cash from sales before it pays to its suppliers. The negative CCC usually indicates the good inventory management and the high inventory turnover. Correspondingly, the positive CCC indicates that a company needs to advance capital while waiting for payments from its suppliers. In addition, the positive CCC can be a result of low inventory turnover. (Grosse-Ruyken et al. 2011, 16.)

3.2 Objectives and importance of working capital management

The objective of working capital management is to manage a company's current assets and liabilities in order to achieve the balance between the profitability and risk. In working capital management context, the profitability refers to the relationship between revenues and costs generated by using the company's assets in productive activities. Consequently, the risk, in this context, is that a company is not able to pay its invoices as they come due. A result of this situation can be insolvency. Generally speaking, it is assumed that the greater the net working capital is the lower the risk is to become insolvent. Nevertheless, the risk becomes lower or greater depending on which current assets the investment is done. More closely, the investment in the cash is lower risk than the investment in the inventory. The nearer an asset is the cash in the balance sheet, the less risky it is. (Gitman & Zutter 2012, 600-603.) Based on these factors, the investment in the inventory is the riskiest compared to the other current assets. Nonetheless, it is necessary to remember that the current assets are a part of the total assets. For this reason, it can be concluded that the investment in the fixed assets is riskier than investment in the inventory.

More closely, the objective of working capital management is to keep the CCC as short as possible. Thus, by minimizing the amount of funds tied up in the working capital, it is possible to decrease financial costs and increase funds available for expansion. The changes in any time periods included in the CCC have an influence on the amount

which is tied up in the company's daily operations. Thus, by minimizing the length of CCC, the need for external funding decreases. (Gitman & Zutter 2012, 600, 603-604, 607-608.) Furthermore, from the inventory turnover point of view, the faster the inventory turnover is the less money is tied up in the inventory and the cheaper the operational costs related to the inventory can be (Berry & Jarvis 2006, 273). Nonetheless, all operational costs are not directly proportional to the inventory ratio. Insurance costs can be related to the values of inventories but premises can be same as long as a rental contract of a warehouse is valid. In addition to the objective of the balance between the profitability and risk, working capital management in the long run aims to enhance a shareholder's wealth (McLaney 2009, 350).

The working capital is fundamental to measure the welfare of business and a company's ability to survive and prosper (McLaney 2009, 355). In addition, a bottom line, a cash flow and a productivity of capital are critical financial dimensions driving a decision making of management especially in today's turbulent business environment. Thus, many companies utilize the concept of return on investment (hereinafter ROI) to measure how much investments generate profit to a company. The ROI is calculated by dividing a net profit by a capital employed to produce the profit. (Christopher 2011, 58-59.) However, the formula for calculating the ROI or a return on capital employed (hereinafter ROCE) or a return on total assets (hereinafter ROA) depends on a purpose of calculation. The denominator varies in the different formulas being the net assets in the ROCE and the total assets in calculating the ROA. (Alexander & Britton & Jorissen 2011, 234.) Nonetheless regardless of the calculation formula, a company with the low CCC is more efficient because it turn its working capital over frequently. The consequence of this low CCC is the high return of capital, measured in the ROI or in the ROCE. (Grosse-Ruyken et al. 2011, 15.) Also in this research, the main objective is to find ways how to improve the productivity of capital. One way to boost the ROI is to improve the capital turnover, especially, the inventory turnover in this research. For this reason, interdependencies between the profitability, liquidity and productivity are in the key role in understanding and evaluating influences between these financial dimensions and companies' decision makings.

Various studies (Garcia-Teruel & Martinez-Solano 2007; Jose et al. 1996; Shin & Soenen 1998; Deloof 2003; Wang 2002, cited by Garcia-Teruel & Martinez-Solano 2007, 165) concerning large and small-and-medium-sized companies suggest that reducing working capital leads to higher profits in companies. Thus, it would be beneficial to companies to adapt an aggressive strategy in managing their working capital management. Accordingly, active cash management reduces the need of expensive external funding. Furthermore, the internal cash allows a company to grow more easily than through external funds. (Grosse-Ruyken et al. 2011, 16.) Grosse-Ruyken and Wagner (2009, cited by Grosse-Ruyken et al. 2011, 16) point out that growth rates are lower in companies with weak cash position than in cash-rich companies.

In addition to the influence of the profitability, Johnson and Templar (2011, 91) argue that a reduction in the current assets improves the assets' utilization and profitability. By extending the payment terms to customers, it can be possible to increase sales. Nonetheless, this has an influence on the CCC by lengthening the collection period. The lengthened collection periods instead can cause challenges to companies' liquidity. In addition, in manufacturing companies the productivity can be influenced by increasing utilization levels of equipment and manufacturing plant. Therefore, costs per unit can be lower than earlier. However, an overproduction can lead to a situation that inventory levels are high and money can be tied up to an inventory. In addition to the liquidity challenges, the consequences can be related to profitability as well because a huge inventory can increase operational costs, such as insurance costs. Thus, from the risk point of view, it is necessary to understand interdependencies between these variables. (Johnson & Templar 2011, 91.) To summarize the discussion above, the influences of financial business decisions are interdependent but holistically speaking, decisions concerning for example manufacturing activities are also related to financial outcomes. This research focuses on interdependencies between working capital management and a supply chain more closely in subchapter 3.5.

3.3 Strategies for improving working capital management

According to Gitman and Zutter (2012, 608), by using three different strategies related to inventories, accounts receivables and accounts payables it is possible to minimize the length of CCC. Grosse-Ruyken et al. (2011, 15) argue that alongside a traditional one company perspective has been arisen a supply chain perspective, where the focus is not on a company's CCC but on all supply chain partners' CCC. The objective in optimizing the CCC is on having stable and healthy partners because of domino effects which can be circumstances of bankruptcy of a single company in a supply chain. Despite this new modern perspective the leverage factors of CCC are commonly same. (Grosse-Ruyken et al. 2011, 15.)

Firstly, it would be beneficial to collect account receivables as quickly as possible (Gitman & Zutter 2012, 608). The shortening of receivable periods could be achieved through credit and collection policies. By focusing on shortening payment periods and on enhancing record-keeping on receivables, cash flows can be improved. By offering discount terms or by moving to an e-invoicing, can be encouraged fast payments and can increased the collection of receivables. (Grosse-Ruyken et al. 2011, 24.) The tightening of terms of payment would be needed to be done without jeopardizing customer relationships (Gitman & Zutter 2012, 608).

Secondly, it would be beneficial to pay account payables as slowly as possible. (Gitman & Zutter 2012, 608.) Companies can try to postpone their payments as long as possible by benefitting payment terms of suppliers or by trying to force the suppliers keep production resources in their own assets as long as possible. Because account receivables are free of interests until the end of payment term it would be beneficial for a company to utilize the payment terms granted by suppliers. Nonetheless, if suppliers grant cash discounts which are more attractive than investing into other alternatives, it would be beneficial to pay invoices before those due on. (Grosse-Ruyken et al. 2011, 24.)

Thirdly, it would be important to turn over an inventory as quickly as possible without losing sales (Gitman & Zutter 2012, 608). Inventory levels should be kept at minimum level and the inventory turnover should be kept at the high level. Nonetheless, in practice inventories are kept in order to counter to uncertainly in demand. In the modern

inventory collaboration programs, the responsibility of inventories can be divided between different partners. For example suppliers can take a responsibility of keeping a material inventory. Thus, it is possible to eliminate that producers need to place purchase orders concerning materials. Accordingly, suppliers get an access to relevant information flows. Thus, it is possible to reduce the inventory turnover within the entire supply chain. (Grosse-Ruyken et al. 2011, 24-25.) In this research, the inventory turnover is the key issue in order to improve the Company's financial situation in the terms of the working capital. Furthermore, the objective is to find a new ways of doing the business by developing the activities related to the production. To these elements is focused on chapter 3.6.

3.4 Challenges in calculating working capital ratios

A problem in using balance sheets as a basis for calculations is that balance sheets report one moment's situation of current assets and liabilities. In businesses where seasonal variations are strong, the net working capital does not give the whole truth of a company's situation. In addition, in calculating ratios from annual reports it is not possible to see which of payables are related to fixed and variable costs. For example, in the Case Company's situation, the accounts payables consist of payables of fixed costs such as premises. Instead, most of payments to the Company's suppliers and manufacturers are needed to be paid before products can be imported. Therefore, these are not reported as account payables in the Company's balance sheet. Furthermore, the minority of the Company's sales is credit sale. For this reason, in order to make a deep analysis of the Company's situation, the published annual reports do not provide enough information for calculating the ratios related to the working capital.

A common problem in the analyses based on annual reports is comparability. In order to make reasonable comparability, a deep understanding of comparable companies is needed. For example, in the Case Company's situation some of its competitors are retailers who sell other companies' products and some of their competitors operate such as the Case Company by selling their own products which are subcontracted. Moreover, a size of company can also have an influence on inventory levels being, in general,

bigger in small companies than in larger companies. To summarize the discussion above, it can be interpreted that the ratios introduced above are reasonable but meticulousness in analysis and comparisons is necessary. The key ratios of the Case Company are illustrated in chapter 5.1.

3.5 Supply chain and its linkages to working capital

In this research, the supply chain consisting of many organizations around the Case Company is the target of the interest in order to improve the Company's performance. According to Christopher (2011, 13), a supply chain consists of organizations which are involved in different activities and processes in order to create value to a product or a service in the hands of end customers. Therefore, it can be argued that a supply chain is in the essential role in order to serve the customers' needs. Moreover, organizations in a supply chain create a supply chain network. For this reason, a supply network or supply web is argued to be more a preferred term than a supply chain (Christopher 2011, 3, Waters 2009, 12-13). In addition, according to Christopher (2011, 3), the concept of supply chain management could be replaced by the concept of demand chain management in order to emphasize that a chain should be driven by market instead by suppliers. Nonetheless, in this research, the supply chain concept is used in order to describe the supply chain network where value is created. The definition of supply chain management by Christopher (2011, 3) consist of managing upstream and downstream relationships with customers and suppliers to deliver superior customer value at less cost to a supply chain as a whole. The focus is on the management of relationships in order to achieve profitable outcome to all parties in a supply chain (Christopher 2011, 3).

The decisions concerning a supply chain strategy and management are linked to a working capital fundamentally. To cash and receivables can be affected by shortening an order cycle time meaning the time between a giving of order by a customer and a delivering of the ordered product. Instead, decisions concerning inventory levels and stock locations have an influence on the size of total inventory. Furthermore, strategies concerning operations have an impact on the need of inventory. Purchases and payment

terms, instead, have an influence on current liabilities, more closely, on account payables. In addition, procurement policies, order fills and invoice accuracies have effects on companies' cash flows. Thus, by reducing the time compression in a supply chain and by eliminating or minimizing the time used for non-value-adding activities to the CCC can be affected. (Christopher 2011, 60-61, 64-65.)

In a conventional approach to meet customers' needs products are produced and positioned in a supply chain in advance before ordinary demand exists. In this kind of systems, the main idea is culminated in inventory control systems, more closely, in certain predetermined points which are signals for companies to make reorders. These points are determined based on the length of lead times. Instead, the amounts of orders are based on models such as an economic order quantity. Nonetheless, these forms can lead to a situation that companies keep safety inventories in order to serve their customers during the lead times. Thus, circumstances can be the great amounts of inventories and ineffectiveness in the use of working capital. It can be argued that every hour or day used a supply chain is directly reflected in quantities in inventories and thus, in working capital. Moreover, because in the conventional supply chain all partners aim to optimize their own performance partners are needed to be buffered with inventories and/or time lags. Low responsiveness and high total costs are consequences of long production time. (Christopher 2011, 104-109, 136, 141.)

In the Case Company's situation the long time used in the production process, including the value adding and non-value adding activities, together with the power of manufacturers have an influence on the working capital of the Company. Thus, it would be necessary to find a new way to operate in order to move from the conventional approach, to push products to market, to the pull approach responding to existing demand. Thus, following subchapter focuses on agility in a supply chain.

3.6 Responsive supply chain

Supply and demand can be effectively matched by improving the visibility of real demand and by improving the velocity of supply chain (Christopher 2011, 88). Thus,

pointed out by Christopher (2011, 89), companies' objective would be to move towards a demand-driven mentality instead of basing production on forecasts. Agility in a supply chain is necessary in order to move from the forecast-driven mentality to the demand-driven mentality.

By an agile supply chain companies would be able to adjust output quickly and to switch rapidly from one variant to another. In an agile supply chain, by effectiveness is meant an ability to respond rapidly to precise needs. In other words, this chain or strategy would be used when demand is uncertain and the levels of variety are high. A focus is on multiple product variants for small market segments instead of standardized products. In an agile supply chain companies try to move toward a just-in-time environment wherever possible by minimizing inventories. Instead, in lean manufacturing is produced more with less in view of relatively standardized products. Efficiencies in economies of scale and in the use of resources are issues where in lean manufacturing is focused on. (Christopher 2011, 99-100.) According to Waters (2009, 85-86), there is not clear distinction between lean and agile strategies. In both strategies customers' satisfaction and low costs are essential but the weight is in different aspects. In addition, the low levels of inventories and the short lead times are the cornerstones in the both strategies. (Waters 2009, 86.) Characteristics such as market sensitivity, virtual, process alignment and network based are necessary to be included in a supply chain in order to be agile (Harrison & Christopher & Hoek 1999; cited by Christopher 2011, 103). In this research, an agile supply chain is the target of the interest in order to improve flexibility. For this reason, it is necessary to invest in characteristics needed in a supply chain in order to be agile.

3.6.1 Virtual information based supply chain

Being market sensitive means that a supply chain is able to capture information from market and respond to real demand. It is possible for a company to hear the voice of market and respond directly to it by using information technologies to capturing data of demand from the point of sale or use. (Christopher 2011, 102-103). Business intelligence (hereinafter BI) systems enable companies to capture data from internal

systems, such as enterprise resource planning systems, and external sources, such as the Internet. By BI solutions, data can be filtered and organized in order to emphasize factors which are important in companies' decision making. By implementing BI systems companies together with their partners in a responsive supply chain, where information is shared, are able to react to changes in real demand. Thus, companies are able to make changes in their forecasts in order to match supply and demand effectively.

In addition to the market sensitivity, a supply chain needs to be virtual where information is shared between suppliers and buyers. Thus, it can be argued that a supply chain would be necessary to be information based rather than inventory based. Web-based technologies enable companies in a network to share the information of demand, capacities and inventories in collaborative contexts. In the fast moving consumer goods, for example, web-based extranets are already common in order to enable suppliers to see their own products' sales item by item almost in the real time. Thus, they are able to respond to the changes in the demand of their products. Shared information through the Internet or extranets enables companies to optimize batch sizes. (Christopher 2011, 103, 112, 144.) Therefore, it is possible to optimize inventory turnovers and thus, have influences on companies' CCCs. In addition, the Internet and its variations enable to share information in a highly cost-effective way. Christopher (2011, 144) argues that extranets revolutionize supply chain management. According to Christopher (2011, 146), information has been central to efficient logistic management but now it provides a driving force for competitive logistics strategy. Based on the factors above, it can be interpreted that information systems in agile supply chains are the key success factors in supply chain management.

3.6.2 Collaborative agile supply chain

In order to utilize a virtual supply chain a process alignment is necessary. Instead of acting as separated companies, each stage would be required to be connected to each other. In other words, a whole supply chain acts as a synchronized network. Consequently, relationships between partners are in the key role in order to enable a supply chain to act effectively. In a conversational style, companies choose their

partners mainly based on prices creating arm's length relationships with their suppliers. Nevertheless, when the importance of agility is at the high level, the traditional relationships do not serve the purpose of supply chain. For this reason, it is necessary to create collaborative programs in order to create a responsive supply chain. (Christopher 2011, 103-104, 113.)

There are many possibilities how to arrange close relationships with partners. According to Christopher (2011, 113), it is possible to explore opportunities to re-engineering and re-aligning processes, which have effects on overall responsiveness, by joint teams with suppliers and manufacturers. Other possibility is to create joint plans and forecasts through shared information in order to benefit all partners in a supply chain. A partnership-based approach to managing interfaces between suppliers and customers across a supply chain is called collaborative planning, forecasting and replenishment (hereinafter CPFR). The CPFR is a development of vendor managed inventory (hereinafter VMI) where suppliers rather than customers, such as retailers, manage the flow of materials or products. In a VMI the information of point of sale/use streams to suppliers who take care about replenishments to inventories. Correspondingly, the CPFR is a creation of an agreed framework for information sharing between partners. In addition, the CPFR concerns decisions of replenishments. Furthermore, the generation of joint forecasts, which are agreed by suppliers and customers, are the key element of CPFR. (Christopher 2011, 94.)

The benefits of CPFR are related to reducing invested capital, to decreasing costs and to increasing sales revenue. In a long run by collaborating with partners and by improving visibility, it is possible to decrease warehousing capacities. Visibility and forecast accuracy together with collaborative long-term planning enable companies in a supply chain to reduce the need of inventories and improve capabilities to react changes in demand. Accordingly, improved forecast accuracy decreases costs in the terms of warehousing and obsolesces as well as transportation. Correspondingly, a capability to respond to demand decreases the need of selling products with discounts. In addition, availability and freshness of products increases customer satisfaction and thus, would improve loyalty toward retailers and manufacturers. (Christopher 2011, 96-97.) It can be

argued that these improvements have influence on companies' CCC as well through decreased inventory levels.

Other possibilities to improve cooperation are to create strategic alliances or partnerships together with other companies. In a strategic alliance cooperation pursues a set of agreed long-term goals whereas in partnerships, companies work closely in order to achieve their mutual aims, however, remaining their independences (Waters 2009, 151). However, partnerships can be also strategic partnerships where common goals are agreed between partners. Furthermore, joint ventures and vertical integrations are possibilities for companies to co-operate. In a joint venture, two or more companies establish a new company with shared ownership. Accordingly, in a vertical integration a supply chain is owned by one company. (Waters 2009, 156.) Thus, it is possible to achieve a situation where a company can have a strong influence on operations.

3.6.3 Quick response

Related to a synchronized network, the concept of `quick response` logistics (hereinafter without emphasis) has emerged (Appelqvist & Lehtonen & Kokkonen 2004, cited by Christopher 2011, 150). The objective of quick response is to reduce inventory levels and lead times as well as to improve accuracy in forecasting (Birtwistle & Siddiqui & Fiorito 2003, 120). A system, which is responsive and fast, is developed to achieving advantages in a time-based competition. Therefore, it is essential that a data of demand is captured in real time as near end customers as possible. Furthermore, an accelerating in process time is necessary in a quick response system in order to reduce cumulative lead times. As a result of accelerating can be lower inventories than without the system. In the United States in the fashion industry, good results have been achieved in the terms of lead times and inventory levels by implementing a quick response system together with an agile supply chain. A cycle from re-order to in-store display takes about six weeks by the new system compared to the old system where the cycle takes six months. (Christopher 2011, 150-153.)

A pressure towards a production is great in order to achieve a quick response in a supply chain. For this reason, flexibility in production is required. A flexible manufacturing system has highlighted in this direction to be a possibility to substantial progress. New technology can be needed but also time used for changes from one variety to another, a set-up time, is an important factor which has an influence on flexibility. If producers can decrease this set-up time to nearby zero, production can respond to changes in demand quickly. In some cases new technologies would be needed to achieve this flexibility but in most cases a different look at a process itself is necessary and possibly enough. Companies' marketing strategies of mass customizing where the focus is on tailored solutions for the specific customers can be supported by a quick response in a supply chain. (Christopher 2011, 153.) Correspondingly, according to Christopher (2011, 264), the supply chains of future are not supplier-driven chains focused on mass production and mass marketing. Instead, the future's supply chains are market-driven chains focused on a mass customization and on a one-to-one marketing (Christopher 2011, 264).

3.7 Business process re-engineering

By doing a detailed examination of a process, such as a production process, it is possible to identify activities which are crucial for adding value to products but also activities which do not add value to the products at all. In other words, activities in a process can be divided in the value-adding and non-value-adding activities. In examining a process from the time perspective it possible to argue that a part of process time is non-value-adding time. The typical example of non-value-adding activities and time is an inventory. The time used in a supply chain correlates the need of inventory. Therefore, the time used between raising an order and receiving the goods, is a requirement for a buffer in an inventory (Christopher 2011, 112). In order to accelerate activities or in order to eliminate non-value-adding activities a supply chain can be transformed by rigorous application of process re-engineering principles (Christopher 2011, 113).

Business process re-engineering (hereinafter the BPR) is an approach to designing and creating dramatically improved logistics to companies (Waters 2009, 126). Hamar and Champy (1993, cited by Waters 2009, 126) define the BPR as a fundamental rethinking and radical redesigning of business processes in order to achieve dramatic improvements in critical, contemporary measurements of performance such as costs and speed. According to James (2011, 17), re-engineering refers to changes of significant business processes and involves a complete rethinking about a way of operating. Christopher (2011, 113) emphasizes simplifying and reshaping of organizational processes with a goal of achieving desired outcomes in the terms of costs and time-frames. Comparing the different definitions of the BPR, it can be argued that the degree of improvement varies between the definitions. Waters (2009, 127-128) emphasizes the difference between continuous improvements and the BRP but he also emphasizes that these approaches are not mutually exclusive. Thus, companies can implement series of radical improvements and still continue small continuous improvements (Waters 2009, 128).

It seems that the BPR approach does not have any specific procedure. Waters (2009, 126) emphasizes the need of starting from a blank paper in order to achieve radical changes instead of achieving small improvements to current operations. One reason to starting from the blank paper is that many existing business process are performed for historical reasons (Christopher 2011, 113). Thus, to achieve radical changes the historical reasons would be necessary to be ignored. James 's (2011, 17-18) description of implementing the BPR in an organization starts from a current process in order to provide a framework for a design and improvement. In the second step, relevant processes for improvement are identified by using different methods, such as a scoring system or a process making guide. Thus, most important processes in a customer value creation or/and against competitors can be prioritized. In addition, critical success factors can be identified in the second step. In the third step, by using brainstorming, by modifying existing designs or by benchmarking, it can be generated new innovative solutions to companies. (James 2011. 18-19.)

Waters (2009, 127) categorizes main principles which would be necessary to be taken into consideration to redefining activities in a supply chain. Firstly, a concentration on a

whole supply chain rather than separated activities in different functions is important. In addition, re-engineering would be necessary to be extended to concern all functions aiming to rationalize activities regardless of different organizational functions. In other words, the work should be done where it is most essential and sensible, instead of organizing activities to different functions. Because the purpose is on radical re-engineering, improved information technologies would be necessary to implement in companies. Lastly, non-value-adding activities should be eliminated. (Waters 2009, 127.)

The Case Company would be necessary to aim the quick response as well as the agile supply chain in order to success in the industry. The examples of the fashion industry indicate that the agile supply chain is possible to achieve even though the size of the Company can cause challenges. Nonetheless, it would be necessary to focus on strategic management, such as a vision and a business model, in order to be able achieve sustainable competitive advantages. Therefore, the focus is on strategic management in following chapter.

4 BUSINESS MODEL INNOVATION: THE SOURCE OF COMPETITIVE ADVANTAGE

4.1 Innovation or improvement

The importance of understanding 'innovation' (hereinafter without emphasis) is firstly recognized by Schumpeter in the 1930s (1934, cited by Goffin & Mitchell 2010, 7). Despite the fact that his definition is old, five different aspects of innovation defined by Schumpeter (1934, cited by Goffin & Mitchell 2010, 7) are still today comprehensive. According to Schumpeter (1934, cited by Goffin & Mitchell 2010, 7), innovation can be an introduction of a good which is new to customers or which has an increased quality compared to earlier products. In other words, this kind of innovation can be called a product innovation. In addition, methods of production which are new to a particular branch of industry can be innovated. An opening of new market and a use of new source of supply are also different aspects of innovation. Lastly, new forms of competition which leads to the restructuring of an industry are the aspect of innovation. (Schumpeter 1934, cited by Goffin & Mitchell 2010, 7.) Porter's (1990, cited by Goffin & Mitchell 2010, 7) definition of innovation includes improvements in technologies as well as methods or ways of doing business resulted from organizational learning or from formal research and development (hereinafter R&D). Compared to Schumpeter's definition, Porter's definition of innovation emphasizes that innovation is not just resulted from a R&D function but it can be originated from organizational learning. In addition, it is necessary to emphasize that an originality of newness is not so important than a perception of newness in innovating. (Goffin & Mitchell 2010, 7-8.) Therefore, it can be interpreted that even though innovation is related to the newness, the originality is ignored in defining the concept of innovation.

New products or services, manufacturing processes, business processes and business models are referred to as the dimensions of innovation in a manufacturing sector by Goffin and Mitchell (2010, 8-9). Despite the fact that product innovation is important competitive advantage can be missed by focusing exclusively on product innovation. For this reason, companies in the manufacturing sector create services, called service

innovation, to differentiate from their competitors. In addition, manufacturing and delivery processes, called process innovation, can be the target of improvement in companies. Business process innovation can be used in order to optimize processes to achieve good customer relationships e.g. in the terms of order fulfilment. Moreover, a key source of commercial innovation can be business model innovation. (Goffin & Mitchell 2010, 8-9.) Figure 1 illustrates the different dimensions of innovation. In this research, based on Goffin and Mitchell's (2010, 8-9) dimensions, the target of the interest is in manufacturing processes and in business model innovation.

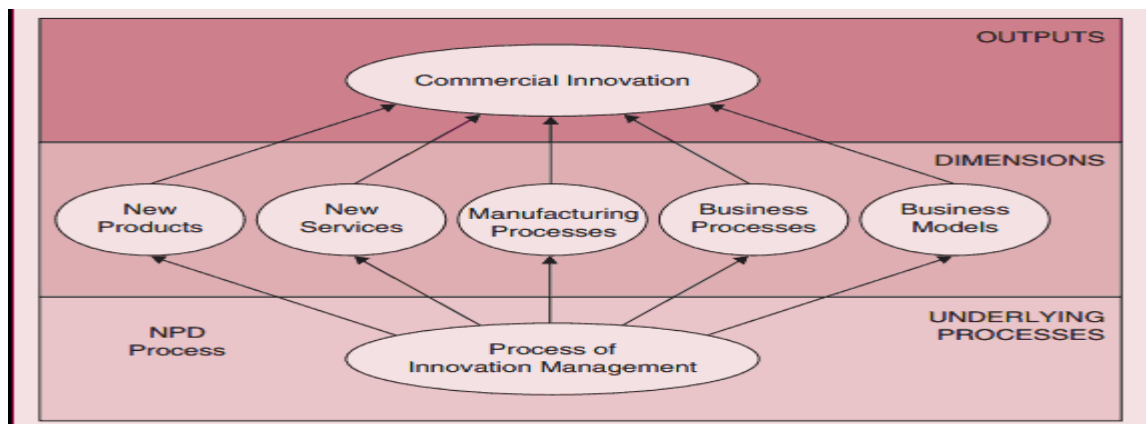


Figure 1. The dimension of innovation in the manufacturing sector (Goffin & Mitchell 2010, 9)

Goffin and Mitchell (2010, 13) argue the importance of recognizing different degrees of innovation. Radical innovations are breakthroughs which create new markets or completely change existing ones. Incremental innovations which changes little existing products, services or processes can also be important. Thus, it can be argued that the degree of innovation depends on a context. (Goffin & Mitchell 2010, 13-14.)

The relationship between innovation and incremental improvement by Goffin and Mitchell (2010, 16) is summarized in Figure 2. The dimension of innovation from process changes to business model innovation is plotted on the horizontal axis. On the vertical axis is plotted the degree of innovation. On the bottom left corner are incremental improvements to processes which are made without significant changes in the nature of doing business. These changes can be argued to belong to a domain of quality management. Instead, on the upper right corner are revolutionary changes made

to companies' business models. In the middle of these two extremes is an area which can be argued to be a realm of innovation management. (Goffin & Mitchell 2010, 16.)

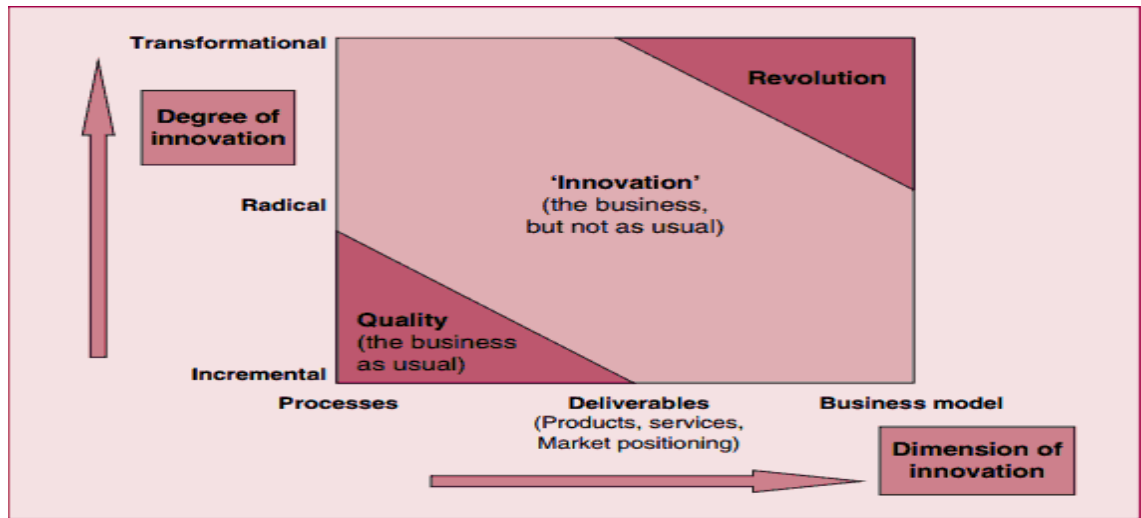


Figure 2. Continuous improvement and innovation (Goffin & Mitchell 2010, 16)

Continuous improvements, which are difficult to copy, can be a source of competitive advantage and thus, can be classed as innovation according to Angel (2006, cited by Goffin and Mitchell 2010, 16). Goffin and Mitchell (2010, 17) argue that it is difficult to determine where a boundary between continuous improvements and innovation lies. The same dilemma is with continuous improvements and business process re-engineering as it has been discussed earlier in chapter 3.7. In addition, the same dilemma can be argued to be in business model innovations. The degree of change varies in business model innovations. Some of business model innovations focus on redesigning and redefining boundaries between different participants in a network. On the contrary, some business model innovations are transformational changing a whole industry. Thus, it can be interpreted that the degree of innovation varies but also the boundary between process innovation and business model innovation may be unclear. Nevertheless, referring to the earlier arguments by Kaplan and Norton (2008, 1) the importance of strategic guidance in process improvements is necessary in order to provide results which can offer a possibility to enjoy sustainable competitive advantage. For this reason, the strategic approach in business process re-engineering and in business model innovation is seen to be important in this research.

4.2 Main concepts in strategic management

The concept of strategic management includes a set of managerial decisions and actions determining long-run performance of companies. Usually strategic planning starts from environment scanning and continues strategy formulation and implementation. After putting strategy in the action, evaluation and control is done in order to make sure that the chosen strategy works. (Wheelen & Hunger 2010, 5, 15.) Despite the fact that it has been written enormously about strategic management, still many companies do not have strategy or do not implement their strategy. The Case Company belongs to this group of companies who has not implemented its strategy or does not even have a clear picture which its strategy is.

In order to emphasize the importance of strategy, Kaplan and Norton (2008, 1) argue the need of strategy's vision and guidance in order to enable a company to enjoy sustainable success from its operational excellence. The lack of strategic vision and guidance can cause circumstance that companies' operational actions do not support the realization of strategy. In other words, companies operate in a short run doing actions which can be the best in a certain moment but in a long-run do not support the realization of long-term objectives. In addition, the lack of strategy may lead to the situation that different functions or departments in a company do decisions benefitting their own best without thinking the whole company's best. For this reason, taking into account the objectives of this research, strategic issues are chosen to the target of the interest in this research.

In order to create a holistic picture of business model innovation and its relationships to other strategic concepts, it is necessary to define main concepts concerning strategic management. In addition, in order to understand the relationships between mission, vision, strategy and business model innovation, the mentioned concepts are defined at first. Nevertheless, the object in this research is not to redefine the main concepts.

The concept of mission is defined as a purpose or reason why a company exists (Wheelen & Hunger 2010, 17). Furthermore, mission describes how a company expects to compete and create value for its customers. A company's values define which is

important to a company. (Kaplan & Norton 2004, 33-34.) Mission and values are the factors which are fairly stable over time. Moreover, mission and values can be argued to be the basis to a company's existence.

According to Kaplan and Norton (2004, 32), vision paints a picture of future clarifying a direction of a company and helping individuals to understand why and how they should support the company. Grant (2008, 21) defines vision as an aspirational view of what a company is like to be in the future. The mid- to long-term goals of a company are defined in a vision statement (Kaplan & Norton 2008, 40). A stretch goal, a definition of niche and a time horizon are the components included in a vision statement by Kaplan and Norton (2008, 40). Stretch goals should be ambitious and different from companies' current situation in order to challenge all employees in companies. Stretch goals define targets where companies aim, such as "to be on the top...". Definition of niches define categories such as "to be specialized...". The time horizon sets a timeframe for achievements. (Kaplan & Norton 2008, 40-41.) Thus, vision is an ambitious goal where a company aims.

According to Porter (1996, 68) "strategy is the creation of a unique and valuable position, involving a different set of activities". Strategy defines how a company differentiates from or competes with its rivals in order to achieve competitive advantage (Magretta 2002, 89-90). Both above mentioned definitions are focused on the positioning in a market in order to achieve competitive advantage. In some definitions the emphasis is on resources and core competences. Prahalad and Hamel (1990, 91) emphasize that core competences constitutes the focus on strategy. According to Grant (2008, 17) allocation of resources is a critical action that constitutes strategy. Mintzberg, Ahlstrand and Lampel (2009, 9) define strategy as a plan or a direction or a guide or a course of action into the future. Strategy is a path from here to there (Mintzberg et al. 2009, 9). Wheelen and Hunger (2010, 19) concur defining strategy as a comprehensive master plan predicating how a company achieve its mission and vision. In addition, Hambrick and Fredrickson (2005, 51) define strategy as "an integrated overarching concept of how the business will achieve its objectives". As it can be interpreted there is not the commonly accepted definition of strategy in the literature. Nonetheless, the last three definition of strategy, introduced above, where strategy is seen as a master plan

how a company achieves its objectives, vision, is seen the most suitable definition used in this research.

4.3 Business model: describing a company's value creation

According to Nielsen (2012, 26), the concept of business model is strongly related to e-business. Nielsen argues (2012, 26) that in the late of 1990s the business model concept was used even as a synonym for e-business. During the last decades the literature of business model has been written largely. Nonetheless, it seems that a precise definition of business model does not exist. Wheelen and Hunger (2010, 142) define the concept of business model as a company's method for making money. In the definition of business model by Teece (2009, 173), value creation is taken into account by determining that a business model defines how a company creates and delivers value to its customers, and lastly converts payments received into profits. Osterwalder and Pigneur (2010, 14-15) agree with Teece by defining that the concept of business model describes a rationale way of how a company creates, delivers, and captures value. In these definitions the focus is on a company and on its value creation and on money.

Nielsen and Lund's (2012, 17) definition of business model emphasize a need of understanding connections and interrelations of business and operations which create value. According to them (2012, 17), "a business model describes the coherence in the strategic choices which facilitates the handling of processes and relations which create value on both the organizational, tactical and strategic level in the organization". Therefore, a business model is a platform which enables companies to be profitable in a long term by connecting resources, processes and supply of services (Nielsen & Lund 2012, 17, 20). In the definition by Amit and Zott (2010, 2) a business model is defined as a bundle of activities, including specialization of different parties, that are linked together to satisfy needs of market. The definitions of a business model by Amit and Zott (2010, 2) as well as by Nielsen and Lund (2012, 7) expand a business model to cover also companies' stakeholders building a holistic perspective of business. For this reason, these definitions are the most suitable in this research in order to explain how a company does business, how different functions and stakeholders are conducted, and

how a value is created to all stakeholders. In order to build a holistic picture of business model it is essential to familiarize elements included in a business model through the business model canvas.

4.3.1 Business model canvas: tool for describing business model

According to Teece (2010, 191), the importance of business model is that it crystallize customer needs and their ability to pay. Furthermore, it describes how a company responds to and delivers value to customers, allures the customers to pay for value and converts the payments to profit through the operations in the value chain (Teece, 2010, 191).

Osterwalder and Pigneur's (2010, 20-49) business model canvas is a handy tool for describing a logic of how a company makes money. The canvas can be divided in two parts. The left part of the canvas includes perspectives of efficiency and the right part of the canvas consists of values. Key activities, partners, and resources, and a company's cost structure are included in the left part. (Osterwalder & Pigneur 2010, 49.) In other words, the left part of the canvas determines activities associated of making something such as designing, purchasing, and manufacturing in the business world. All these activities need resources which can be e.g. physical or human resources. In addition, these resources can be owned by a company or received through its partners. Moreover, to all these activities, resources, and partners are determined prices which are a part of a company's cost structure. Customer relationships, segments, channels, revenue streams, and value propositions are included in values in the canvas (Osterwalder & Pigneur 2010, 49). In other words, all these activities and factors are associated with selling something. Determining, finding and reaching customers, maintaining customer relationships, delivering or distributing products or services to customers are examples of elements included in the right part of the canvas. In addition, pricing mechanics is the part of business model defining how a company generates money. The business model canvas created by Osterwalder and Pigneur (2010, 18-19) is introduced in Figure 3. Moreover, all blocks are discussed more closely in the following paragraphs.

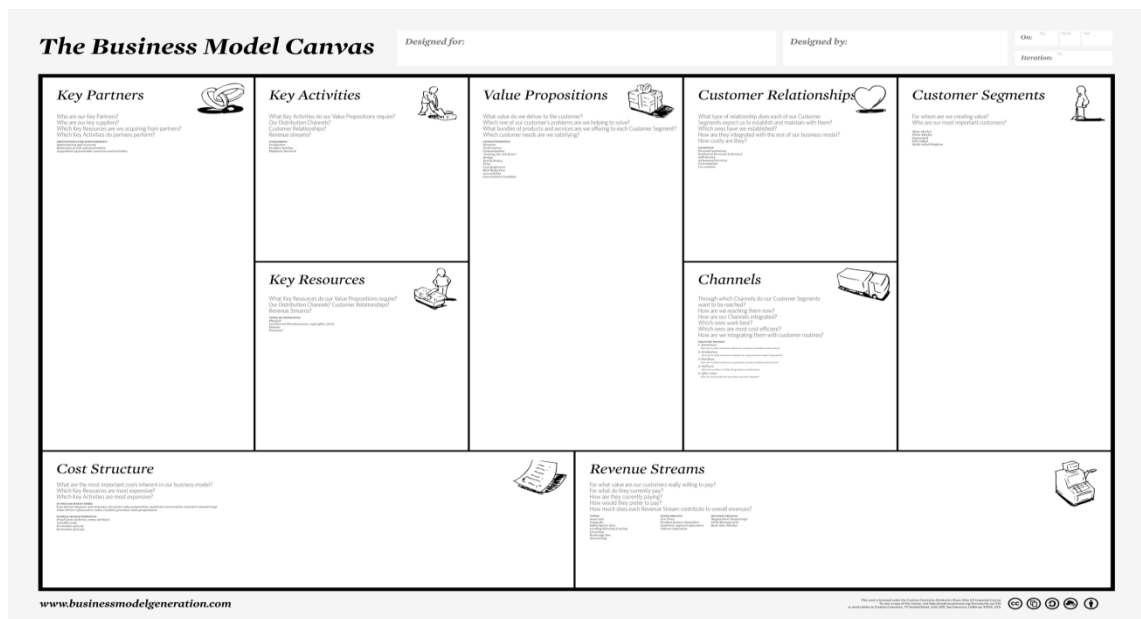


Figure 3. Business Model Canvas (Osterwalder & Pigneur 2010)

Customer segments determine different groups of people who a company aims to reach and serve. In other words, it is necessary to define which of segments a company aims to serve and which it ignores. Customers can be divided in segments based on factors such as needs and behavior. Mass market, niche market and segmented are examples of different types of customer segments. (Osterwalder & Pigneur 2010, 20-21.)

Value propositions are reasons why customers choose one company over another. Value propositions consist of a bundle of products taking into account requirements of selected customer segments. Value propositions can be divided in quantitative or qualitative. Quantitative values are referred to prices and speed of services for example. In contrast, qualitative values are related to e.g. design, brand or customer experiences. Newness, performance, customization, cost or risk reductions are examples of value propositions what a company can give to its customers. (Osterwalder & Pigneur 2010, 22-25.)

Channels enable companies to reach their customers. Channels improve an awareness of companies' products or services. Moreover, channels enable customers to purchase specific products or services. Channels help customers to evaluate companies' value propositions and enable companies to deliver their value propositions to their customers. In addition, a post-purchase customer support is provided through channels.

Companies can make choices between own channels, partners' channels or mixes of both channels in order to reach their customers. In other words, companies can reach their customers by their own shops and web sales or by using their partners' shops and web sales or by creating combinations of these opportunities. In order to make strategic decisions concerning channels strength and weaknesses of opportunities would be necessary to be evaluated. (Osterwalder & Pigneur 2010, 26-27.) On one hand, own shops would enable companies to save touch points to their customers and their needs and furthermore, would enable to collect feedbacks directly from end customers. On the other hand, partners' shops enable companies to benefit their partners' strengths, probably saving in costs.

Customer relationships describe types of relationships with the specific customer segments wanted to establish by a company. Customer acquisition, customer retention or boosting sales may be motivations driven customer relationships. (Osterwalder & Pigneur 2010, 28-29.) A traditional approach to manage relationships in the retail industry is human interaction between customers and retailer maintained through different channels. Furthermore, self-service, where companies do not maintain direct relationships with their customers can be an approach to managing relationships (Osterwalder & Pigneur 2010, 29).

Revenue streams describe how companies generate cash from their customer segments. In other words, it would be necessary to consider which value customers are willing to pay about value propositions which companies give. Revenue streams can be involved transaction revenues, meaning nonrecurring payments from customers, or recurring revenues, meaning ongoing payments related to new deliveries or ongoing supports. Asset sales, usage fee, leasing and licensing are examples of possibilities to generate revenue. Related to revenue streams decisions of pricing mechanisms would be necessary to be included in considerations in companies. (Osterwalder & Pigneur 2010, 30-33.)

Key resources are companies' most essential assets required to make business models to work. Assets can be physical such as manufacturing facilities, intellectual such as brands and patents, financial such as cash, or human resources such as knowledge. In

addition, resources can be owned by a company or acquired from key partners. Instead, key activities are most important actions which are necessary to have in order to operate successfully. In the manufacturing industry, production activities dominate a business model. Thus, supply chain management can be argued to be one of the most essential activities to manufacturing companies. In the competitive environment, key partnerships can be cornerstones of business models. In order to reduce risk, to optimize companies' business models or to acquire resources, companies create relationships with their partners. (Osterwalder & Pigneur 2010, 34-39.) As it is discussed in chapter 3.6 relationships are important in order to create a responsive supply chain.

Cost structure consists of most important costs which are incurred while operating under a particular business model. In every business model, cost should be minimized. In comparing different business models, costs are more important to some business models, such as low cost business models, than to others. Thus, business models can be divided in cost-driven and value-driven models. Nonetheless, in practice many of business models have characteristics of both of these extremes. In cost-driven models, costs are minimized wherever possible by creating and maintaining leanest possible cost structure. Low price value propositions, maximal automation and extensive outsourcing are elements which can be included in cost-driven business models. In contrast, premium value propositions and a high degree of personalized service can be characteristics included in value-driven business models. (Osterwalder & Pigneur 2010, 40-41.)

4.4 Business model innovation strategies in retail industry

Giesen et al. (2007, 5-6) identify three types of business model innovation strategies which are an industry model, a revenue model, and an enterprise model. In the industry model innovation is accomplished by redefining the existing industries, by making horizontal moves into new industries or by developing new industries. In the revenue model innovations are related to pricing models or/and offerings. In the enterprise model a company's structure or a company's role in a new or existing value chain can be the targets of innovation. Thus, the innovation can be accomplished via

specialization focusing on the company's core competences and by outsourcing the remaining activities. (Giesen et al. 2007, 5-6.) This approach can be argued to be commonly used in the manufacturing industry already a few decades. In the textile industry, more closely, in the sportswear industry big actors, such as Nike, have outsourced most of its manufacturing activities keeping a product design and marketing functions in-house. In addition, the enterprise model innovation can be accomplished through integration (Giesen et al. 2007, 6). The Spanish fashion chain, Zara, has created a closely integrated company-owned supply chain in order to achieve flexibility to produce small batches at a short notice (Christopher 2011, 38). Moreover, the innovation in the enterprise model can be accomplished via networks relying on an external collaboration (Giesen et al. 2007, 6).

Sorescu, Frambach, Singh, Rangaswamy and Bridges (2011) focus on business model innovations in retail industry in their research. According to them, retailers have two characteristics in their businesses. Firstly, retailers primary sell products which are manufactured by others and thus, they are rarely enjoying long-lasting sustainable advantages based on a product assortment. Secondly, retailers are more often in direct interaction with end customers than e.g. most of manufacturers are. Based on these factors, the retailing business model (hereinafter RBM) is necessary to be focused on from the points of view of both how retailers sell products and how retailers maintain their customer interfaces. Retailing is not today anymore just buying from suppliers and selling to customers. Instead, retailers today are "orchestrators or conductors of a two-side platform that serve as ecosystems in which value is created and delivered to customers". (Sorescu et al. 2011, S5.)

Sorescu et al. (2011, S7) define RBM innovation as a change in one or more elements of RBM modifying a retailer's organizing logic in value creation and appropriation. A retailing format, activities, and governance, and those interdependencies are the elements included in the RBM. The retailing format means organizing the chosen retailing activities into coherent processes in order to fulfill a customer experience. More closely, the format is a combination of elements such as a product assortment, pricing, location and customer interfaces. The retailing activities include acquiring, stocking, displaying and exchanging goods or/and services that fulfill a customer

experience. The retailing governance refers to actors who are involved in creating and delivering customer experiences. A retailer's network throughout a supply chain is included in the retailing governance in order to create and deliver customer experiences. Moreover, the mechanism such as a contract system which motivates actors to create value and fulfill a customer experience in a supply chain is included in the governance. (Sorescu et al. 2011, S5-S6.)

Sorescu et al. (2011, S7-S12) categorize major types of RBM innovations to illustrate business model innovation in retailing and in order to facilitate its critical review and future development. Three of six themes, referred to as customer efficiency, customer effectiveness and customer engagement, are related to value creation. The other three themes, referred to as operational efficiency, operational effectiveness and customer lock-in, are involved in value appropriation. Despite the fact that the categorization is divided into the themes, it is necessary to emphasize that both themes should be taken into account in developing a company's business model. Even though the emphasis would be on value creation, potential value appropriation should be taken into consideration. (Sorescu et al. 2011, S7.) For this reason, despite the fact that the emphasis in this research is on value appropriation, especially on the operational effectiveness and efficiency, value creation is also taken into account by using the business model canvas in evaluating possible developments from the Case Company's point of view. Figure 4 illustrates the classification by Sorescu et al. (2011, S8). In the following paragraphs the different possibilities are discussed more closely.

A classification of retail business model innovations along design themes.

	Design theme	Was traditionally implemented as	Innovative ways to implement the design themes	Main premise of the model	Example
Value appropriation	Operational efficiency	Streamlined store environment and back end operations	Fast fashion model	Reduce assortment, implement a fast inventory turnaround	Zara
			Self-service model	Streamline dispensing of merchandise	Redbox
			"Name your own price" model	Minimize unused perishable products	Priceline
	Operational effectiveness	Vendor management; Inventory management; Market research studies	Leverage complementarities	Offer products tied-in with services and company knowledge	Apple stores, Best Buy
			Adjacency model	Capitalize on adjacent demand by expanding outside the boundaries of the business	Ikea's Mega Mall division
	Customer lock-in	Subscription-based model	Leverage exclusive products	Product assortment is unique, inimitable and contains products with a clear and strong value proposition	Target; Trader Joe
Enduring consumer relationships via multichannel processes				Continuous experimentation to identify appropriate assortments and customer experiences	Recreational Equipment, Inc. (REI)
Value creation	Customer efficiency	Multiple locations; product displays, sales support, and so forth	Innovative format which facilitates the shopping experience	Store within store	Sephora inside JC Penney
	Customer effectiveness	Depth of assortment	Rely on stakeholders to determine the optimal depth of assortment and supporting services	Automated selling Customer co-creation	Redbox Mix my granola, Chemstation Amazon affiliates
	Customer engagement	Reliance on advertising	Rely on added value tie-ins	Supplier co-creation Products sourced from sustainable sources, sustainable business practices Embedding the product into a complex store experience	Walmart American Girl

Figure 4. A classification of retail business model innovation along design themes (Sorescu et al. 2011, S8)

Operational efficiency means that a company is focused on doing its activities right. More closely, a productive use of resources without wastage belongs to operational efficiency. Retailers can streamline back end operations, such as sourcing and managing inventory levels, to improve efficiency. In addition, retailers can enhance a store environment e.g. by identifying optimal store layouts that reduce costs and increase profit. New technologies, which for example automate processes made earlier by employees, can be a source to cost savings. By rethinking operations completely and by evaluating consequences, retailers have been able to create formats which are completely different to current customers. One good example maximizing operational efficiency is Zara. (Sorescu et al. 2011, S7-S8.) Zara's business model is benchmarked more closely in chapter 4.5.

Operational effectiveness means that a company is focused on doing right things. One example of operational effectiveness is matching a product assortment with demand. The advantage of retailers compared to manufacturers is that they are not bound by a set of product portfolio. Instead, retailers have a flexibility to determine their product assortment and thus, can respond to changes in demand faster than manufacturers. In many cases, the matching of supply and demand is based on the market research. However, some retailers, such as Apple Stores, try to expand demand by leveraging complementarities. In other words, retailers utilize their brand and competences in retailing by offering different services in their shops. Apple Stores offer for their customers a possibility to experience its products but also offer services such as workshops. In addition, Apple Stores reinvent the retailing format by opening mini-stores. Another way of leveraging complementarities is related to adjacency meaning that a company capitalizes on unrelated demand that has a physical or temporal proximity to the company's current products or services. In other words, a company expands its activities outside its core businesses. (Sorescu et al. 2011, S9.)

Memberships and subscriptions are mechanisms used in the retail industry in order to create a high incentive for customers to come back to a store. This system is called the customer lock-in. In the traditional situation, retailers sell others' products and for this reason, their assortments are rarely a source of competitive advantage. However, some retailers, such as Zara, have created value for their customers through unique, inimitable, limited, high-qualitative assortments of products. Thus, they have created loyal customer relationships. In addition, some retailers have created cooperative business models by offering on-site services together with their products for their member volunteers. (Sorescu et al. 2011, S9-S10.)

Customer efficiency, instead, is related to enabling customers' access to products in multiple locations and channels. The Internet enables companies to sell their products through many channels but also to sell across channels. In other words, customers can buy a product through an online shop and pick up the product from the shop. In addition, customers can benefit retailers' home delivery. Alternatively, customers can make their purchases at a store benefitting a customer support. In addition, the concept of the store within a store is launched where a retailer has a mini-store within a large

store. By going to those places where companies' customers are, retailers facilitate their customers experience and thus, create value for their customers. (Sorescu et al. 2011, S10.)

Customer effectiveness involves a capability to facilitate consumer's realization of consumption goals. In other words, how well the company's products fulfill the needs of customers. Typically, this fulfillment is solved by increasing the depth of assortment and often at the cost of efficiency. Nonetheless, by focusing on online shops companies may be enabled to reduce warehousing costs by centralizing their warehouses to one location. By redefining the roles of stakeholders a company can move the responsibility of defining the optimal depth of assortment and supporting services, which a retailer should offer, to the suppliers. A customer co-operation can also be used in order to fulfill the needs of customers. One example of the sportswear industry is the NikeID system which enables customers to build their own shoes online. (Sorescu et al. 2011, S10-S11.)

Customer engagement is referred to the emotional involvement which goes beyond purchase (Van Doorn et al 2010, 254, cited by Sorescu et al. 2011, S11). Traditionally, this involvement is achieved through advertising creating images of brand and products in the mind of customers. However, today companies have focused on goals related to sustainability by e.g. using renewable energy or creating zero waste targets. Walmart is one example of this kind of innovations. By focusing on the customer engagement companies can increase loyalty and positive associations concerning brands and companies in general. (Sorescu et al. 2001, S11.)

To summarize the discussion above, the business model innovations in the retail industry leverages the interdependencies between business model elements creating the model which coping is difficult and hard. Hence, business model innovation may be the source of competitive advantage. (Sorescu et al. 2011, S12.) Teece (2010, 173) emphasizes that business model innovation may be a pathway to competitive advantage only if the model is sufficiently differentiated and hard to replicate by other actors. This argument confirms the need for holistic improvements instead of focusing on the one part of business model. Thus, the use of the business model canvas enables companies

to take into account the most relevant factors in order to redesign their business models. Nonetheless, it would be also beneficial to benchmark successful actors in the specific industry or even in wherever industries. Therefore, following chapter focuses on benchmarking one successful company in the fashion industry.

4.5 Benchmarking successful business model innovation: Zara

Christopher (2011, 238) uses the concept of competitive benchmarking in order to define the continuous measurement of companies' products, processes and practices against leaders' corresponding products or processes. Camp (1989, cited by Christopher 2011, 238) identifies four benefits of benchmarking. Firstly, the benchmarking enables companies to creatively incorporate best practices from any industry to their processes. Secondly, the benchmarking enables companies to break down ingrained reluctance of operations to change. Thirdly, the benchmarking may be identified as a technological breakthrough which would not been recognized in a company's own industry. Fourthly, to professionals who are required to perform and implement benchmark findings, the benchmarking can provide motivation and stimulation. (Camp 1989, cited by Christopher 2011, 238.) It seems that the Spanish fashion company Inditex Group, more closely, Zara, is the industry's leader in many sector referred to the responsive supply chain and to business model innovation. Despite the fact that the sportswear industry and the fashion industry are not directly comparable the sportswear are increasingly becoming the fashion products. Trendiness is a part of sportswear today. Based on these above introduced factors, Zara has been chosen to the target of benchmarking in this research.

In the textile industry, regardless of whether it is a sportswear or a dress, the cycle of design, production and distribution is on average six months. Nonetheless, Zara has been able to shorten this time to a mere 15 days (Ferdows & Lewis & Machuca 2004, 104). One reason for the quick lead time is the use of "postponement" buying or producing of undyed fabric. The fabric can be later in the process dyed and printed enabling Zara to react mid-season color changes (Ferdows et al. 2004, 108). The exchange of information between different departments, locations and participants is the

requirement in the fast fashion system which Zara has created. Hence, Zara has designed its organization, procedures, performance measurements and office layouts taking into account that information transfers are easy. In order to achieve the responsive supply chain, Zara has divided its production to the three parallel product lines, called woman's clothing, men's clothing and children's clothing. Each clothing lines have separate design, sales and procurement and production-planning staffs. Thus, the company has achieved the information flow which is fast, direct and unencumbered by problems in other lines. Furthermore, because designers, market specialists and production planners work physically and organizationally close to each other, it is possible to increase the speed and quality of designing process but also provide quick feedback about new products. Moreover, proximities and cross-functional teams enable production planners to estimate and forecast manufacturing costs and capacities. Latest information technology tools facilitate the information exchanges. Furthermore, the computer-aided design system transmits specs directly to cutting machines and other systems in factories. (Ferdows et al. 2004, 105-106.) In addition to the above mentioned factors, vertical integration, where Zara owns most of its production process, increases flexibility in Zara's supply chain enabling the company to adjust its production more than traditionally in the industry.

The second factor, which can be argued to be the common element of textile industry, is outsourcing. Contrary to the industry's common standard, Zara keeps almost half of its production in-house (Ferdows et al. 2004, 105). Despite the fact that the vertical integration is out of fashion in the fashion industry and even though Zara's competitors, such as H&M and Gap, do not own any production facilities, the Zara is implemented the vertical integration. Thus, they have been able to achieve the high level in flexibility enabling adjustments in order to avoid overproduction. Furthermore, the vertical integration enables Zara to control over schedules and capacities which would not be possible in outsourcing main processes to the other side of the world. (Ferdows et al. 2004, 106, 108.)

Mihm (2010, 56) illustrates the outsourcing model in the fast fashion as the two-way arrow including the control perspective. In the left of the model is a vertical integration where a company owns its factories and distribution centers. Thus, a company is able to

control all activities in its supply chain. In a house branded model, a product design is handled in-house. In addition, a company contracts with manufacturers in order to achieve quality standards and design specifications. Furthermore, a company contract with a transportation company in order to arrange transportations to its distribution center. Therefore, a company is able to sell its products with its own brands. This model follows the Case Company's current model. In a fully outsourced model the partners of a retailer handle all parts from a product design to transportations. (Mihm 2010, 56.) Figure 5 illustrates the outsourcing model in the fast fashion by Mihm (2010,56).



Figure 5. Outsourcing model in the fast fashion (Mimh 2010, 56)

The third factor where Zara differs from its competitors is the size of batches. Instead of benefitting economies of scale, Zara manufactures its products in small batches (Ferdows et al. 2004, 105). Zara utilizes the small batches by changing clothing twice a week in its shops (Mihm 2010, 58). Thus, the company is able to keep the product assortment novel. In addition, the company is able to create a feeling in the minds of customers that products are sold up if a customer does not use her/him opportunity immediately. In other words, the company motivates its customers to visit in its shop by limited assortments, instead of investing in strong marketing campaigns. Thus, Zara has been achieved the high level in the number of visitor per year. Compared to the average stores in London, where the customers visit on average four times a year, in Zara's stores the corresponding annual quantity is 17 (Ferdows et al. 2004, 107). The limited size of batches enables Zara to sell its products without an expensive sale. In addition, the size of batches and the high quantity of visitors achieved through the novel assortments enables Zara to achieve saving in marketing costs (Ferdows et al. 2004, 107).

Because of responsiveness of factories and distribution centers, Zara has been able to decrease its needs for working capital. In addition, Zara is able to operate with negative

working capital because products are sold a few days after those have been produced. Thus, the company can fund its investments to the extra capacity. (Ferdows et al. 2004, 109.) One reason why Zara has been able to operate with negative working capital is that its production is located to Europe where payment terms are commonly related to finished products. Instead, pre-payments are commonly used in Asia.

To summarize the discussion above, Zara's business model pursues operational efficiency by focusing on small batches with fast inventory turnover. In addition, the limited assortment of products enables the company to create the high incentive for its customers to come back to its stores. Therefore, Zara is able to create loyal customer relationships and to increase customer flows in its stores. As a result of the limited assortment and the increased customer flows are low marketing costs and low losses caused by clearance sales.

5 DATA ANALYSES OF CASE COMPANY (CONFIDENTIAL)

The Case Company's current situation concerning its working capital management is analyzed in this chapter. The Company's production process and supply chain is analyzed in order to create in-depth understanding of the Company's current situation. Based on the collected empirical data, which reflects to the theoretical framework, the Company's possibilities to develop its current supply chain is evaluated.

Because the focus is necessary to be on both value creation and appropriation in the retailing business model, the business model canvas is used in this chapter. Thus, it is possible holistically cover all aspects included in the Case Company's business model. For this reason, in this chapter the Company's possible improvements concerning its whole business model is taken into account. In addition to the supply chain and business model, the environment of the Company, where it operates, is shortly analyzed.

In compliance with the Case Company's instructions, the data analyses of the Case Company are regarded as confidential information. Deriving from this requirement, the chapter 5 is written in Appendix 1 which is not published in the Library databases of Lapland University of Applied Sciences.

6 DEVELOPMENT AND IMPLEMENTATION PLAN (CONFIDENTIAL)

In order to create the situation where the Company could enjoy sustainable advantage of its operational excellence, it is necessary to linkage the business model to the strategic issues. Therefore, the example of the Case Company's possible vision statement is created in this chapter. In addition to the vision statement, the Company's business model is linked to the vision. Furthermore, the tool for linking the Company's vision to its operations is included in this chapter.

In compliance with the Case Company's instructions, the development and implementation plan is regarded as confidential information. Deriving from this requirement, the chapter 6 is written in Appendix 2 which is not published in the Library databases of Lapland University of Applied Sciences.

7 CONCLUSIONS

The objective of this research was to examine the Case Company's possibilities to improve its inventory turnover and working capital management by developing the Company's business model. The Company's current business model ties up capital since making an order, because the Company's current partners require pre-payments before they start production. In addition, the partners' production is based on the lean manufacturing producing big batches of products. Nonetheless, the Company has focused on the specific market segments in the specific countries where the demand of the Company's products varies and is seasonal. For these reasons, it can be argued that the produced batch sizes are not currently optimal for the Company. Thus, the Company's inventory turnover is low and the consequence of this low inventory is that the Company faces challenges with its working capital.

In order to gain the in-depth understanding of the specific challenges in the Case Company, the case study method was chosen for the research method in this research. By creating the holistic theoretical framework, it was possible to examine how companies manage and implement business model innovations in general and in the retail industry. Furthermore, it was possible to create a holistic picture of relationships which business models, supply chains and working capital management have. Based on the theoretical review and the empirical data of the Case Company, the recommendations and suggestions concerning the Company's business model were created.

Deriving from the analyses and main findings, it can be interpreted that there is no single way to redesign a company's business model in general and in the retail industry. Instead, in the retail industry, both, value creation and appreciation must be taken into account in developing a company's business model. Despite the fact that the Case Company's supply chain is recommendable to be reorganized in order to improve operational effectiveness and efficiency, the basis on the operating in the retail industry is value creation. Thus, value creation including customer efficiency and effectiveness are necessary to be taken into account in developing the Company's activities.

Despite the fact that the Case Company's operational efficiency would be at the high level, it is possible that the customers do not buy the Company's products. Therefore, the starting point for the developments is that the Company knows its customers and analyzes its customers' behavior. As it argued by different sources, customers' role in companies' business models seems to grow. For this reason, it is necessary that the Case Company creates the systematic way how it analyzes its customers and how it benefits captured information from its customers. Together with the responsive supply chain the Company will be able to react to the needs of customers. As a result of responsive supply chain and good customer relationships can be that the Company's customers are satisfy. Therefore, loyalty against the Company and its products can improve.

The basis on all developments is that the Case Company has vision which is implemented through the Company's different departments and offices globally. Vision, which all people in the organization understand, enables the Company to achieve its common goal. However, all achievements start in the mind of person. When the common goal in the minds of all employees is the same as it is in the minds of the managers, it is possible to achieve something. The encouragement enables the employees to do their best in their daily activities. Without the common goal the Company is like a drifting boat without the knowledge of destination. When the direction is clear inside the Company, it is possible to expand the thinking to cover also the whole network around the Company. When the focus is on the network, the collaborative joint planning can be argued to be the requirement for the success of supply chain.

To conclude, in the operational activities meaning the Case Company's supply chain there are many possibilities to reorganize its operations in order to improve the Company's inventory turnover and thus, its working capital management. In addition to the developments concerning the operations, the research has provided the strategic alternatives for the Company's management in order to improve the Company's value creation. The ongoing projects concerning the improvements of supply chain could significantly change the Company's financial situation enabling the Company to improve its working capital management.

This research is limited to concern the Case Company. Therefore, the suggested developments are not directly usable in other companies, not even in the retail industry. Nonetheless, the theoretical part of the research can offer basis for many companies regardless of industry how to develop companies' supply chains in order to improve companies' working capital management.

In the future, the Case Company should examine its IT resources' possibilities to be benefitted in capturing the data from the market and in streaming captured information to its suppliers and manufacturers. The future of the Company is dependent on the capability to benefit the captured data and on the possibility to have the responsiveness to the existing and new demand. In addition to the examination of IT resources, the Case Company's should examine the possibilities where the different activities of the production process, physically, would be most sensitive to locate. The third issue concerning the future researches is the market research concerning the possibilities to expand its operations from the Scandinavia to the other countries.

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APPENDICES

- Appendix 1. Data analyses of Case Company (Confidential)
- Appendix 2. Development and implementation plan (Confidential)
- Appendix 3. Interview form
- Appendix 4. Interview form 2
- Appendix 5. Transcript of group interview
- Appendix 6. Transcript of interview
- Appendix 7. Strategy Overview

APPENDIX 1: DATA ANALYSIS OF CASE COMPANY (CONFIDENTIAL)

5.1 Case Company's inventory turnover and cash conversation cycle

5.2 Different stages of production process and supply chain

5.2.1 Product design and decisions of order quantities

5.2.2 From fabrics to finished products

5.3 Changing Chinese market

5.4 Europe: window of opportunities

5.5 Business model opportunities

APPENDIX 2: DEVELOPMENT AND IMPLEMENTATION PLAN
(CONFIDENTIAL)

6.1. Crystalize vision

6.2 Linking vision statement to redesigned business model

APPENDIX 3: INTERVIEW FORM (CONFIDENTIAL)

APPENDIX 4: INTERVIEW FORM 2 (CONFIDENTIAL)

APPENDIX 5: TRANSCRIPT OF GROUP INTERVIEW (CONFIDENTIAL)

APPENDIX 6: TRANSCRIPT OF INTERVIEW (CONFIDENTIAL)

APPENDIX 7: STRATEGY OVERVIEW (CONFIDENTIAL)