



School of Management

*Blekinge Institute of Technology*

# **Chain Management for today's demand**

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*Case study Seven Eleven in Japan and Sweden.*

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# Abstract

The purpose of the firm is to create value. To do so, a firm has to offer either a unique product/service or a price that is more attractive than its competitors so that customers will pay more than the cost of producing the product/service. It sounds easy to achieve but we all know it is not.

In this thesis it should be clear to the reader how the management of the value chain impacts profitability. The company Seven Eleven Japan have considered demand processes in their chain management and are showing higher profitability than their competitors.

Using demand processes and shifting the supply chain towards a customer oriented demand approach will have its rewards but it takes a strong alignment with suppliers and distributors for succeeding in a good way. The movement also put additional constraints and focus on the organisation of the company and its management. When a developed chain management is able to integrate the supply chain processes with the demand processes, it gives the company a possible competitive advantage for the future.

This thesis has looked at the aspects of a supply chain moving into a more demand related chain management and examined the impact both on the organisational and technology systems in an efficient chain management process. Explaining some of the related conceptions, processes and terms as well as highlighting successful examples is also included in the work. The thesis is conducted by a secondary data investigation of chain management and business literature as well as first hand data on the two companies Seven Eleven Japan and Sweden.

The aim of the thesis is to define how the chain management has moved from being a traditional supply chain management to be a more demand focused process as well as to exemplify if and how this has been conducted within two different Seven Eleven companies. A comparison of the two companies' chain management processes will also be conducted.

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## 2. Table of abbreviations

SCM - Supply Chain Management

SC - Supply Chain

CRM - Customer Relationship Management

DC - Demand Chain

IT - Information Technology

SEJ - Seven-Eleven-Japan

KPI – Key Performance Indicator

POS – Point of Sales

OCF – Operation Field Counsellors

CDC – Combined Distribution Centre

SDC – Single Distribution Centre

SKU – Stock Keeping Unit

SES - Seven Eleven Sweden

SE – Seven Eleven

# 1. Motivation of the topic

In a world of constant changes and development, with demands on higher profitability companies are focusing on their supply chain processes.

If companies, when trying to create efficient supply chain management, are only looking at cost and speed they will probably fail. To create a successful value chain the organisations need to take other aspect into consideration and will have to complement the supply chain with more demand related processes, securing that the customer demand is met. This different approach will make it necessary to change the strategically processes within the organisation as well as the management and leadership structure.

According to previous studies a supply chain (hence SC) performs two basic functions; the physical function of production, storage and transportation, and the market function of matching demand and supply. There have been extensive studies of the physical function in the SC but innovative studies related to the marketing function and the integration between the two functions has been more limited. (Yücesan & Wasserhove, 2004). This information triggered our interest of investigating the effect the market function (and the demand related processes) has on the chain management and what key aspect are characteristic for a successful one.

A typically SC produces raw material, produces items, ship them to warehouses and finally to retailers or customers. In order to reduce cost and improve service levels, effective SC strategies need to take into account the interactions in the different parts in the SC (Simchi-Levi et al, 2004). The main problem in the SC is the focus on producing products/services as efficient as possible and at the same time handles the problems occurring from the bullwhip effect. A demand related approach is trying to solve this issue.

The bullwhip effect is driven by delayed and misplaced information as well as by local optimization. Without a good demand process any SC can be the victim of this effect (Lee et al 2004). Figure 1 shows the effect that lack of synchronization among SC members has on the whole chain.

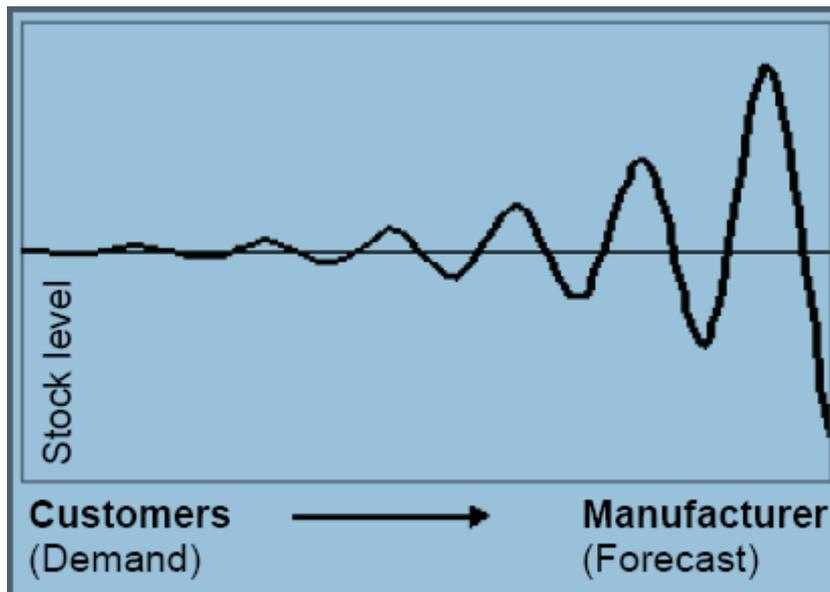


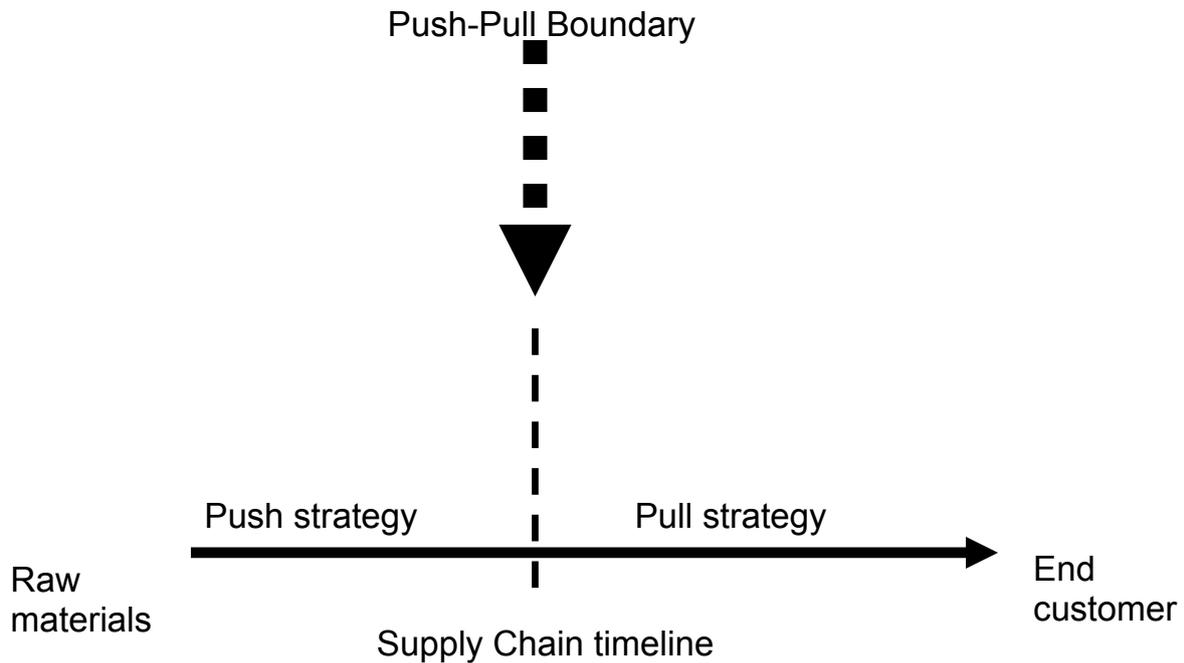
Figure 1 Source: Lee et al, 2004

In the demand chain (hence DC) the crucial task is to define the needs of the ultimate customer, both among existing and future customers. (Lee et al, 2004). This is the key to understand why the movement towards DC started, and why, without a better demand process the risk of the bullwhip effect always will be there.

Another aspect of the demand processes is that they are similar to the supply based ones, but with emphasis on consumer pull vs. supplier push. DC begins with customers, and then continues through resellers, distributors and other business partners. (Simchi-Levi et al 2004)

Whereas the traditional supply chain management (hence SCM) focuses on efficient supply and tends to be cost-oriented, the demand processes are more concerned with revenue. A company need both parts and both their success will decide the company's profitability (Jüttner et al, 2007).

Traditional SC strategies are often defined as push-based SC strategies where decisions related to production and distribution are based on long-term forecasts, often with only information from the retailer's warehouses as the tool to forecast the demand. This is the reason why it takes longer time for a push-based SC to react to changing trends in the market (Simchi-Levi et al, 2004)



*Figure 2 Source: Simchi-Levi, et al 2004*

It is fundamentally different to manage a traditional SC than one with a more demand focused approach. The demand focused one starts with the end, the customer and thus turning the traditional SC on its head (Jüttner et al, 2007). Moving towards this demand approach will make it necessary to change the strategically processes within the organisation as well as the management and leadership structure.

To understand why certain companies are successful is always complex. One aspect of the success is the possibility of creating advantages for the future, not catching up on the competitors but getting out in front and seeing aspects that doesn't exist today (Hamel et al, 1994)

Japanese companies in many different industries seem to have been able to create totally different and new forms of competitive advantage and at the same time found ways to deal with their competitors' advantage in more cost-efficient way. This is showing that having the right ambitions is more important than a large number of resources that many of the western competitors have had. This means that it's the mindset in the organisation on how to view and

develop new work processes, measurement and SC activities that determines if the organisation is capable of creating a competitive advantage. Japanese companies have a very successful history of doing this transformation with limited resources and a lower overhead cost than their western competitors. For the Japanese companies, it's not about lean manufacturing – it's about lean everything including the chain related processes (Hamel et al, 1994).

The purpose of this thesis is to provide principles that answer the following questions:

(1) What is, according to the literature, the important aspects of creating a successful SCM with a demand chain approach?

Seven Eleven Japan (hence SEJ) is according to some previous work having a successful SCM.

(2) Does their SCM correspond to the aspects that is highlighted in the literature and does the SEJ's processes correspond to the processes in Seven Eleven Sweden?

This thesis begins with considering important aspects of SCM and continues with a deeper discussion considering the demand related processes, organisational and managerial aspects on the chain processes as well as the importance of systems and technology.

Throughout the literature section the earlier findings about SEJ have been connected to the relevant theories. In the analyse section the success criteria of a chain management, identified in the literature review have been identified and compared to the empirical findings of the two Seven Eleven Companies. A comparison between how the two companies are conducting their chain management processes has then been completed.

## **1.1 Problem Statement**

The problem that prompted this research is a multi-faced one:

First the role of chain management seems to be changing. Secondly, the market and SC organisations seem to have progressed little along the road of making a meaningful contribution to strategic decision-making in organisations. This will become extremely important in the future if the competitive climate hardens. The question is therefore how to integrate the demand processes into the traditional SCM in order to deliver the right level of customer value in an efficient way. Seven Eleven in Japan seems, according to recent research (for example Lee 2006, Whang 2004, Kunitomo 1997 and Yahagi et al 2009) to have had the ability to develop successful processes within the chain management. We have used it as a reference example in relation to this issue.

## **1.2 Research objective**

The aim of this research is to highlight the change within chain management with a movement from a traditional SCM into a more demand related approach. This will be achieved by describing SC processes and management and then outline the relevant demand related processes, pinpointing what aspects making the movement a successful one as well as what implications that can arise.

The research will also include studies of a successful example of demand chain processes (Seven Eleven Japan) that will be used to discuss the theories of chain management as well as the basic data in a comparison with processes within Seven Eleven Sweden.

## **1.3 Limits**

This thesis have not investigated the importance of customer relationship management (hence CRM) even though CRM have an important aspect of the chain management. The thesis has investigated the movement from SC to DC and not the importance of CRM in a DC.

The important aspect of forecasting in the demand processes and the relevant and shifting forecasting techniques has been delimited due to the time frame for the work.

Only two Seven Eleven companies have been included in the thesis although Seven Eleven is a worldwide organisation, founded in USA in 1973.

## 2. Methodology

### 2.1 Research Method

The work with the thesis started with a review of the relevant chain management and business literature to understand the chain management concept, the development and challenges. In this review it appeared as the traditional SC was changing into a more demand focused process and that this change of focus reveal quite challenging for many companies.

The key aspect of the research approach has been to single out theory from the data collected from the case studies. By having this approach there is a possibility to bridge qualitative data to mainstream research with a likelihood of producing a theory that is accurate, interesting and possible to test (Eisenhart et al, 2007).

Reading about chain management one company stood out as a first class example of succeeding in implementing a successful chain management processes. This company was Seven Eleven Japan. This company had been able to do quite deep changes in the industry and therefore had been able to create a competitive advantage. The success criteria seemed to be the customer chain management and the processes related to this. The demand aspects on these processes and the importance of management involvement and focus were aspects that kept emerging. The importance of organisational aspects and management were one of the reasons for using the previous work about SEJ as a part of the literature review.

It was also quite clear that organisations that were capable of managing their chain processes in new ways, with the demand of the customer as the baseline, had managed to create competitive advantages. Interestingly only one company in the Seven Eleven Cooperation where mentioned in the literature and the importance of cooperate culture and entrepreneurial mindset emerged. It is reasonable to believe that the culture and management approach in organisations affect the processes and focus, also within the chain management.

The thesis is conducted through a qualitative approach and the information gatherer has been written information from the two Seven Eleven Companies, such as cooperate reports,

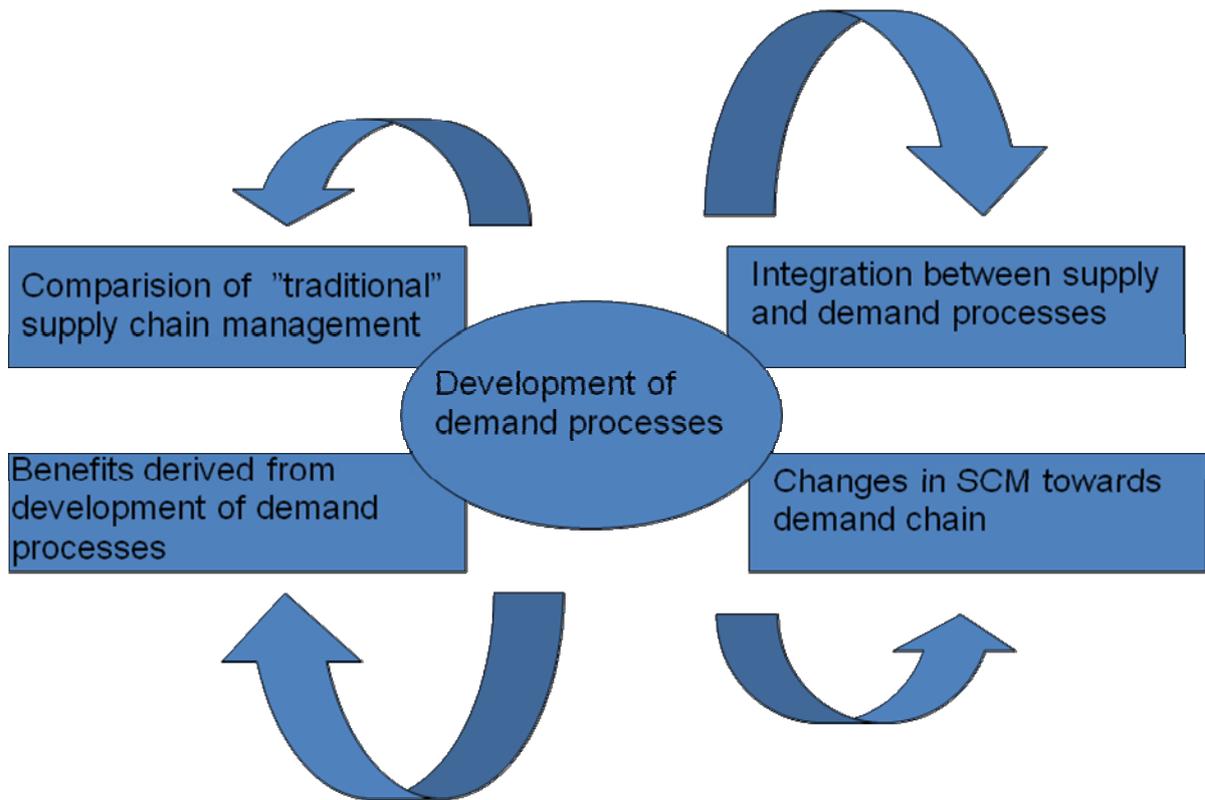
information on the cooperate websites and cooperate financial reports. The data has also been complemented with interviews and mail conversations with a senior manager at Seven Eleven Sweden.

The interviews and mail conversations were carried out in a semi-structured way, where the interviewee had received the areas that would to be discussed before the interview took place. One main interview and one follow-up interview were completed and some aspects were clarified over e-mail after the interviews.

Living in Sweden, the authors found it interesting to see if the findings regarding SEJ were applicable in the Swedish sister company. The idea of a comparison then evolved. The theories from the literature, including the previous work about SEJ will then be compared and analysed in relation to the first hand data gathered in the thesis to answer the research question about differences in the customer chain management processes.

## **2.2 Research Framework**

The research questions are defined in the figure below as well as the framework of chain management with demand processes. The investigation will be related to how the development of demand processes have evolved by identifying a successful SCM and then reviewing how the integration between supply and demand processes changes the SCM towards the DC and finally investigation the benefits that comes from the demand processes. This information will then be used to reflect about the processes within Seven Eleven Japan and the comparison with Seven Eleven in Sweden



**Figure 3** Source Authors

## 2.3 Validity and Reliability

Reliability refers to the extent to which the data procedures will yield consistent findings and validity is concerned with whether the findings are really about what they appear to be about (Saunders et al, 2007).

One of the most important criteria for the suitability of any data is measurement validity. Data that fails to provide answers to the research questions will result in invalid answers. When taking part of written information from a company the possibility of securing the accuracy is limited. The data must therefore be carefully reviewed before added in the study. The solution to this aspect was to try to evaluate the extent of the data's validity and taking into account the reasons for the company producing it (Saunders et al, 2007).

When conducting semi-structured interviews, the interviewer's possibility to affect the information given raises questions regarding the validity and reliability. The aspect of the reliability doubt should be seen in the light of the time when the interview was conducted. It was the reality then and might not be the reality some time later (relativism). This limits the possibility to make bigger overall generalisations with the basic data as starting point. On the positive side, the techniques enable the interviewer to collect complex data in a flexible way. From our point of view this was to gather information on specific aspects of chain management and related processes (Saunders et al, 2007).

To be able to secure the highest level of both reliability and validity of the information gathered from the interview the preparations phase is important. To have creditability as an interviewer underlines the trust and knowledge that need to be present in interview situation. Giving the interviewee the possibility of preparations for the interview by viewing the list of aspects that shall be discussed will promote both the validity and reliability (Saunders et al, 2007).

## **2.4 Data related to the thesis**

The data related to the thesis has been gathered from written information from the two Seven Eleven companies. The information has been both qualitative continuous background data regarding financial aspects and key figures related to SC as well as qualitative information regarding working processes, strategy, etc.

The information has been collected and gathered for the purpose of the thesis and research questions. The information has consisted of published reports, information on the two companies' websites and other related forums. Since the information has been given by the originations the accuracy in the figures is hard to confirm. It is unlikely that that an organisation like Seven Eleven would publish or communicate financial figures or figures related to the SC that is incorrect, due to the effect of an official misinformation. The qualitative and quantitative information used in the thesis have been compared to relevant available information so that the authors feel confident in the accuracy.

Information has also been gathered from semi structured qualitative interviews with a senior manager within Seven Eleven Sweden. When conducting the interviews the importance of the questions nature, as described by Saunders et al (2007) was taken into consideration. The interviewee was also given the aspect to discuss in advance, to be able to prepare and gather necessary information.

## **3. Literature review**

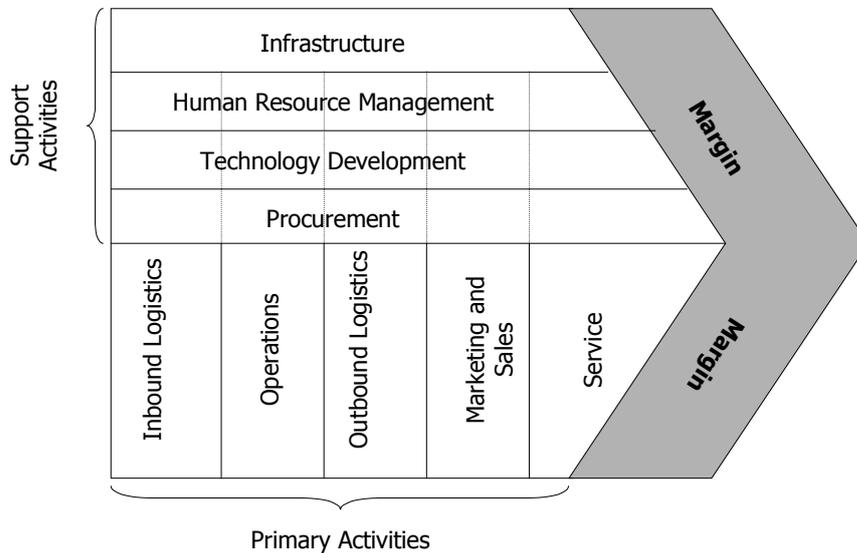
The literature review describes the basic principles of supply chain (SC) and the movement into the demand related processes. The aspects are then related to previous work regarding SEJ's development of their chain management

### **3.1 Value chain**

The value chain can be described as a chain of activities for a firm operating in a specific industry at a certain business level. Products pass through activities of the chain, gaining some value at each activity. The chain of activities gives the products more added value than the sum of added values of all activities. This is the basic principal of Michael Porter's value chain.

Porter describes the value chain as the value-adding activities of an organization. There are the "primary activities" that include: inbound logistics, operations (production), outbound logistics, marketing and sales (demand), and services (maintenance). The "support activities" include: administrative infrastructure management, human resource management, technology (R&D), and procurement and all these activities are supposed to give the product or service a better value for the customer. (Porter 1985).

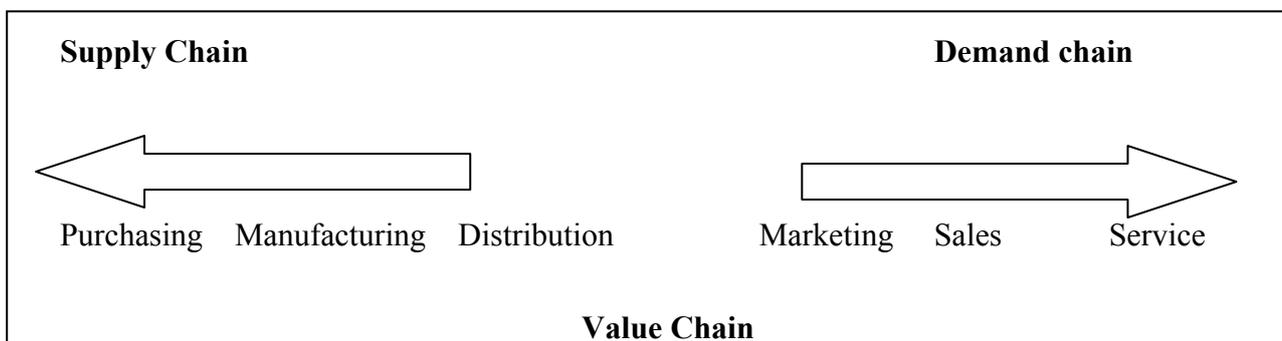
The basic model of Porters Value Chain is as follows



Porter 1985

*Figure 4 Based on Porter (1985)*

According to Chase (2008) the value chain consists of two parts, SC and DC. The SC focuses on the parts of producing and distribution and the DC of the more customer related aspects. (Chase 2008)



*Figure 5 Source: Chase 2008*

The most discussed and recognizable part of the value chain today is the SC and the management of the processes explaining how to be able to streamline production timeframes and reduce production costs (Chase 2008).

## **3.2 CHAIN PROCESSES**

The literature offers several basic explanations of both SC and DC and Chase (2008) are describing them as:

**Supply chain** *n.* **1.** Your suppliers. **2.** Your supplier's suppliers. **3.** The complicated network of direct and indirect manufacturing and distribution professionals that provide you with the capability to design, manufacture, and deliver your products better, faster, and cheaper.

**Demand chain** *n.* **1.** Your customers. **2.** Your customer's customers. **3.** The network of direct and indirect marketing, sales, and service professionals that provide you with the capability to get, keep, and grow profitable customer relationships better, faster, and bigger (Chase 2008).

There is a clear difference between the two chain processes and this thesis will investigate why the SC have evolved and that customer demand have made the chain change from a cost driven SC to a revenue focusing DC.

### **3.2.1 Supply Chain Management**

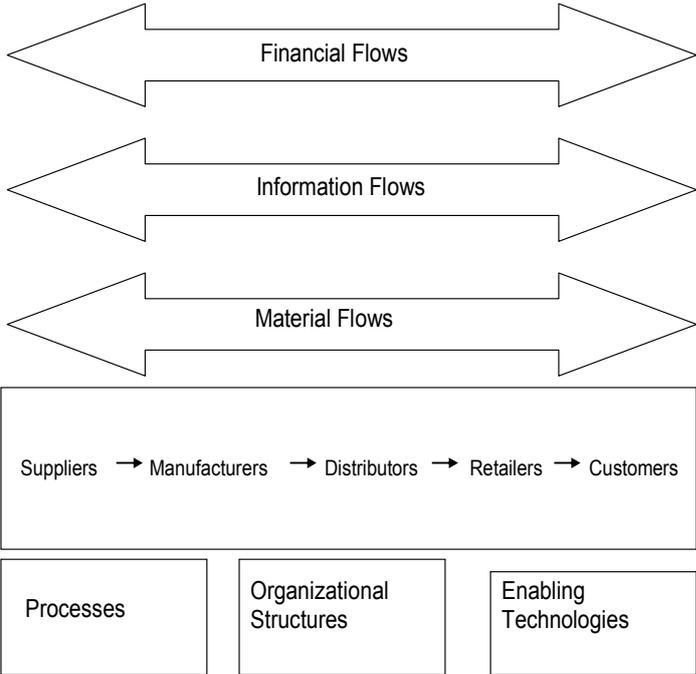
The definition of a SCM according to Simchi-Levi et al (2006) is

“Supply chain management is a set of approaches utilized to efficiently integrate suppliers, manufactures, warehouse and stores that merchandise is produced and distributed at the right quantities, to the right locations, and at the right time in order to minimize system wide cost while satisfying service level requirement”.

SCM can be showed as a network that supports three types of flows that need careful planning and coordination. The first type is the material flows; where physical products flowing from

the supplier to a customer as well as the reverse flow of product returns and services. The information flow is related to the orders and order tracking, coordinating the physical flows and finally the financial flow represent financial aspects such as credit, payment and other arrangements.

The network is supported by three pillars; processes, organisational structures and enabling technologies. Processes include value adding activities such-as logistics, knowledge management, and product development. Organisational structures represent a range of relationships from total vertical integration to networked companies (Yücesan et al 2004).



*Figure 6 Source: Yücesan et al, 2004*

The primary focus for SCM is how to match supply with demand in an efficient way. SCM do not answer the customer question, i.e. it does not help organisations to find out what the customer thinks is valuable and how this value can be integrated to the organisation. This

means that SC efficiency by itself doesn't increase customer value and satisfaction (Rainbird 2004).

A SC that only focuses on speed and costs tend to deteriorate over time. Lee (2006) therefore points out the positive impact of a "Triple-A SC" has. This means that the SC processes are agile, adaptable and aligned. All three components are equally important and the lack of one of them will destroy the chain. Agility is crucial because in any industry demand and supply fluctuate quickly and widely. If the chain is agile it is possible to respond quickly and cost efficiently. A SC can build in agility by sharing and using data on changes in supply and demand to all partners in the SC so that the SCM can respond quickly. This requires collaborative relationships with suppliers and customers in the chain so that processes and products can be used as a backup plan. An agile SC uses a team that have the knowledge and support to invoke those backup plans when and if needed. (Lee, 2006)

In the case of SEJ this is clearly shown by how they conducted the deliveries of oven-fresh bread. Since SEJ realised this product was something customers wanted, they created a new product category (oven fresh bread) Due to the small space in SEJ stores the bread had to be delivered from the producer to the convenience stores three times a day. SEJ found a food manufacturer and persuaded the producer to set up an SEJ bread network designed to match the existing distribution chain. By doing so the cost could be kept to a minimum using the already set up of the SC and therefore reducing cost per item (Matsuo et al 2007)

A SC must also adapt the supply network when a market or the strategy changes. By allowing managers to identify structural shifts by recording data and tracking key patterns, managers can early make the adaptation that is needed. Organisations should keep adapting their SCs so they can adjust to changing needs. These adaptations can be hard but it is critical in developing a SC that delivers a sustainable advantage. Building an adaptable SC requires two key components: the ability to spot trends and the capability to change supply networks (Lee, 2006).

SEJ is the only company in Japan that systematically holds weekly meetings with more than 1000 people. These weekly gatherings are costly but the company recognizes that only physical interaction enables the sharing of tacit knowledge through dialog. (Nonaka et al

2007). The information from these meetings and other data allow the SC to detect fluctuations in demand between stores, to alert suppliers to potential shifts in requirements, to help relocate inventory among stores and to ensure that the company restocks at the right time. (Lee, 2006).

In SEJ this reflects the thinking behind the planning and ordering of different items. For example, a store may detect sales pattern of different sizes of milk at different hours of the day, SEJ re-arrange the milk products in the refrigerator several times a day, so that customers can easily pick up their favourite choices (Whang, 2004).

To be able to identify future patterns it is important to track economic changes and review the “ultimate customer”. This is not just the existing customer but as well future customers, making companies focus on the right customer segment. Companies should develop the existing SC by using complement of suppliers and make sure that product design teams are involved in the logistics of products and understand the impact of a change in design. (Lee, 2006)

Finally by aligning the interests of partners in the SC the overall performance will be higher than if every firm is only concerned with its own interest. This is critical since every firm, will always try to maximise its own interests. If any company’s interests differ from those of the other organisations in the SC, then the focus will not be to maximise the chain’s performance. Companies must be prepared to keep changing networks and take responsibility for the entire chain which is hard and alignment is a must. (Lee 2006).

The beverage company Ito En has a staple product of Ooi-ocha (a green tea product) in a plastic bottle that it offered to SEJ with broader variations than it used to have. By being able to make changes in variation SEJ can offer customers a refreshing beverage and Ito En uses the innovation of this variation of selection to keep the brand image fresh, new and exciting (Matsuo et al 2007).

Another example is when SEJ together with six other companies started the 7dream.com (an e-commerce organisation). This new company uses the existing SC of SEJ and allows customers to order products online and to pick them up at a SEJ store. By doing so the

partners' benefit of a highly efficient SC and SEJ can use these partners' customers to attract new customers to their stores (Lee, 2006)

According to Fisher et al (2008), a fast SC movement is critical for the profitability for the organisation, especially for products with short life cycles which is a major part of SEJ turnover. If a company can respond quickly to early sales trends with additional purchase the risk of running out of fast-selling items is reduced. SEJ has, according to the litterateur (Ishikawa et al 1998), managed to have the right level of mix in using their delivery and sales system.

### **3.3 Demand Chain**

One of the main challenges of today's chain management is to be both efficient and contribute to customer satisfaction. The key to this is to find a good balance between a good level of customer satisfaction and a good level of SC efficiency (Hekkilä, 2002). With a Triple-A supply chain the company have started the movement towards a demand approach but to solve the challenge there are some components and processes that needs to be added. The Triple-A supply chain is focusing on the supply of products and to react to changes in demand but DC works from the customer and how that affects the SC.

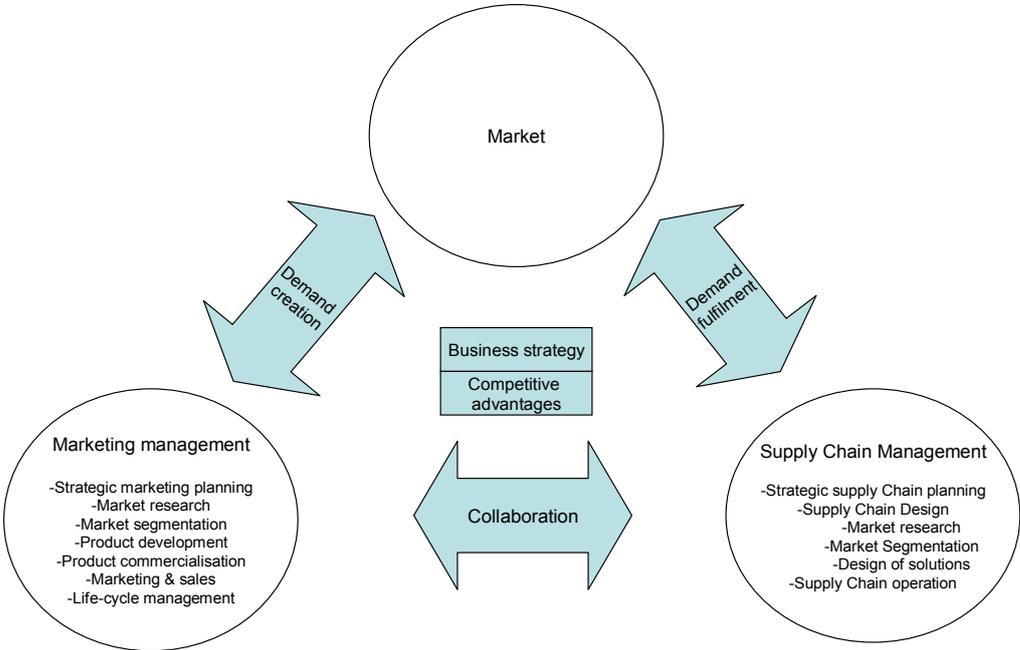
#### **3.3.1 Demand Chain Processes**

The objective of demand chain processes is to create value on a deeper understanding of how to combine the competences of the two disciplines marketing and SC. Demand chain design is based on a deeper understanding of market and SC and has to be managed in an effective way to be able to meet different customer needs (Jüttner, et. al. 2007)

These two different processes, the demand creation and the demand fulfilment, are in this kind of environment fairly separated. In many organisations this means that the marketing department has defined the strategy (what to sell, where to sell and how to sell it). Then it is

the job of the SC organisation to execute the demand creations findings at the lowest possible cost. (Hilletoft et al, 2009).

It is normal that SC management focus on efficient supply (demand fulfilment) which is the case of a Triple-A CS and tends to be cost-oriented. Marketing is often more focused with the revenue (demand creation), and owns the process of defining the customers view as value adding and how this value adding can be transformed into product offers (Hilletoft et al, 2009).



*Figure 7 Source: Hilletoft et al, 2009*

When SC focuses on fulfilment and marketing is focusing on customers it is crucial that the processes and coordination works through collaboration. To regard the two processes as not equally important is a fatal mistake as well as to restrict the innovation processes to products. (Hilletoft et al, 2009). As the figure 7 shows, all demand creations and demand fulfilment processes must be linked together.

### **3.3.1.1 Demand Creation Process**

While the demand creation processes comprise all the activities as for creating demand, closely linked to marketing, the demand fulfilment process includes all activities necessary for fulfilling demand, closely linked to SC. With this in mind the conclusion is that the chain management needs to take three aspects into consideration, the market, marketing and SCM (Hilletoft et al, 2009).

The approach to start with specific customer needs and design the chain to satisfy these needs, instead of starting with the supplier (manufacturer) and working forwards (Hekkilä, 2002) is an integration that seems mandatory in today's marketplace. If a company should be able to answer the challenges of today's demands, a good customer satisfaction and an efficient SC, the process needs to start from the beginning with understanding how the situation looks in different customer segments. This starting point differs from what operations manager normally works with (Hekkilä, 2002).

The making of packaged ball-shaped frozen juice was created by SEJ when they initiated a project between a producer of vegetable juice and a ball shaped ice cream manufacture. SEJ was aware that there was a demand for a differentiated product according to customer surveys. SEJ was able to make collaboration between two different producers to create a new product and in the end fulfilled the demand of the customers. (Matsuo et al 2007)

To be able to recognise customers' future needs, there should be a trigger in value creation process for the company. The marketing departments need to be involved with market analysis and the SC with evaluation of the existing supply network against the new market info. These common activities underline the need of collaboration of the two competences to view to whole picture. (Jüttner et al, 2007).

This collaboration between SCM and marketing makes it more natural to involve SC in the marketing planning at an earlier stage as well as in the customer priority decisions. This gives them the possibility to reject marketing decisions not being financial defendable to the business. On the other hand marketing needs to be more cost driven and less inclined to agree to sales that are not optional for the business (Jüttner et al, 2007).

When SEJ moved into China the number of items sold in each store deviated from the normal. In China the average numbers of items is between 1300-1500 and differ from the average of 2500 in the Japanese stores. This difference is related to two aspects. In Chinese stores the high proportion of fast food sales limits the variation and the second reason is the limited number of national-brand processed food which is suitable for sales in the convenience stores. When SEJ realised the difference and limitations of certain items they tried to strengthen the relationship with local producers of the processed food to make up for the lower sales. This adaptation to local markets relates according to Yahagi et al (2009) to a highly developed creation process with input from the SC as well as the market organisation.

The absolute value that guides SEJ stores is articulated in the two principles of their corporate philosophy: “adaption to change”, and “pursuit of fundamentals”. They are the answer to the fundamental question, “what does the customer want?” and they are emphasized in every SEJ operation. (Nonaka et al 2007).

SEJ’s focus on the customers is also shown in their principles of last-delivered-front-displayed method. This is not the common method used in the retail industry. The approach of SEJ is that the customers and not the stores should be the number one priority and implements this thesis out into the organisation. To be able to do that without losing money on destroyed items the purchasing system is developed as well as the limiting of orders for food and other items. The challenge with this approach is to purchase enough so that the fast-selling products aren’t sold out and that there are goods unsold at the shelves. (Kunitomo 1997).

SEJ uses the information gathered from the point of sales (POS) system and they complement the information with their own customer surveys. All this information is then used in the analyses of customer behaviour. Since the major customer group are young people it is important to introduce new product lines and eliminate the slow selling product to get space for new products. The basic of replacement is done with the marketing analyses as a platform. (Kunitomo 1997).

SEJ is very interested in developing new products to meet new customer demands and SEJ have identified a way of dealing with the product development where both the marketing

department and the SC organisation are participating in the processes. SEJ calls this “total merchandising” given that both internal and external parties are involved. It means that the company involves the manufacturers and wholesalers in the whole process from planning to the follow up of the sales and aren't holding any information back from any of the participating parties. The process starts with the planning phase, goes throughout the production, reviewing distribution channels and investigates the final sale to the customers. SEJ believe that this makes the process more efficient; shortening the lead times, prevent the high-selling items to be sold out as well as a faster responding to customer needs. This thanks to that all the parties are involved in the chain and remaking it as one not as external and internal. The real key of success in this process is the sharing of information on the company's sales to be able to design appropriate production and distribution systems so that new products or processes can be implemented when and if necessary. By doing so the total profit from the chain will be higher and all parties will benefit from that (Kunitomo 1997).

### **3.3.1.2 Demand Fulfilment Process**

When setting up the DC the most important aspect is to keep the end-user in focus. It's also vital that the complete SC (including production, supply and distribution) is managed in a competitive way. The criteria of success with the chain management will depend on how the company succeeds with this. One company, researched by Hilletoft et al, 2009, has defined three important aims for succeeding with the demand processes:

*(1) Make sure that the company delivers on time, which is the first priority. However, it is also supposed to reduce unnecessary time in doing so, thus the aim is to deliver on time in less time.*

*(2) Contribute significantly towards improving value creation, e.g. it aims to increase sales by making products available on time and to decrease costs and waste in the SC.*

*(3) Contribute significantly towards improving innovation. Innovation is critical to the success of new products, without new features the company will not succeed in the market. However, innovation should not only be restricted to the products, it should also be applied in other areas as well, such as customer service.*

Often it is not only a challenge to deal with different SCs but the complexity is further increased by the need to respond to changing customer needs (Hilletofth et al, 2009).

Companies that are able to differentiate the products, services and the underlying delivery processes will gain a competitive advantage. By linking these different solutions to different customer segment the company is able to recognise the emerging customer needs as well as shorten the lead times and at the same time improve the product and service life cycle management (Jüttner et al, 2007).

If the SC managers have a deep understanding of the total SC costs on a customer-by-customer basis they will know which customers should be given potential treatments. They can then develop service packages meeting customer needs and bring added value to the customer. In a study conducted by Deloitte during 2002 (in Jüttner et al 2007) it is pointed out that only a minority (17%) of all companies have effectively linked their SC and customer operations. The integrated companies have outperformed their competitors and a range of performance criteria (sales growth, market share, customer service and return on assets) Jüttner et al (2007)

Many of the exchanges encountered in the SC will therefore be between companies seeking to maximize their own revenue but have little or no interest in the other players in the SC. A successful cooperation must have a mutual understanding, a common vision and collective objectives, which will affect the performance in a positive way. The main objective should be to develop customer adapted SC solutions that bring additional customer value. This environment makes the processes of demand fulfilment and demand creation more linked together and should include both products and delivery aspects. By doing this the company is able to create demand driven SC solutions that will fulfil the demands of the customer in a cost efficient way (Hilletofth et al, 2009).

To be able to have fulfilled the aspects of customer demands, but still keep a high level of profitability SEJ realised that their distribution system needed to be totally revolutionising. They developed a system with delivery of individual items, joint delivery and delivery in temperature controlled vans (Kunitomo 1997).

SEJ learned the basics of convenience stores from the American partner and tailor the strategy to fit the Japanese market. The business environment was different and during the location processes the aspect of area dominance as well and the item-by-item inventory control was developed. SEJ supply network with the joint deliveries combining highly precise temperature specific SC was developed to support the new strategy. With these aspects the company has continuously developed fruitful relationships with producers in order to offer valuable products. (Yahagi et al, 2009). Several researchers (ex Kunitomo 1997 and Yahagi et al 2009) point out by doing these changes Seven Eleven Japan has revolutionising its grocery distribution.

According to Yahagi et al 2009, continuous adaptation is a standpoint from which the innovative managerial move occurs continuously and a retailer's internationalisation process can be analysed. For SEJ this view has triggered two changes: the shortened cycle of high variety, small-lot inventory and a shift of mainstay products to fast food and daily delivered foods. (Yahagi et al, 2009)

### **3.3.2 Organisational and managerial aspects**

The customer value-based theory of the firm suggests that superior performance is a result of providing superior customer value. In this aspect companies need to organise themselves around understanding customer needs and customer delivering processes. (Jüttner et al, 2007).

The DC processes just as the SC processes can be seen as organisation which involves a variety of participants who all hope to prosper based on their contribution to the chain and who are brought together in the pursuit of goals. (Jüttner et al, 2007).

To have an optimal organisation is always complicated and management need to take the lead enabling the environment described by Drucker "The talk you hear...about adopting to change is not only stupid it's ...dangerous. The only way you can manage change is to create it. By the same time you catch up to change, the competition is ahead of you" (Drucker, 2010)

A lack of integration between marketing and SCM appear to be a widespread problem in many companies and has to be seen as a major barrier for successful demand processes. The different cultures of the two disciplines shouldn't be underestimated. One way to achieve the

required integration between the demand and supply processes is to work with co-ordination (Jüttner et al, 2007).

Jüttner et al (2007) refers to a successful example when the co-ordination between the two processes enabled the company to identify the target markets for a new product and at the same time develop the SC to compete in those markets. This cross functional coordination will help the company to prioritise customers according to the internal supply capabilities of the company. This means that the integration will also help the company to manage the flow of customer and demand information (Jüttner et al, 2007).

Problems in communication are probably the major aspect that hinders the cross-functional cooperation from working properly. Tools for handling this problem can be top management support, joint projects, information sharing and implementing a culture of cooperation (Jüttner et al, 2007).

All organisations exist through the input of the employees, meaning the work that is carried out by individuals. This means that trust and open communication is important to create a successful organisation, operation and business structure. The communication part includes cultural aspects, technology and pure leadership. Communication is often seen as the basic in achieving management processes and at the same time continually enhances performance (Mestre et al, 1999)

The Japanese approach of visual communication is working both upwards and downwards through the hierarchy. Upwards is mostly focused on face to face contacts, meanwhile downwards seems to be more related to written communication. In both communication ways the visual part of the communication is successful, since the processes of communication should be multidimensional and integrated. In this aspects, and taken the Japanese culture in to consideration, the aspects of visual communication seem to work well. Thinking in a global context the principals are global and should be able to work in western context as well (Mestre et al 1999).

Mestre et al. (1999) highlights the success criteria of organisations that encourage employees to question the existing operations, in order to achieve the aspects of continuous

improvements. The focus should be to relate to future requirements rather than to be satisfied with the aspects of today's operations and performance.

For management it is important to facilitate communication and in the Japanese environment context the advantages of bringing visual communication has been underlined. The identified advantages are according to Mestre et al. (1997) gaining group membership, acquainting employees with cooperate visions and culture, mainline cooperate vision, alert members to change in the work environment, management of human relations and transforming the cooperate paradigm. All this aspects are important to link the employees to the structure and vision of today as well as moving the organisation into the future, keeping the competitive advantage. Mestre et al (1997) argues that the visual communication have demonstrated the effectiveness on local, national and global levels, independent on the type of business. At the same time the success is related to the achievements of continuous improvements in communication as well as the enhance performance.

The franchising structure of SEJ gives the franchisee possibility to influence how the local business is run. At the same time it also gives the local store know-how, managerial information as well as support with the high developed information/distribution systems. To be able to offer the right level of support SEJ has developed a system with operational field consultants (hence OFC) that visits each store twice a week, giving the store operational advice (Kunitomo 1997).

There are, according to previous research (for ex Mayerson 2002), two ways of changing organisations. One is a more drastic approach. The other is through evolutionary adaptation. If the change is forced upon an organisation the result is often quick and painful. If an organisation choose to change through evolutionary change it produces over time a long and lasting shift with less pain.

SEJ has chosen to put a lot of effort and money in the management communication and the structure of the communication. In Japan it is very rare that the top management speak directly to the employees but the OFC has in SEJ the possibility to speak directly to their CEO during meetings. This is a possibility to influence the employees and raise their morale. Although the SEJ has a very well developed information system the top management regard

the personal advice and the direct communication greater than the information from the systems (Kunitomo 1997).

Seven Eleven in Japan has created an organisational structure to support their future vision, including cooperation and process integration. Compared to their US sister company SEJ chose the organisation of a franchising organisation with 98% of all stores being owned by franchisees and in the states nearly half of the stores are directly managed (Yahagi et al, 2009).

SEJ started up many of their stores close to the big highways following the US initiative but ended up having most of the stores in shopping streets in city centres depending on the management understanding of the necessity to change strategy. (Yahagi et al, 2009)

### **3.3.3 Information Flow**

In a company that Jüttner et al (2007) investigated it was clear that the two disciplines, marketing and SC agreed that it was essential to exchange relevant information. The information marketing needed was timely information on lead-times, capacity and costs related to the SC processes. SC on the other hand was asking for information about new customers and product opportunities, defined customer segments, planned releases and marketing campaigns as well as feedback on over and under delivery. In this way both the demand creation and demand fulfilment processes were working but it was obvious that no information system supporting the processes.



*Figure 8 Source: Jüttner et al, 2007*

The information flow is necessary but not a sufficient condition for the cross-functional working relationship. A shared understanding of the information and moreover the ability to act on the same information is prior (Jüttner et al, 2007).

At SEJ stores are much smaller than the American ones, approximate 40% smaller but despite that, they are handling a much larger number of items with a much higher store-level inventory turnover rate (Yahagi et al, 2009). So to be able to operate stores efficiently SEJ needed a high turnover of the inventory since the stores don't allow much stocking. To manage and to find proper solutions to the problem SEJ decided to move on several aspects at the same time. One key aspect was more frequent deliveries of smaller batches as well as reduced brands of single items. SEJ realised that they needed a system that was highly efficient and streamline, but realised at the same time that it would question the basic principles of suppliers. This was conducted through incremental changes and not a result of a single move at HQ (Yahagi et al, 2009).

SEJ realised that they wouldn't be successful if they didn't coordinate with suppliers and made it visible for them that to participate in building the new distribution platform. To be able to do this they needed to push the domination location strategy making the deliveries easier for the supplier, and make more competitive environment for the store owners. Apart from that they also needed a system that could support the control of all stores using point of sales data. (Yahagi et al, 2009)

Based on the above two aspects SEJ implemented a reduction of the number of the suppliers, the promotion of joint delivery and distribution by temperature, the conceptualization of ordering systems and the introduction of a digital picking system. (Yahagi et al, 2009)

Findings from the literature show that one important role in the integration process is played by information technology and related systems. A system based, customer and SC integration for demand forecasting, order scheduling and target marketing is highly important. This should be seen as success criteria for the integration between the supply and demand processes since a poor system will prevent the demand information to be shared between the disciplines (Jüttner et al, 2007).

Information management system makes the process integration and the necessary changes possible and the design of the systems should relate to an integration of demand and supply processes requirements (Jüttner et al, 2007).

The information system needs to consist of specific information regarding each order, sales ways but also needs to be connected to an appropriate system relating to demand processes (CRM-system) and a SC tool that includes the distribution processes. The system doesn't only need to be linked in cyber space but also in practice (Jüttner et al, 2007). SEJ created a point of sales (POS) system based on the requirements of stores, HQ, supplier integration and SC requests.

In the POS information system data is entered within four different aspects: items purchased, time of the purchase, type of customer and the shelf location. SEJ was the first retailer in the world to introduce this kind of system. The system is used as a marketing tool and the item-by-item control is one of the key aspects for the retail chains success (Kunitomo 1997). When

the Japanese costumers became more sophisticated the stores used the tool to understand the behaviours and monitor sales so that the customer demand was fulfilled. (Kunitomo 1997).

SEJ also uses their system in cooperation with vendors, manufactures and combined distribution systems. In less than two hours all the partners receive the information and orders on their terminals. By making the ordering system faster and paperless, there is a positive impact of heavily reduced lead times between placing an order and the receipt at the partners terminals. SEJ is actually not only using the POS systems but are also collecting and analysing various data, changes over time (trends), movements in the market, differences between regions and the effects of the weather. These aspects influence the future customer demands so the franchisee is using all the data to decide the items and quantities to be ordered (Kunitomo 1997).

### 3.4 Synthesis

The literature review many different aspects of demand categories that all needs to be linked and coordinated to be able to give a successful demand chain management approach: strategic marketing planning, market research, segmentation, product development, commercialization, marketing and sales and life cycle management.

The main differences between the demand and supply chain processes are defined in the table.

Table for comparison of Supply and Demand chain	
<ul style="list-style-type: none"> <li>• <b>Supply chain</b></li> <li>Effeciency focus cost per item</li> <li>Processes are focused on execution</li> <li>Cost is the key driver</li> <li>Short-term-oriented, within the immediate and controllable future</li> <li>Typically the domain of tactical manufacturing and logistics personnel</li> <li>Focuses on immediate resources and capacity constrains</li> <li>Historical focus on operations planning and control</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Demand chain</b></li> <li>Effectiveness focus, customer-focused, product-market fit</li> <li>Processes are focused more on planning and delivering value</li> <li>Cash flow and profitability are the key drivers</li> <li>Long-term-oriented, within the next planning cycles</li> <li>Typically the domain of marketing, sales and strategic opeations managers</li> <li>Focuses on long term capabilities, not short term constrains</li> <li>Historical focus on demand management and supply chain alignment</li> </ul>
<p>Source Table 1 s250 Journal of Enterprise Information Management vo.19 No 3 2006.David Walters A role for enterpise information management org source Langabeer &amp; Rose 2001</p>	

*Table 1 Source Walters 2006*

The literature review has showed how a SC can be viewed as an integrating function with primary responsibility of linking business processes within and across companies into a high-performing business model with the lowest cost in focus. The SCM includes all of the logistics activities, and manufacturing operations, and the coordination of processes and activities such as marketing, sales, design, and finance and information technology are all in scope of the SCM.

Three important aspects need to be focused on when evolving the chain management into a more demand related approach:

- 1) Demand creation,
- 2) Demand fulfilment and
- 3) Coordination between demand creation and fulfilment.

One problem area on the way to create a successful chain management is the lack of coordination between demand creation and fulfilment. The findings suggest that a company will never exploit the full benefits if there is a lack of coordination in the demand processes.

As pointed out in the literature it is important that the two demand processes (demand creation and demand fulfilment) are viewed as equally important and that the creativity process is including service and delivery and not just products. This will create customer value. When the two demand processes are not coordinated or viewed as equally important there is a need for a cultural change that needs to be initiated by the senior managers followed by a change in strategy.

The ultimate aim of the demand processes is to gain competitive advantages by differentiating the products from the delivery process. In markets with high competition, broad variety of products, high customisation and short product life it is even more important. Differentiated delivery processes can in many ways be viewed as competitive advantage (Hilletoft et al, 2009). Developing an information and operating system and showing a remarkable willingness to listen to the customers' needs, is mandatory so that a high level of both demand fulfilment and demand creation will be met. As discussed earlier SEJ has created excellent information/distribution systems but this is not the only key to success. The customer's choice of store is related to the stores attempt to offer customers better quality services and products than the competitors. This is done by applying the systems and the managerial know how. The systems are just a tool for reaching the aims. What SEJ is trying to do is to build an operation that will support their stores to respond the customer needs by using the highly developed information/distribution systems (Kunitomo 1997).

The figure below shows how the demand chain analysis can support in focusing the SC on the efficient supply and cost benefits.

Customer value drivers need to be clear and understandable. These drivers may then be used to identify the planning areas that need to be addressed when constructing the SC response. The response should be structured around the identified issues. (Walters, 2006)

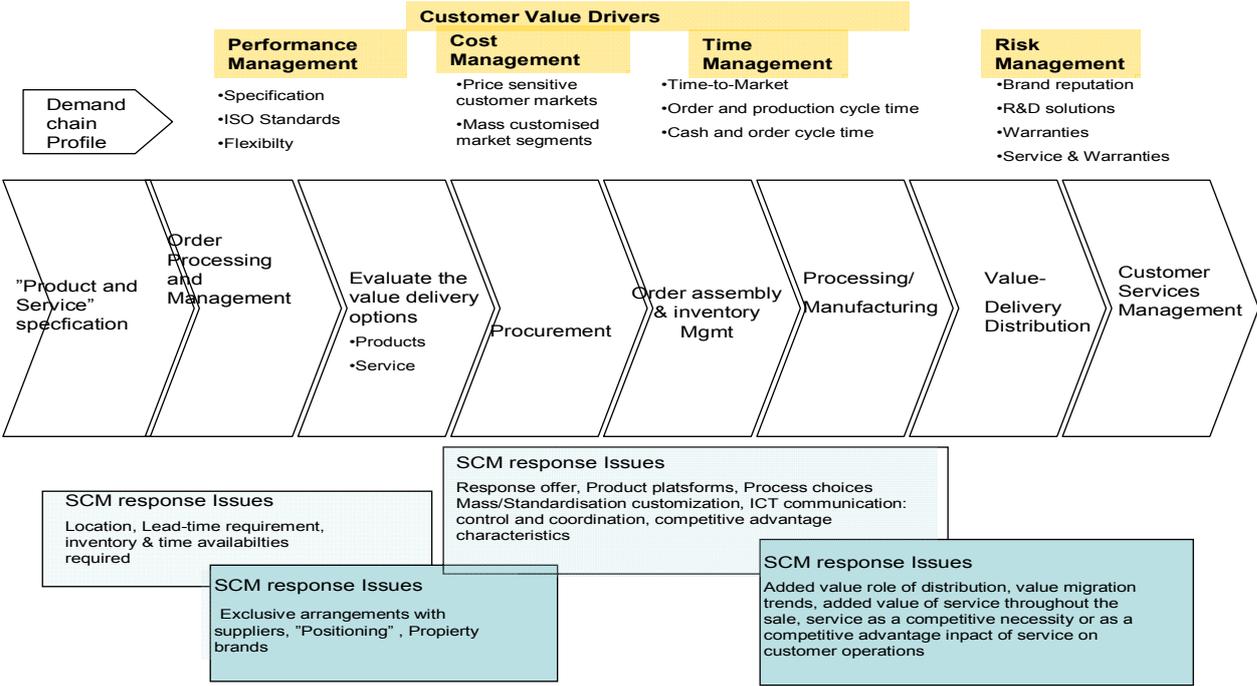


Figure 9 Source: Walters 2006

## 4. Empirical Findings

The empirical findings presented below, on the leading convenience store chain in Japan, Seven-Eleven Japan (SEJ) is an example of chain movement towards demand related processes. The empirical findings also include information from the sister company, Seven Eleven in Sweden.

### 4.1 Seven-Eleven Japan

SEJ started in 1973 when a license from the Seven-Eleven US was required. Seven-Eleven Japan (SEJ) defines itself as “the company that offers convenience” and uses five factors to show customers why it should be the number one in offering convenience

(Ishikawas et al 1998)

.Time	Stores open 365 days many of them open 24 hours a day or long business hours.
Distance	“Always just around the corner” Availability of many stores in an area.
One-stop shopping	Customers can buy all essential goods in just one place
Quick shopping	The layout of the store is ideal for customers to locate their items easily
Reasonable price	Goods should be priced reasonable (but no practice of bargain sales)

(Ishikawas et al 1998)

Seven-Eleven Japan is the largest convenience store chain in Japan. As of June 2010 SEJ operated about 12.800 stores in Japan, growth have been 400 per year and 98% of the stores are owned by franchisers many of these stores are open 24 hours a day. According to SEJ the

aim is “to establish a world-class brand with business infrastructure created in Japan” (SEVEN-ELEVEN 2010)

SEJ have four guidelines that they try to operate according to, they are called “Four Fundamental Rules” to attract customers over long term (SEVEN-ELEVEN 2010).

- Product assortment means that the stores modify their assortment of products after the time of day, community events and other factors like weather or traffic problems to best meet customer demand.
- Friendly service SEJ wants to provide the best customer service by putting themselves in the customers’ shoes. So a friendly greeting and a smile together with a helpful service if the customer needs to find a product.
- Freshness the stores should carry fresh products so that customers can shop whenever they want and still get a fresh product.
- Cleanliness the stores are tidy so that a customer always finds the stores clean and thus can shop in comfort and as well easily should be able to find what they want.

SEJ operates in food services with fast food restaurants, financial services Seven Bank Ltd, IT services (7 dreams.com) as well as department stores. (SEVEN-ELEVEN 2010)

The sales for 2009 is totally 2.784,9 billion Yen. Items classified as non food products such as magazines, cosmetics and commodities stands for 32,6% of the sales, processed food products such as soft drinks, snacks and instant noodles represent 28,3% fast food like rice products, sandwiches and salad 27,0% and daily delivered food products such milk, dairy and fresh pastries are the remaining 12,1%. Worldwide approximately 38000 stores are located in 16 countries whereof 189 are located in Sweden (SEVEN-ELEVEN 2010).

#### **4.1.1 Franchising**

In Japan the franchise system is based on a clear division of roles. The franchisees concentrate on store operation and sales such as management of store staff and the management of products. SEJ HQ support store operation with store operation Consulting services (OCF’s) product development, distribution system services, information systems services and general

services such as accounting, advertising and promotion activities. The sharing principle for SEJ is the gross profit splitting method which means that the gross profit on sales of a store is split between the franchisee and the headquarters according to pre-defined percentage but with a guaranteed minimum gross income system (SEVEN-ELEVEN 2010).

#### **4.1.2 Store Strategy**

A SEJ store is on average 130 square meters, about half the size of a US store and the stores on average have an inventory of 50 times per year. Due to the small convenience store SEJ only have 4000 Stock-Keeping-Unit (hence SKU) to choose from, large supermarkets carry more than 100.000 SKUs (SEVEN-ELEVEN 2010, SEVEN-ELEVEN USA 2011) plus 7eleven.com about us fun facts tabid 77).

In 2010 approximately 2500 products was carried in a store with a 70% replacement annually and SEJ have 100 new products introduced per week (SEVEN-ELEVEN 2010).

SEJ's closest convenience store rivalry Lawson Inc. have achieved the same gross margin as SEJ (approx 30%) 2009 but SEJ still have more daily customers well as a higher average amount spent by customer so total profit per store is still considerably higher in SEJ (Lawson inc 2010, SEVEN-ELEVEN 2010)

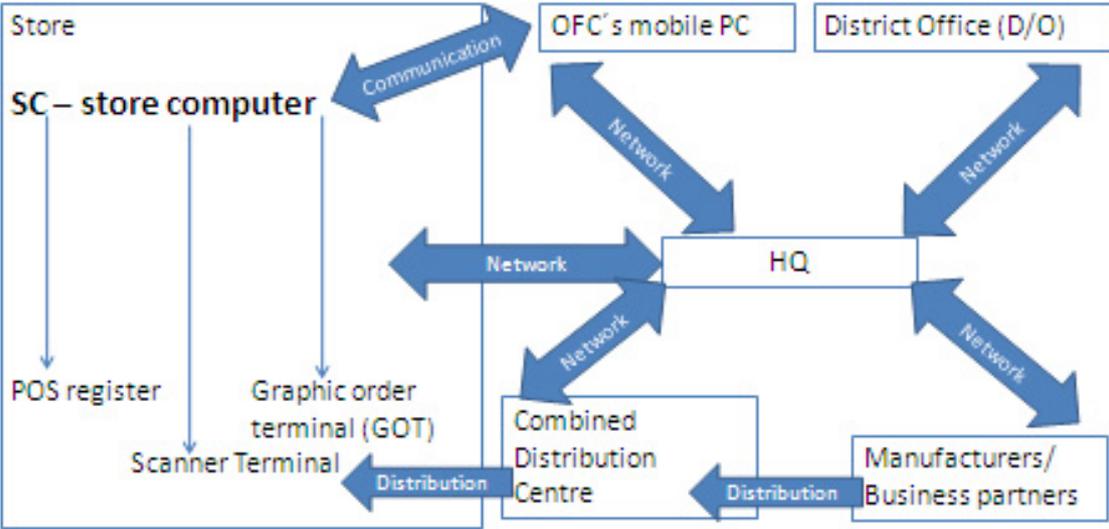
SEJ has two ways to attract customers' attention. The first is the design of the stores, meaning that the store is organised so that product racks and refrigeration units are displayed in easy to find way. The other way is the development of various types of stores, with flexibility of the location, customers taste and environment. SEJ has for ex opened stores in large buildings such as universities and hospitals (SEVEN-ELEVEN 2010)

The store location strategy is based on a chosen specific regional market that will be covered with quite a few stores. All stores within a small area. This strategy is called dominant opening strategy (hence DOS). An example is that there are almost 3000 stores in the Greater Tokyo area. SEJ states that "the high-density store opening strategy allows installation of an exclusive bento (boxed meals/entrée commissary) near stores; customers are able to buy fresh products at any time. In addition customers can take advantage of various services such as ATM & multi functional copy machines (SEVEN-ELEVEN 2010).

**4.1.3 Supply Chain**

SEJ created combined distribution centres (hence CDC) to overcome the problems with frequent deliveries to the stores. The frequent deliveries were necessary due to the limited storage spaces in its stores. CDC is combining deliveries of products groups that require the same temperature zone. They are being cross-decked at a single distribution center (hence SDC) and delivered in truckloads to groups of SEJ stores in different geographical regions. The SDC is jointly operated by the suppliers of the products. Such consolidated and cross-docking decreases the average number of deliveries to the each store. By doing so SEJ have been able to reduce number of delivery vehicle per store per day from 70 in 1974 to 9 in 2009 (SEVEN-ELEVEN 2010, SEVEN-ELEVEN Japan 2004).

**4.1.4 Information systems**



*Figure10 Source: Based on SEVEN-ELEVEN (2010)*

SEJ have created one of the largest information network to capture trends and have accurate figures related to sales of products.

As described in the picture above the store computer receives information from the point of sales (hence POS) meaning that every payment is captured. SEJ collects information on purchased item, location and time of the purchase as well as information about the buyer. This information is then transmitted to HQ where the data is collected, accumulated and used for product selection and sales promotion activities. Scanner terminal is used for check-in, product display position and freshness management. The graphic order terminal allows confirmation of sales data, weather and event information to enable effective ordering for a specific store. At HQ the information from the stores are analysed and used towards manufactures and business partners for ordering and then distributed to the CDC so that scheduled deliveries of products can if needed be changed (SEVEN-ELEVEN 2010).

#### **4.1.5 Organisation and Management**

The operation field counsellors (hence OCF) visits the eight franchisees under his/hers responsibility at least twice a week for finely-tuned advice about sales methods and other relevant issues as well to provide and receive the latest information. This information is then shared among the employees. The forecast meeting is held bi-weekly basis and is attended by approximately 1750 OCFs nationwide. In the meeting the top management meets the OCFs and are discussing future sales trends and the aim of the meeting is to make sure that the right product mix is given to the customers. The direct contact and communication allows them to share the latest information (SEVEN-ELEVEN 2010).

The information from these meetings is then communicated in the organisation to the next level. Japan is divided into 15 zones and meetings are held in each zone every week (zone meetings) and every zone are divided into areas. District office meetings are then held by each area for the purpose of exchanging regional information (SEVEN-ELEVEN 2010).

## **4.2 Seven-Eleven Sweden**

All information in this section is taken from the interviews and mail conversations, if nothing else is pointed out.

Seven Eleven Sweden is organised in a different way than SEJ when it comes to the owner structure. The concept has also been strongly changed in Sweden.

The license to operate as Seven Eleven store in Sweden, Norway and Denmark are owned by Retain Servicehandel AS from Seven Eleven USA. It is a subsidiary to SEJ. The Retain Servicehandel AS owns Pressbyrån Sverige and Narvesen Norge as well as Seven Eleven Denmark and Seven Eleven Norway. According the Retain Servicehandel Seven Eleven is the leading convenience store chain in Scandinavia. All in all, there are almost 500 Seven Eleven stores in Scandinavia,

The concept of SE is to have products and opening hours that is suiting the travelling and modern person, offering “anything, anywhere, anytime” (Retaingruppen, 2011).

SE in Sweden was first introduced in the 1980’s and progress was slow. SE shut down for a period of time in early 2000 but the concept was back as Small Shops AB acquires the license and in 2003 Pressbyrån Sverige bought Small Shops. In 2004 Retain Servicehandel AS bought Pressbyrån and thus got the licenses for the Seven Eleven. The market share in Sweden for the total Retain Servicehandel including Pressbyrån is 21, 7% and sales are 19 billion SEK.

### **4.2.1 Franchising**

SES uses individual contracts between franchisee and the headquarter, where Seven Eleven delivers key ready stores and their supply chain to the franchisee. The franchisee then owns the stock and manages the stores personnel,

Seven Eleven uses a gross profit sharing and in 2009 the average profits per store was 700.000 SEK and have risen during the last years. The organic growth has been 3-4% per year.

Almost all stores are franchisee owned, only some stores are owned by Retain Servicehandel AS when Retain have taken the strategic approach to own and manage the stores by themselves, to f ex push for a certain location.

#### **4.2.2 Store strategy**

In November 2010 there were 189 stores in Sweden where of 77 were located in major cities and 112 on the road. The “on the road” concept is developed together with Shell.

The stores have a base concept of products and can depending on the wish of the store owner adjust the number of SKU that the store should operate.

The average size (including the warehouse) is about the same size as the US companies but approximately 40% bigger than SEJ. Not many stores are open 24 hours seven days a week. The most common opening hours are 07-23. The location strategy for the “pure” Seven Eleven stores are to focus on the major cities in Sweden (Stockholm, Gothenburg and Malmö/Lund) and on triple A locations where there is a high traffic of potential customers. The other concept is to have, together with Shell stores located in gas stations that have a high volume of customers.

Not all Shell’s gas stations have or will have a SES store. Only stations with a high volume of customers have been transferred to SES. The daily flow of customers is 990/customers/day/store. A Swedish store is more focusing on coffee and fast food than the stores in Japan but no detailed view of sales structure have been given. The Swedish concept is mostly based on fast food and coffee related products. The franchisee and Seven Eleven have a communication about what the concept of products the store should use. The average time of stock is 20-25 times per year.

#### **4.2.3 Supply Chain**

The supply chain in Sweden is handled by two major distributors. One handles the food supply and the other is responsible for non-food items such as newspapers, gas station supplies and other non-food related items.

The focus of the Swedish branch has been to try to limit the number of suppliers, even for suppliers of special goods such as sunglasses, Coca-Cola, paperback books etc. These items are allowed to be distributed directly to the store. There are the two major suppliers and apart from these there are approximately 25 suppliers delivering directly to the stores.

All deliveries are time scheduled and the distributors have a 30 minute time period before a fee will be activated. SES has decided not to check what the suppliers actually deliver. This activity to check the delivery quite time consuming and SES have decided to trust their suppliers on their deliveries.

The distributors are as well measured on level of service, reclamation etc, this to try to make the Supply Chain lean and cost efficient and there is profit sharing so that rewards are split between suppliers and Seven Eleven.

The 1st of October 2010 Axfood Närlivs AB acquired the cold storage distribution centre in Kungen kurva Stockholm and a five year supplier agreement have been signed for the Swedish market starting first of January 2011.

How this will change the Supply Chain organisation is at this moment not clear according to Niclas Petterson, President of Axfood Närlivs AB (Press releases - Published Wednesday, 30 June 2010 12:12, at axfood.se)

*"The acquisition of this distribution centre creates good opportunities for Axfood Närlivs AB to strengthen and develop its position as a wholesaler of fast food and ready-made meal solutions, which are rapidly growing market segments,"* Retain Servicehandel AB's president Magnus Carlsson comments the affair

*"During the last ten years our cold storage distribution centre has played a key role for us in developing fast food concepts in our stores. We have now arrived at a juncture in which the market has grown so much that Axfood is better-suited to develop the business than we are. This will allow us to maintain continued focus on our core business - the stores."*

Due to company policy no financial data for only Seven Eleven Sweden have been given or for the Retain Servicehandel, except public data for this thesis.

#### **4.2.4 Information systems**

The information system used in Sweden is highly developed and all sold items are recorded in the store computer and available both to the franchisee and HQ. There is no additional information keyed into the system with a purchase. Seven Eleven Sweden use customer surveys to find future demand and customer preferences. The information from these surveys is then used for market purpose.

The franchisee uses and analyze sales data to find the best combination of product placement and price.

Seven Eleven Sweden uses a four week cycle when it comes to product planning and the ordering for each store is done manually and not automatically via the system. The franchisee needs to do an active order, deciding when to order so that no high-volume products are sold out and that there aren't any goods that are hard to sell stuck on the shelves. The responsibility is for the store owner to order when the timing is right.

#### **4.2.5 Organisation and management**

The management structure in SES is based on the OFC principal with weekly contacts between the OFC and the franchisees within the districts. Most of the contacts are managed via phone and not face to face. This approach is mostly related to the large geographical district every OFC has. The Swedish population density and store location isn't allowing weekly face to face meetings. During these weekly contacts the OFCs supports the franchisee with know-how and discussions about the product range, sales figures, costs, coming products and changes needed to be done.

There are no organised regular meetings between the OFCs and the top management. The information needed for forecasting and deciding about new product range is taken from the information system together with information from different customer surveys. The top management of SES is Retain Servicehandel Sverige AB and is shared between the different convenience store chains in the group. The focus and communication from the management is then also divided.

## **5. Analysis: Results from the comparison SE Sweden /Japan**

This thesis has focused its theoretical approach to show how the “traditional” SC and the management of this have transformed to more demand related processes. In the thesis the company SEJ and its sister company in Sweden have been studied. This analysis will show how SEJ have successfully moved from the traditional SC to a DC and what differences there are to the sister company SES. Given that this thesis have investigated SC where the company SEJ have been investigated by other authors, some data and conclusions might already be known and published by other authors. That is one of the reasons why a comparison with the Swedish sister company is of interest. From the authors knowledge there are no published findings related to SES. Therefore it felt relevant to investigate the Swedish company to see if the successful demand driven SC of SEJ have been implemented in the same way in SES. This thesis has not only focused on the SC in SEJ but on the demand approach and what the impact of management and organisation has as well.

The authors have used first hand data from the SE companies and other published data about SEJ. The information has then been complemented with interviews with a senior manager in SES. Using this information, an analyse on the demand approach in SE has been conducted along with a comparison of the related processes in SEJ and SES.

The analysis will show that SEJ has moved away from the traditional thinking in SCM to the DC approach, showing any differences in the organisation of the demand related processes in SEJ and SES

This is a case study based on the company’s SEJ and SES. This means that the conclusions and analysis in the thesis might not be applicable if a similar case study and comparison had been conducted in SEJ and any other Seven Eleven company such as Seven Eleven US.

## **5.1 Alignment of the SC and focus on demand management**

By using data and tracking key patterns from customers SE have taken the focus on demand management and made the supply chain to align to the changes in the demands. Identifying demand changes an organization can relocate facilities, change source of supplies and if needed outsource manufacturing. SE in both Japan and Sweden uses sales data that is retrieved from the POS system to take the decision to retain or drop a product and are always trying to have a fresh attitude towards customers' preferences and wishes. SE tries to listen to the customers and has adapted to the thinking of becoming the store for customer by offering closeness, convenience and suitable prices on needed products.

One critical component of a successful supply chain is tight integration among the partners by sharing information. Information sharing allows the supply chain to achieve efficiency gains in various forms like lower inventories, higher service levels, lower logistics cost and better customer satisfaction with fresh products. An important aspect of information sharing will take place at the supply chain level, not restricted to the boundary of a company. . It-solutions play an important role in the process of sharing information and the development of efficient systems is crucial. The HQ of SEJ uses the information retrieved from the POS data to control the strategy in the companies' distribution and to review how stores all over Japan are fulfilling its sales forecast. For individual stores the information is used to make changes in display of products or changing products.

SES is also using the information from the store computers to adopt the distribution, the product offer and to flow up on the sales figure. The integration that SEJ has with suppliers is lacking in the Swedish organisations. This is probably related to the size of the company. SES haven't developed the key initiative for suppliers to make special SES offers as SEJ have been able to do, for example with the product of packaged ball-shaped frozen juice. If and when SES can show suppliers that they will benefit more on working with them than only selling to them then, SES will be able to reach the same level as SEJ.

SE uses an agile SC by creating a combined distribution of items in the same category, delivered in the same vehicle but from different vendors. Not only does this reduce the number of trucks per store and day. It also secures that items that are temperature dependents

(such as soft drinks) can be delivered more frequently thanks to the CDC. The SDC is jointly operated by the suppliers of the products. Such consolidated and cross-docking decreases the average number of deliveries to the each store. As discussed earlier, SES uses a similar program with reduced deliveries to shops by join deliveries. The need of deliveries more than one time a day is not as important in Sweden as in Japan since the stores are bigger.

## **5.2 Demand creation process**

SEJ are monitoring trends and changes and are taking this into account when reviewing their strategy. For example was the strategy changed when they identified that the local shopping opportunities near residential areas are shrinking. Due to that trend SEJ have started to offer meal solution to senior citizens, single persons and double income households, working with partners such as vendors/suppliers/manufactures. SEJ is developing new categories of meal solution by using the information from its IT network and customer surveys as described in the thesis.

The main driver to use a demand chain for SEJ is geared towards efficient utilization of shelf space due to the high cost of real estate in Japan. The stores in Japan are therefore smaller than in the US and Sweden. It costs more for SEJ to have an empty shelf space since customers are craving for a product. To have non-selling products is also more expensive than to actually find out what the customers prefer and what price they are prepared to pay. This means that SEJ needs to invest in information and logistics systems to make sure that customer demand can be retained at all time The SC strategy of SEJ is therefore defined as one truck covering the demand from a large number of stories in a small geographic area, thus reducing delivery time and the number of trucks for the same numbers of stores. This functioning in the same way in Sweden but the demand for very few deliveries is more limited, related to the bigger stores and the lower real estate cost. In comparison SES doesn't at all put as much time and effort on this subject as their Japanese sister.

Another key driver is that SEJ have a short shelf life of its products. Since processed food and weekly magazines constitute a large part of the business SEJ finds it worthwhile to invest in freshness. SEJ have made this demand thinking a strategic choice by its management with weekly or biweekly meeting making sure demand are its first choice. SES has more coffee

related and fast food sales which can have longer lifespan than sushi and fresh rice products. This means that the incitement to monitor customer changes are lower than in SEJ due to that the coffee beans can stay in the machine for days but fresh noodles and rice products have to be thrown out the next day.

### **5.3 Flexibility**

The foundation of Seven Bank is a very good example how SEJ shows flexibility. SEJ saw that consumers wanted to be able to withdraw cash in their locations and started a ATM services which will as well motivate customers to visit Seven Eleven not only by having a e – commerce service and a retailed function. SE in Sweden does not have Seven Bank but offers ATM services. By doing this and letting other bank use space inside the stores or just outside the entrance of the store, SES is as well offering added value to the customer. The flexibility thinking is therefore is applicable for both companies.

The differentiation of products, services and underlying delivery processes need to make it possible to satisfy different customer needs and adding great value to the customer.

### **5.4 Scaled logistic and store strategy**

SEJ uses DOS firstly to maximize efficiency of distribution by exploiting scale economics in logistics. As described, the supply chain strategy is focusing on one truck covering the demand from a large number of stores in a small geographic area, thus reducing delivery time and the number of trucks for the same numbers of stores. So SC and DOS are working in hand in hand. DOS allows SEJ to extract data from each small homogeneous area to detect significant demand patterns and develop a plan applicable to the stores in the area. This means that DOS is a critically for the demand and supply chain related processes in SEJ. SES has not been able to complete this in the same efficient way. Given the lower demographics in Sweden SES cannot use the DOS in the same way as SEJ and therefore SES have not the same SC efficiency and turnover rates as SEJ has.

The focus on the delivery systems, the way of working with reduced and joint deliveries and the highly developed sales systems, to deal with the direct communication between the single

store and the HQ is just a few examples of similarities pointed out in the findings. The location strategy (with the focus on triple A location and the DOS) is another similarity.

Many of the smaller differences are related to size and possibilities of economy of scale with SEJ as well as practical aspects. The owner structure differs quite a lot and in this context it should be pointed out that SES is a much younger and immature organisation than its Japanese sister.

## **5.5 Organisation and management**

As the literature reviews the organisational and managerial structure of the business is very important not only for creating a successful integration between different disciplines in the organisations but also in the development of the organisation and its competitive advantages. In the chain management aspect this means thinking new and making the organisation think and feel the new aspects. SE has a very clear organisational and managerial structure with its franchising concept. SEJ has an "add on" with a very clear managerial link that really contributes to the internal visual communication and two way communication. The possible difficulties in the cooperation between the different disciplines as well as the possibilities for management to reach all employees have been narrowed.

The organisational and business change that has been completed over the years has been done in a way that the change is constant and not causing too much pain. In this aspect SES has had a tougher journey with changing owner structures as well being of the market for a period of time. When looking at the two sister companies there are of course many similarities in the way that they are dealing with internal processes, systems and the business approach. It is also reasonable since they are part of the same cooperate organisation.

There are two major differences. The first aspect is that SEJ has taken their chain management to another level that isn't today existing in SES. The detailed data collection on every single item sold as well as their regular work with partners in both the product development phase and the chain process suggests that they have been able to create a competitive advantage with their view of chain management. SES have started a this journey

but the question is of course if they will be able to go the whole way, taken size and practical aspects like density into consideration.

The other major difference is the focus on the managerial communication and organisational structure. SEJ puts a lot of efforts on the regular meetings both at top level but also in the zones and districts. In SES this is more limited to the OFC's regular contact (not always face to face) and the regular communication link between the management single store computers.

The advantages that SEJ gains with this regular communication are the possibility to information exchange in two ways. Top management gets the possibility to influence and strengthen the commitment, communicate the vision and strategy and at the same time get direct feedback about sales trends, organisational feelings etc.

## 6. Conclusion

One of the more important aspects of this thesis is the coordination and integration between the supply processes and the demand and marketing processes. By taking care of and paying attention to the difficulties involved in such integration benefits will be made as the case of SEJ have shown. The market department needs to work with other departments' process knowledge into their decisions. The rationale for this is to be more cost efficient as well as to learn not to accept customer demands that is not profitable for the business. The supply chain organization on the other hand needs to get involved earlier in the customer priority decisions.

It is extremely important during this process that the senior management within the company needs to show, with their actions and behaviour, that the movement is important. The focus within the organisation needs to move away from being just cost focused to focus on revenue generation as well. Seven Eleven in Japan was the first company to successfully launch a large-scale convenience store in Japan. The company has been able to develop a well-functioning operative system as well as showing a great willingness to respond to customer needs.

Seven Eleven Japan has a locating strategy that means that they are located where people live or pass by on their way to work and school. They have developed a dominate location strategy, meaning that the clusters are giving them a market domination.

With extensive and customer oriented opening hours and store locations SEJ has been able to create a pull aspect. This, in combination with their well developed logistics and delivery system has made them the more successful than competitors in Japan, throughout a high amount of sales per store

Looking at the two Seven Eleven companies it is clear that the majority and the development are much deeper in SEJ. Their possibilities to develop competitive advantages for the future have also been much more expanded. SEJ has tried in many ways to localise the business approach from the sister company, ex building a concept with "on the road" stores to get the dominancy that is needed for the strategy. The big differences, related to development of the

chain management and the managerial communication structure has been highlighted during the work. Not many companies have as highly sophisticated and developed communication structure as SEJ, given the cost for this infrastructure, but for SEJ it has helped to create their competitive advantage.

Some of the implication for SES is more general. For example, if we take into consideration other Seven-Eleven countries, they will encounter probably similar problems. SES certainly does not have created a successful SC with demand processes as SEJ have been able to create. It would be of great interest to see if Seven-Eleven will be able to “establish a world-class brand with business infrastructure created in Japan.”

Due to culture and demographic differences that have worked so successfully in Japan might not work elsewhere. Even though SES has become successful in Sweden does not mean that Seven-Eleven can live up to its high set goal. To be able to deal with the competition in a fast moving business environment, Japanese cooperate practices have developed the implementation of visual processes to maintain the cooperate identity. They also use it as an integrated art of the management processes

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# ***Appendix***

## **Areas discussed during the interviews with Seven Eleven Sweden**

- Seven Eleven Sweden and the ownership by Retail Servicehandel
- Franchisee in Sweden structure and stores
- Business model for Seven-Eleven Sweden
- Seven Eleven Sweden Structure
- Store products and differences to SEJ
- Information system and exchange by HQ franchisees
- Distribution system and retailer
- Localisation strategy
- Product strategy
- SC strategy