AN EXPLORATIVE STUDY ON THE POTENTIAL TO ESTABLISH A LOCAL VALUE CHAIN IN THE SWEDISH HOME TEXTILE INDUSTRY
Title: An explorative study on the potential to establish a local value chain in the Swedish home textile industry

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Abstract

Purpose: The purpose of this research paper is to examine the potential of the Swedish textile industry to achieve more sustainability in the home textile segment, through establishing a local value chain for local consumption. The aim is to explore the potential of both the supply and demand side of the local market. For the supply, or the industry perspective, the goal is to show companies the relevant aspects to consider when choosing to establish a local value chain in Sweden, with a focus on the home textile segment. For the demand, or the consumer perspective, the objective is to find out how they perceive locally produced sustainable products and whether there is interest for purchasing such products.

Methodology: Existing literature and relevant results from researches have been collected and used as secondary sources, for forming and backing up the industry perspective of the thesis work. Face to face interviews have been conducted and analyzed, for getting primary information for the consumer perspective for the paper. This work is an explorative study, combining information for both the supply and demand sides of the home textiles segment in Sweden.

Findings: After combining the findings from the literature review and the results from the analysis from the interviews, it can be concluded that there is a potential to establish a local value chain in Sweden. The situation is not ideal though, also potential risks and drawbacks related to the locality of the value chain of the home textiles segment that are presented have to be considered. The paper explores both the advantages and the disadvantages for producing locally in Sweden, to estimate the existing potential.

Keywords: home textiles, local value chain, local production, Swedish home textiles, alternative fibers, sustainable textiles, consumer awareness, sustainability
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1 Introduction

The introductory chapter of the thesis consists of background information on the subject areas on which the thesis focuses. The problem is then presented, in order to give the reader a better insight of the situation. That is followed by the purpose or the ‘raison d’être’ of the thesis. The next part consists of the research questions, in which what the thesis is trying to answer is illustrated. The introduction chapter is closed with a brief explanation of the delimitations of the paper, which is an integral aspect that has to be taken in consideration.

1.1 Background

The environmental and social practices of businesses in different industries are increasingly being questioned (Hockerts & Wüstenhagen, 2010). The textiles industry is not excluded from this trend, but on the contrary, it is often connected with controversies and unsustainable practices when it comes to its production processes. The production, which consists of the sourcing of raw materials and the processing of them into finished textile products significantly damages social and environmental well-being in some parts of the world (Shen, et al., 2017; Riddlestone, 1999). ‘Air and water pollution and exploitation of human resources, especially where production is outsourced to lower labor cost countries’ (Shen, et al., 2017, p. 1) are only a few of the negative impacts associated with this industry.

The textile industry is a broad term, that can be divided in several distinguishable segments. In order to be able to identify challenges and propose valuable solutions, a focus on a specific segment is required. Home textiles are referred to as being a highly environmentally harmful industry (Das, 2010). Hence, it makes sense for it to be chosen and examined as a potential candidate category for starting a change directed towards more sustainability. Analyzing home textiles separately from fashion and apparel might be beneficial due to the fact that the products serve different purposes, therefore their consumption patterns differ. Namely, some of the trends that influence the demand of home textiles worth considering to be pointed out are:
continuing interest in more fashionable textiles, growing demand for natural fibers, increasing price consciousness, more critical about design, green consumers on the increase, developments in technical household and furnishing textiles, and sustainability. (Das, 2010, p. 16)

The concept of sustainability in the textile industry is a topic which is more and more covered from academics all over the world. The negative environmental and social impact that could be connected to the overproduction of textile products in a global value chain, are addressed. The overall goal is to find relevant and possible solutions for the omnipresent threats for nature and humans coming from the textile production and ways of consumption.

There are many ways to define sustainability and implement the approaches in a company’s business model. The three big challenges which need to be addressed are: Pollution – Depletion – Poverty (Hart, 1995). The striven solution approaches for these issues could be pollution prevention, products stewardship & increased responsibility and sustainable development (Hart, 1995). The last point (poverty) will not be addressed in detail, as this paper has a focus on the potential of Sweden to establish a local value chain (see delimitations).

Pollution prevention aims on the elimination of emissions and effluents to the environment, through for example the usage of more sustainable materials, innovations in processes and production. The changes need to be implemented in all of the value chain steps to guarantee an optimal pollution control and protect the environment against these damages (Hart, 1995). The competitive advantage in implementing a pollution prevention plan in a given business model could be the reduction of costs and could be beneficial for the reputation of a company (Hart, 1995).

A local value chain can for example contribute to the prevention of greenhouse gas emissions through shorter distribution distances or the cultivation of locally grown textile fibers, which do not need much fertilizer or pesticides and would spare the soil and groundwater from this kind of pollution (González-Garcia et al., 2010).
The second point also involves many value chain processes, like product design, product development, production, but also use and the afterlife of a product. The idea is to take the responsibility for reducing the environmental, health and safety impacts of a product. This is likewise the task of companies and consumers, furthermore from every other value chain step participant like retailers, and in the case of end of life models also from the recyclers (Hart, 1995).

A combination of proactive actions (in products development, design and production phases) and reactive actions (in use phase or after life of the products) is necessary to achieve a successful product stewardship with the aim of a more sustainable responsibility (Hart, 1995).

In a local value chain, the “made in” argument is an addition to the good reputation when talking about sustainable ideas. It can be used from the marketing sector to promote the idea in an ideal way and show the consumers what the beneficial facts of a local production can be. This reinforces a strong future market position and can lead to a long-term growth and stability coming from a durable customer loyalty (Hart, 1995).

These are overall ideas for more sustainability, but they are not enough as Hart and Dowell mention in their paper ‘Natural-Resource-Based View of the Firm: Fifteen Years After’ from 2011 (p. 1476):

As important as these corporate initiatives have been, it is now clear that such incremental sustainability strategies will simply not be sufficient. Companies and management scholars are being challenged increasingly to develop breakthrough strategies that actually resolve social and environmental problems, rather than simply reducing the negative impacts associated with their current operations.

A local value chain approach for the textile sector could go further, as it breaks the habit of seeking low cost countries as production locations and therefore an attempt is given not just to work against the obvious problems which are connected to a complicated global value chain, but also find new ideas how to integrate sustainability in a corporate identity.
Currently there are social, economic, environmental and political challenges worldwide that need to be addressed in a holistic manner (Lukman et al., 2016). The last decades' increased globalization led to a high level of complexity in the textile value chains (Goldsmith, 2014). Looking from an environmental perspective, the damage occurring at different stages of the value chain is alarming. The environmental impact due to long transport distances (Gray et al., 2013), pollution and exploitation of resources (DEFRA 2008; Fletcher 2008) are just a few of the issues that are resulting from the activities in a global supply chain. Important priorities to focus on could be the manners of using water, energy and chemicals in the textile industry (Bailey, 2018). In general, it is hard to address and treat these environmental problems independently, as they all contribute interchangeably to the whole value chain picture. Global value chains are often associated to long lead times and less flexibility (Tate et al. 2014). Furthermore, the distance between the company and the different suppliers make it more complicated for monitoring and controlling all of the value chain steps (Gray et al. 2013). This also points at the traceability and visibility issues when operating in a global context. Low responsiveness and supplier commitment, and involvement when it comes to sustainability responsibilities, all lead to a questionable level of transparency (Ashby, 2016).

As a response to the issues coming with the globalization of the textile industry, the idea of a local value chain is being explored (Goldsmith, 2014). As exemplified further by Goldsmith (2014, p. 12):

Instead of global sourcing of materials, use what can be found or developed locally. Rather than outsourcing labor to distant lands, employ (even at much higher costs) people living nearby. In lieu of producing for “other communities”, produce for “one’s own” community.

In this context the topic is not just connected to localization of the production, but also to local consumption of the products. The decision to produce locally and utilize locally available resources and capabilities can be seen as a potential solution for global value chain problems (Johnston, 2012). Additionally, a local focus is believed
to bring the companies the advantage of having better value chain transparency and to affect the local economy in a positive manner (Tate et al., 2014).

Discussing a local value chain, a focus on a specific country and combining its available conditions might ease to make it clear how the theory can be applied to practice. This research paper focuses on Sweden. All the value chain steps are looked at in a local context, including the local market, to figure out what the possibilities are to realize this kind of sustainable approaches. The choice is backed up by the knowledge that Sweden has a long tradition in producing distinct home textile products (TEKO, 2015). Having the potential for establishing a sustainable setting locally is another reason for this selection (TEKO, 2015). When talking about the consumer side, a report from TEKO (2015) describes the Swedish consumers as taking in consideration the environmental and social impact of the products they choose. Tukker et al. (2008) put an emphasis on the importance of the actual context in which the situation is being questioned, also considering the social and economic background of the consumers as important factors that influence the decision-making processes that eventually lead to purchases. Therefore, Sweden might be a suitable terrain, for implementing production with a focus on the local market, as this country belongs in the high-income category (World Bank Group, 2018).

It is believed, that the switching to a local value chain with a more sustainable practice in home textiles could lead to the necessary change in the current industry (Goldsmith, 2014). As Fletcher and Grose (2012) explain, if changes and transformation towards a more positive and sustainable setting are to be planned and expected from the textile industry, attention should be paid on modifying properly the scale of it, and also the actual region of the production should not be overlooked. ‘Sustainability is nothing more than another word for respect’ (Plieth, 2012, p. 134), and change is needed to ensure a secure and healthy environment for current and future generations. Innovations are needed to foster sustainable production and consumption patterns simultaneously (Buerke et al., 2017).

Tukker et al. (2008), in their work called ‘Perspectives on radical changes to sustainable consumption and production’, approach the situation from an angle that proposes that for changes to be seen in the production and consumption spheres of
the textile value chain, experts from various fields need to join forces and contribute together. Namely, professionals from the field of business development should work jointly with colleagues from neighboring fields such as system innovation, design, consumer behavior etc. to all share their distinct knowledge and form a whole that might alter the current unsustainable situation.

The problem cannot be pointed to a single link in the value chain, both demand and supply side have to take responsibility and act towards change. Various stakeholders, such as NGOs, universities and research institutes can combine efforts and hence contribute to a stronger awareness and green product innovation (Melander, 2017).

1.2 Problem

As this paper encompasses both the industry and consumer perspectives, it is necessary to treat the problems separately. The problem that is present with home textiles currently can be pointed out to the dependency on imported raw materials, large distances from production to consumer which are associated with emission of greenhouse gases and difficulties in transparency and control of a global value chain. The problematic part on the consumer side is to identify whether they are aware of and interested in buying sustainable locally produced home textile products.

1.3 Purpose

The purpose of this research paper is to examine the potential, with the advantages and disadvantages that determine it, of the Swedish textile industry to achieve more sustainability in the home textile segment, through establishing a local value chain for local consumption. The aim is to explore the potential of both the supply and demand side of the local market. Potential in this paper is seen as the possibility to develop and succeed, after weighing the advantages and disadvantages for the given situation. Namely, if there are more advantages than disadvantages, it leads to having a bigger potential. For the supply, or the industry perspective, the goal is to show the potential to companies through the relevant aspects which need to be considered when choosing to establish a local value chain in Sweden, with a focus on the home textile segment. For the demand, or the consumer perspective, the
objective connected to showing a potential is to find out how they perceive locally produced sustainable products and whether there is interest for purchasing such products.

1.4 Research Questions

The study approaches the situation by attempting to answer questions from two different perspectives, so that a more holistic picture will be acquired. The first research question has an industry perspective and the second one adopts a consumer perspective. That way the potential for a sustainable home textile company establishing a local value chain in the Swedish market is explored from both relevant sides. And if companies go for that option, it is valuable to see how consumers would respond to locally produced sustainable home textile products. In this respect, the research questions are formulated as following:

**RQ 1**: What are the advantages and disadvantages for a Swedish home textile company to produce locally?

**RQ 2**: What is the perception of young consumers of locally produced home textile products?

The main point of answering the questions proposed is to give existing home textile companies that are interested in becoming more sustainable an insight of the situation in Sweden, so that they will be informed about the advantages and disadvantages when deciding to manufacture and sell their products locally. Another application for the study is to serve as a recommendation when developing a new home textiles brand by considering the relevant data from the supply and demand side in Sweden.

The answers to the first research question are derived from a thorough literature review on the relevant aspects and listed and discussed as advantages and disadvantages. The answers to the second research question are covered by conducting exploratory semi-structured face-to-face interviews with the relevant consumer group.
1.5 Delimitations

The main focus of this research paper lies on sustainability outcomes, and profit as an end goal is overlooked. This is an important delimitation to consider for a company that tries to implement a more sustainable alternative. Profitability of such an attempt needs to be further investigated in another research. The attempt to analyze the establishing of a sustainable local value chain in the home textile sector is approached through a general view on the segment, not specifically focusing on different company sizes. Thus, the conditions and possibilities of realization for various company sizes might stray from the general overview presented in this paper. Furthermore, no existent case of a home textile company with a local value chain is introduced and used for reference in this paper. The effects that a local value chain in Sweden could have on countries that are currently producing most of the home textiles, are not mentioned. The sustainability implications, both environmental and social, are suggested while having only the Swedish local value chain and market in mind.

When talking about fiber options for local sourcing, animal fibers and synthetics are not part of this research paper. To limit the scope of this paper, only natural plant-based fibers, that could be locally sourced in Sweden are examined. Synthetic materials, due to their questionable sustainability level are excluded from the findings of this research. Their usage for home textile products and also their sustainability impact should be addressed separately. Innovative solutions, like smart textiles, are not a part of this research, even though they could be relevant for the further development of the home textile segment.

Finding information that are focusing solely on the production of home textiles is challenging, as most of the available material is focusing on apparel and fashion. When it comes to the consumption, there is also more extensive literature on the fashion field in contrast to the home textile field, for which the information on consumption patterns and consumer awareness are scarce.

The scope of this research can be quite extensive, especially with the two approaches: consumer and industry perspective. That is the reason why the paper
aims on giving a holistic overview on both topics, with suitable academic approaches for both perspectives, to give an insight into the relevant ideas of a local value chain. In addition, the paper can be seen as a start for broader research on both perspectives, relating to the home textile sector and gives directions for further in-depth research.
2 Methodology

This paper is an explorative study with a focus on the domestic production of the home textile industry in Sweden. According to Robson (2002), an explorative research is to discover what is occurring at the moment and look for new perspectives of seeing the phenomena. This paper aims to provide an understanding of what is happening in the home textile industry and explore new possibilities, particularly in building a local value chain in Sweden. There are various methods for conducting an exploratory research such as secondary data analysis, focus group interviews, in-depth interviews, case analysis etc. (Sekaran and Bougie, 2016). Instead of only having one dimension to approach to the topic, this qualitative research is structured under a twofold method - a secondary data analysis and interviews.

In the first section, it explores the advantages and disadvantages of a local value chain from an industry perspective and secondary data analysis is applied. An alternative approach could be interviewing people who are working in the industry. Indeed, having a focus on certain companies could offer a more in-depth knowledge into the topic. However, as mentioned previously, the purpose of this paper is to give a general overview of what is happening in the industry, which includes both micro (e.g. production capacity, infrastructure and manpower) and macro factors (e.g. political, environmental, economic and technological). Putting the focal point on certain companies would have limited the research to be more emphasized on micro factors. In the second section, interviews are conducted to find out the perception and awareness of young consumers towards local production of home textile products. Unlike many other studies covering different age groups, this paper focuses solely on a group of young consumers (20-30 years old). Through the glimpse of both the supply and demand perspectives, it aims to obtain a holistic view on the subject and hence to give an insight into the potential of local production and consumption for the home textile industry in Sweden.
2.1 Secondary Data Analysis

In this part, a secondary data analysis approach is taken for the supply perspective. The data is collected via a scan of literature. With the objective to find out and analyze the advantages and disadvantages of a local production in Sweden via existing literature, numerous literature sources are gathered and summarized through a narrative review. Some researchers use narrative review as ‘a means of gaining initial impression of the topic area that they intend to understand through their research’ (Bryman & Bell, 2015, p.110). This approach is featured as less focused when comparing to systematic review. In other words, it involves a wider range in scope, which is usually used for qualitative research interpretive epistemology (Bryman & Bell, 2015). Thus, a wide variety of sources, such as scientific journals, books, press, companies’ official webpages, government statistics and reports are included in this paper. And most of the literature is sourced from electronic databases such as Primo from the University of Borås and Google Scholar through the keywords searching method. The data is being processed with a content analysis method. With the use of this method, the researcher categorizes and clusters the data collected, which enriches the value of such data from the secondary sources (Hair et al., 2016). The results from the findings are summarized and presented into two main categories - advantages and disadvantages.

2.2 Interview

2.2.1 Sampling and Data collection Method

A non-probability (also known as non-random sampling) approach is applied when choosing the interview participants. This method has been credited for its simplicity, convenience and low cost (Krishnaswami & Satyaprasad, 2010). The aim of conducting the interviews is to offer some insight into the topic with a limited time constraint, therefore, a non-probability approach is appropriate for this paper. The interviewees of this research are selected based on the purposive sampling method with a heterogeneous approach. A heterogeneous approach allows researchers to emphasize on key themes (Saunders et al., 2012), and the theme of this paper is educational background, age and country of residence.
Since the population of young people in Sweden is booming these years (Sida, 2009), which means it is essential to understand the purchase logic of this particular group of young consumers in Sweden in order to offer relevant insight for the industry. According to the EU’s family and society statistics, conducted in 2016, the results showed that the average age of young men and women moving out from their parental home in Sweden was 20.6 and 20.8 year-old, respectively (Ec.europa.eu 2017). Moving out from their parents could imply this group of people has the condition to make their purchase decision in home textiles. Thus, the age group of this research is set between 20 to 30 for both man and woman currently living in Sweden and have left their parental home. In the sampling process, 11 interviewees, with ages ranging from 24 to 30 years old were the participants of the personal interviews that were conducted. All interviewees are currently living in different parts of Sweden and are having a different educational background, but in this research, they have been classified into textile and non-textile background.

2.2.2 Interview Design and Execution

A semi-structured face-to-face interview is employed in this phase. This method empathizes on the interaction between the interviewer and the participant by using preplanned questions (Eriksson & Kovalainen, 2008). Eriksson and Kovalainen (2008, p.93) describe ‘a guided and semi-structured interview outline of topics, issues, or themes, but variation in wording and sequence; both ‘what’ and ‘how’ questions’ and ‘the tone of the interview is fairly conversational and informal.’ The benefit of this technique is that it is systematic and comprehensive, which has been favored by many business researchers (Eriksson & Kovalainen, 2008). Alternatively, a structured interview would also fit in this paper. A structured interview is much more systematic and standardized in nature, but it has been criticised for many of its' aspects, such as inter-coder variability that the way to answer the questions is being miscommunicated by the respondents and it limits the possibilities to alternative answers that could be given by the respondents (Bryman & Bell, 2015). As the purpose is to gain a more in-depth insight to the consumer perspective, a structured interview with closed questions could not provide sufficient answers to the research question. In contrast, a semi-structured interview would be more suitable and appropriate for this research since it enables the interviewer to ask further questions
regarding replies that they consider to be important (Bryman & Bell, 2015). In other words, the researchers could benefit from obtaining richer and more valid answers to the questions. Once the interviewing method was decided, 15 questions were prepared before the interviews took place. The data were collected between April and May 2018. The duration of each interview was within 30 minutes, and each was audio-recorded. The audio-recorded interviews were then transcribed and the results were put in a table for data analysis.

### 2.2.3 Data Analysis

Empirical data collected through interviews is known as primary data (Eriksson & Kovalainen, 2008). The data collected from the interviews undergoes a qualitative content analysis method since it acquires data through ‘observing and analysing contents with message in written or spoken communication’ (Zikmund et al., 2010, p.250). This method is widely used to analyze unstructured information, for instance, semi-structured and unstructured interviews (Bryman & Bell, 2015). Hair et al. (2016) also stated that it is commonly used for text interview interpretation.

Once the data is collected, a deductive reasoning approach is employed in the process of analysis. This approach is closely associated with theory-testing research, which is ‘to accept or reject hypotheses about certain patterns and relationships’ (Hair et al., 2016, P.135). With this approach, it is aimed to test if the connections and relationships in these propositions can be considered as valid or need to be rejected. By following this direction, eleven propositions were set up for analyzing the interview questions, and each of the proposition is backed up with reference of related concepts from relevant literature. A list of the literature is presented in the following Figure. 1, and the explanation of how each proposition anchors with the literature will be delivered in chapter 6.

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Literatures reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P1</strong>: Textile background individuals are more aware of sustainability when it comes to home textiles, compared to people with non-textile background.</td>
<td>Hiller Connell and Kozar (2012)</td>
</tr>
<tr>
<td>P2: Price is the main concern associated to locally produced home textiles.</td>
<td>Laitala et al. (2014)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>P3: The consumer perceives locally produced products as having high quality.</td>
<td>Suri and Thakor (2013)</td>
</tr>
<tr>
<td>P4: The “Made in” – aspect of the product is an important factor for customers, when choosing a home textile product.</td>
<td>Yavas and Tunca (1984)</td>
</tr>
<tr>
<td>P5: Consumers would be willing to try locally produced home textiles from hemp, flax and nettle.</td>
<td>Eifler and Diekamp (2013)</td>
</tr>
<tr>
<td>P6: Consumers perceive locally produced home textile products as contributing to sustainability.</td>
<td>Hustvedt and Dickson (2009)</td>
</tr>
<tr>
<td>P7: Customers need more information about the sustainability in the home textile sector.</td>
<td>Miraftab and Horrocks, (2007)</td>
</tr>
<tr>
<td>P8: There is a different level of sustainability awareness when it comes to home textiles between genders.</td>
<td>Brough, A. et al. (2016)</td>
</tr>
<tr>
<td>P9: Customers would be willing to pay a higher price for locally produced home textile products, if they are assured that those products have a high sustainability aspect.</td>
<td>Hiller Connell and Kozar (2014); Nassivera et. al. (2017)</td>
</tr>
<tr>
<td>P10: Material composition is an important factor for customers selecting home textile products.</td>
<td>Eur-Lex (2011)</td>
</tr>
<tr>
<td>P11: Consumers that have already bought locally produced home textiles are satisfied with their purchases and would buy again.</td>
<td>Sproles and Geistfeld (1977)</td>
</tr>
</tbody>
</table>

**Figure 1 - Propositions and literature references**

### 2.2.4 Ethical concerns

The interviews conducted for this research paper were following ethical considerations, so that the conditions for the people that participated were acceptable and fair. The first thing that was taken as a step for establishing the ethical aspect of
the process was to ensure that all of the participants took part of the interviews voluntarily. That is tightly connected to the situation of them being informed transparently before agreeing to participate in the interviews. They were all informed in detail about the topic of the interviews and the aims of the research, how will their answers contribute, and how will the interviews proceed, before they accepted or rejected to participate in them. They were informed that the results will be used anonymously in the research, that their names will not be mentioned anywhere, and for that reason of confidentiality they have been each given participant numbers. With respecting ethical codes for such procedures, the interview questions were carefully formed so that they would not in a way lead the participants to a wanted answer, they were formed in a rather free manner, so that they would be able to express their personal opinion on the subjects that were investigated. As the main topics covered in the interviews were mostly connected to the topic of consumer experience and knowledge of sustainable home textile products, there were no questions that were on sensitive or too personal subjects. Even if they felt that a subject was controversial or not adequate for them to answer it, they were informed that they are free to skip answering that question. In addition to the above-mentioned ethical considerations, the interviews were conducted in safe environments, with a low level of risk for harm of the participants, they were interviewed in the university library, in cafes etc. And the time and place were set according to their personal preferences.
3 Theory

In the following chapter, the theory that is being used in this research work is presented and clarified briefly. The findings of the literature review are analyzed with the help of using the chosen theory. The use of it helps with guiding the direction of the work and contributes to formulating the structure of the parts to which it is relevant. Thus, the theory is carefully selected, with the intention to complement the topic of the research paper, and to also serve as a ground for organizing the results of the findings from the literature review part of the research work.

The themes are explored and organized with inspiration gotten by the theory known as The Porter Diamond, that is an invention of the American researcher and academic, Michael E. Porter. The theory is focusing on every country’s national competitive advantage, with the idea that there are multiple factors that lead to success of a business or a market, and it explores which ones of those are already available at the given territory but puts more emphasis on what is being created that leads to becoming more competitive (Porter, 1990). A short preview of the theory states that:

A nation’s competitiveness depends on the capacity of its industry to innovate and upgrade. Companies gain advantage against the world’s best competitors because of pressure and challenge. They benefit from having strong domestic rivals, aggressive home-based suppliers, and demanding local customers. (Porter, 1990, p. 1)

The ‘diamond’, also known as Porter’s National Competitive Advantage Theory, published as early as year 1990 (Carpenter & Dunung, 2011), is consisting of four interrelated groups of factors, that all contribute towards creating competitive advantage of a specific business or a market, based on national attributes, and it is presented in the edition like this:
The theory divides the relevant points from the region into four categories, which are named as: local firm characteristics, local market demand, local suppliers and complementary industries, and local market resources and capabilities.

The Local Firm Characteristics category, as discussed by Carpenter & Dunung (2011) constitutes of the four elements named as: firm strategy, industry structure, and industry rivalry. These are to examine the position of the company, in relation to the local industry and related to its competitors.

Local Market Demand examines how the situation is locally, seen from the perspective of the customers, or the demand side. This is done with an intention to see whether the market demands are fostering more innovations, change, and heightened standards for the products that are being offered to them. Or as stated in Carpenter and Dunung (2011, p. 54): 'Companies whose domestic markets are sophisticated, trendsetting, and demanding forces continuous innovation and the development of new products and technologies.' In the case with introducing a local value chain in Sweden, it would be valuable for companies to know how consumers feel about sustainability issues. It would be beneficial for the industry, in terms of
innovation and going forward, for the companies to have a push to change to better by the demand side. The demands from the consumers might encourage companies to change, and the feedback from the consumers might give them the direction in which the change is this expected. This aspect of the diamond is touched slightly in the analysis of the Swedish market, but chapter 6 “Consumer Perspective” is dedicated to the demand side.

The relevance of the theory from the Porter’s diamond, concerning the consumer perspective in this paper, is in a way to put an emphasis on the consumer as an important aspect when measuring the local potential for introducing the given product. The other three aspects of the diamond might be fulfilling the conditions and might show potential to for example develop, produce and distribute locally, but without the consumer demand, the puzzle would be incomplete. The Local Market Demand category guides to the need to explore the consumer perspective, which is done with the help of face-to-face interviews in one of the following chapters. The Swedish consumer is the focus of examination in this case, as the potential for Sweden is being explored, and it would not be relevant to focus on consumers from other regions.

The Local Suppliers and Complementary Industries category can be explained as ‘To remain competitive, large global firms benefit from having strong, efficient supporting and related industries to provide the inputs required by the industry’ (Carpenter & Dunung, 2011, p. 54). In this case this is of huge importance, since local value chain hugely depends on the available suppliers in its nearest surrounding, and related industries that might be used mutually for the use of common resources, knowledge and infrastructure.

Local Market Resources and Capabilities is also of huge importance for this research work, since it is a local value chain, and its potential and success basically depend on what is being available there to build it and support it. This does not only include the available natural resources, but also, as Porter pointed them out as being advanced factors that are crucial for the country’s success ‘skilled labor, investments in education, technology, and infrastructure’ (Carpenter & Dunung, 2011, p. 54).
The advantages and disadvantages researched and analyzed in this work belong to the above mentioned four categories. Due to the type and amount of information available, it might be difficult to connect the advantages and disadvantages to the categories. Also, the characteristics of the categories might be overlapping. The overall idea of choosing this theory as a guidance for researching about the potential to produce locally in Sweden, is a thorough analysis of the situation of the region and the conditions for the companies there. And all that leads to helping to get an answer for the research questions, mostly for exploring the potential, or the possibility to have all of the parts of the supply chain locally, in Sweden.

The literature review and the analysis of its results was conducted with an effort to find information that match the categories, in order to draw a picture of the potential for producing locally in Sweden. Based on the available selected sources, relevant themes for determining the potential were further researched and explained. The themes that were analyzed are mostly focusing on sustainability. The topics that were chosen for the analysis are further divided into advantages and disadvantages, with the purpose to provide a more holistic overview of the current situation, with relevance for the home textiles segment of the industry.

The themes that are being explored and selected with the help and guidance of the National Diamond theory, are the following: Suitable environment for cultivation of natural fibers, Regulations on environment and work safety, Global recognition for good quality, Focus on innovation and education, Control over value chain, Proximity, Production capacity, Political and economic stability, Infrastructure, Sustainability role-model, End of use-models, Legal uncertainty for Hemp, Lack of facilities and skillful labor for production, High cost, and Limited market.

The table below presents the summarized advantages and disadvantages, for giving a clear introduction to the following part that presents the most relevant eleven advantages, followed by the five disadvantages.
<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
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<tbody>
<tr>
<td>1. Suitable environment for cultivation of natural fibers</td>
<td>1. Legal uncertainty of some sustainable fibers</td>
</tr>
<tr>
<td>2. Regulation on environment and work safety</td>
<td>2. Lack of processing and production facilities</td>
</tr>
<tr>
<td>4. Focus on innovation and education</td>
<td>4. High cost</td>
</tr>
<tr>
<td>5. Control over value chain</td>
<td>5. Small market with a keen competition</td>
</tr>
<tr>
<td>6. Proximity</td>
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<td>7. Production capacity</td>
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<td>8. Political and economic stability</td>
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<td>9. Infrastructure</td>
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<td>10. Sustainability role-model</td>
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<tr>
<td>11. End of life and repair models</td>
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**Figure 3** - Advantages and disadvantages for establishing a local value chain in Sweden
In this chapter, a narrative literature review is conducted to give a general insight of the ideas which are the focus of this research paper. In addition to that, several relevant aspects that are connected to the implementation of a local value chain are examined. The topics covered in the literature review of this paper are focusing mostly on the supply side, namely what is being referred to as the industry perspective in this paper. A smaller part of the literature review is dedicated to the demand side, or here presented as the consumer perspective. Such division is done with the logic of extracting the main information for the industry perspective from secondary sources, books, publications and reports from state and branch organizations, and for the consumer perspective the literature review scope is more

**Figure 4** - Darkovska, A., Mayinger, L., Yuen, S. L. (2018), following “General model of fashion supply business” by Larsson, J.
limited because for this perspective the main information is gotten from conducting face-to-face interviews with a relevant group of people.

Literature review that is often academically defined as an overview of existing literature, is also identified as being a significant component of all research (Bryman & Bell, 2015). The aim of this paper is to read further to determine the issue to figure out what has been already researched about the topic and which concepts and theories have been applied to it. Furthermore, what are the existing controversies and how they can be studied, especially what could be seen as clashes of evidence and who were the important contributors on the topic (Bryman & Bell, 2015). The attempt, to name the crucial points of the topic and identify and read key books and articles, has been set while doing the literature review. That has been complemented by findings and reports from state and branch organizations, that have conducted analysis on the topics relevant for this paper. Nevertheless, focusing on a critical view on the existing literature was given while conducting the review, aiming on not losing the link to the research questions and find valid information on the issues in question.

Considering the home textile industry as a whole, or better referred to as a textile cycle, that is consisting of the value chain, starting from the raw material, to manufacturing, including the labeling of the product, to consumption up to end of life of the products, and specific areas of the model are examined in this literature review (See Figure 1). The main areas explored are the home textiles industry, local value chain and consumer perception and awareness. The concept of this paper is built around the idea of a sustainable value chain, with a specific focus on the connection between the suppliers and the end-users of the products. It is essential to deliver a holistic view of how each element individually contributes to a more sustainable value chain, and how they are all interconnected. Thus, in the following sub-chapters, the topics explored and presented in this literature review are further divided into: (1) the current situation and future aspects of the Swedish home textiles industry; (2) the concept of a local value chain regarding sourcing and manufacturing in Sweden; (3) transparency of a value chain; and (4) the consumer perception and awareness regarding sustainable products. Figure 1 is meant to be a visual summary and representation of all of the topics and subtopics that are being explored and presented in the literature review. The intention of creating the figure is for it to serve
as a simple explanation of how the different topics are interconnected, to give the reader a quick overview of the topics included in this literature review. A scan of relevant literature and reliable reports concerning these topics is combined in the upcoming part, with an attempt to summarize and explain already existing findings from the areas of discussion.

This literature review in this thesis serves as a basis that provides information gathered from reliable sources, from researchers and organizations that have been researching in the same or similar relevant topics and that is leading to the findings presented in the following chapters. The intention behind it is to inform the reader in a broader sense on the situations that are further in the paper explored more in detail. It should serve as an informative chapter consisting summarized data from previous research and relevant publications, and provide a basis of knowledge that will be helpful for understanding the following chapters.

4.1 An Overview of the Swedish Home Textile Industry

In general, the textile industry is a broad concept and it could be separated into three main streams - (1) fashion and clothing, (2) home textiles and (3) technical textiles (TEKO, 2015). The focal point of this paper is home textiles and the concept of home textiles, also known as interior textiles, usually associated with interior design. The home textile products are often identified as ‘bed sheets, towels, carpets, mattresses, upholstery, window blinds and curtains to tapestries and sound absorbers’ (TEKO, 2015; p. 4). Sweden has a long history in quality textile production, and is especially renowned for its carpet production, as well as the fabric for roller blinds (TEKO, 2015). Throughout the years, the textile industry in Sweden has been through a rapid change, especially, during the seventies, companies started to import textile products from low-cost countries such as India, Bangladesh and China to Sweden, which led to a dramatic decline of the local textile production (TEKO, 2015). It is reported that home textile capacities in the EU are shrinking due to the lack of competitiveness (Das, 2010). This shrinkage of the local value chain in textiles can be recognized from the labor force distribution in the country. From a total labor force of 4,500,000, only 1.3% are working in the textile sector, as measured in 2008 (Sida, 2009; TEKO, 2015).
4.1.1 Production

Nowadays, domestic production of textiles in Sweden is rather rare and most of the home textile goods are imported (Sida, 2009). The current value chain for Swedish home textiles mostly works in two ways - either (1) the Swedish manufacturers import fabrics and produce locally in Sweden or (2) the companies import the finished pieces of goods (made-ups) and sell them to the local market (Sida, 2009). According to Sida (2009), the whole process is conventionally operated through commission agents with commission charges between 2% to 10%.

In terms of the use of materials, the most common fiber used for home textiles is cotton, and also with a lower rate, flax, silk and synthetic fibers are used (Sida, 2009). The importing duty rates vary according to the type of fiber. For instance, the duty for natural silk fabric ranges from 3% to 7.5%, while for cotton and flax it is 8%. The made-ups have a standardized duty of 12%, regardless the fiber type. As a member of the European Union (EU), Sweden follows EU’s custom duty and import regulations.

When it comes to the communication channels of Swedish companies, Sida (2009) also reported that it is common for them to attend trade fairs locally and internationally in order to exchange new information, develop networks and new business opportunities, both seasonally and annually. Internationally, the popular trend fairs are Heimtextil, Ambiente and Tendence in Frankfurt, Maison & Objet in Paris. Locally, the most visited trade shows are Formex in Stockholm and The Nordic Fabric Fair in Borås.

4.1.2 Consumption

Among the population of ten million, the home textile consumers in Sweden are identified mostly as single households and parents, active old couples (Sida, 2009). Within these consumer categories, Sida (2009) also addresses women aged between 30 to 50 years old to have a high purchasing power. Among all the home textile goods, the most frequently purchased item is bed linen made from cotton. The average expenditure per household on home furnishing textile products has been
rising in the past decade, the turnover of home textiles in 2008 was 5163 million SEK and bed linen account for 602 million SEK alone (Sida, 2009).

There are two major factors affecting consumer purchase behavior, and they are - fashion trends and sustainability. ‘Home textiles nowadays are very close to fashion because people tend to ‘cocoon’ themselves in their homes’ which indicates that home textiles became an area of individual expression, with a trend for seasonal cycles (Tobler-Rohr, 2011, p.388). The report from Sida (2009) also stressed that the fashion trends have a high influence on Swedish home textile trends and consumers are more trend driven when it comes to decorative home textiles. Besides, consumers are quite conscious on the sustainability topic, and trend analysis foresees a demand for more sustainable fibers and practices. In terms of consumer protection, a general after sale law is applied between retailers and consumers for all the products sold in Sweden. According to the Swedish Consumer Act, within two years of purchase, the consumer has the right to complain and may get compensation regarding the faultiness, quality issue and forth. However, there are no such regulations regarding the retailers’ and manufacturers’ relationship, however, a general contract with conditions for collaboration is commonly applied (Sida, 2009).

4.1.3 The Future of the Swedish Home Textile Industry

As a member of the European Union, Sweden has been actively participating in the roadmap of The United Nations Development Program (UNDP). The UNDP established 17 sustainable development goals (SDGs) with 169 targets as guidelines for all nations to follow in fighting against climate change, poverty and inequality, and hence to build a more sustainable and peaceful environment for the future generations (UNDP, 2018). Among 35 countries in the Organisation for Economic Co-operation and Development (OECD), Sweden has the best performance for goals (13) and (17), which represent climate change and implementation of the goals respectively. However, when it comes to goal (12) Sustainable consumption and production, it has poorly performed compared to the average score from other OECD regions (OECD, 2017). The result also implies that Sweden has to put more effort in building a greener domestic production and consumption pattern to achieve the sustainable goals.
Today’s fashion and textile industry has been greatly criticized for over-consumption and unethical production (Greenpeace International, 2018). However, signs are showing that there are great potentials for the Swedish textile industry to shift from a cost-oriented to a more sustainability-oriented system. For instance, with a focus on sustainability, the Swedish government is determined to create a bio-based economy, especially to support EU’s goal of building a sustainable society in coping with climate change and reducing energy consumption. As a result, many projects have been carried out, and sustainable textiles is one of the many focuses. The effort could be seen from the Research Institution of Sweden (RISE), as they have been researching on local alternative fibers such as regenerated cellulose fibers [cellulose-based textiles] from wood, to replace cotton and synthetic fibers (Alkhagen et al., 2015).

On the other hand, Fletcher and Grose (2012) highlight the importance of the role of the consumer in driving sustainability forward, since the consumer demand motivates companies to go green. It is essential for every citizen to support and to willingly purchase sustainable products that are locally sourced and manufactured. It is reported that consumers in Sweden became more eco-conscious, they are concerned about the working conditions of the workers as well as whether the brand has a focus on corporate social responsibility (CSR) (Sida, 2009).

Form the evidence above, it seems there is still a long way to go in achieving the sustainable development goals. However, with the sign of increasing demand for more sustainable alternative options in the textile industry, the future for the idea of establishing a local value chain could be considered as positive.

4.2 A local Value Chain with an Emphasis on Sustainability

Porter defines a value chain consisting ‘of all the activities related to the ideation, development, manufacture and sale of industrial products’ (Cohen & Zysman, 1987, p. 20; Porter, 1985). In the last decades lower trade barriers, among other things, have made it easier for firms to offshore to cheaper production plants in developing countries, and therefore created highly complex value chains (Ashby, 2016). This complexity brings environmental and social consequences as global value chains can
lack visibility and bring up discrepancies in country practices and standards (Ashby, 2016).

As a response to these problems, some companies decide to reshore their production and work with local rather than global suppliers (Johnston, 2012). Gray et al. (2013) mention in the paper: “The Reshoring Phenomenon: What value Chain Academics Ought to know and Should Do”, that the idea to reshore production may come from a higher focus on sustainability, because a closer proximity to the home company can bring better control of the environmental impacts of the production processes. Hence, reshoring can reduce environmental impact due to shorter distribution distances and can lead to an improved visibility of working practices, as well as ethical behavior (Gray et al., 2013). Therefore, if put in the context of localization, in the sense of using locally available resources and production opportunities, a local value chain could counter some of the disadvantages a globalized value chain brings. These effects are inter alia increased delivery times, long lead times, high transportation costs, poor transparency, ethical issues, cultural differences and language barriers among the value chain members (Pal et al., 2016).

A local value chain approach can according to Tate et al. (2014) be motivated by the objectives of a greater visibility of the value chain, the positive contribution to a local economy and the enlarged response to sustainability issues. Furthermore, a higher product quality and consistency, skilled workforce, better image of being ‘Made in’ in the country of origin, could be mentioned as incentives for a local production (Kinkel and Maloca, 2009). Additionally, a stronger focus on core activities, the intent of having production closer to the development and research departments, and an increased use of automation can all be seen as drivers for reshoring production, as mentioned by Arlbjørn et al. (2018). Also, as a global value chain, according to Caniato et al. (2013), cannot be as fast and seamless as a local value chain and time is considered to be a crucial factor. If speed could be improved, and flexibility and simplicity enabled, the all over effect would be a more responsive value chain in a local context (Johnston, 2012).

Putting a stronger focus on the locality of the value chain, the relationship between the buyer and the supplier can be of importance. It is to the credit of a local value
chain, that strong durable relationships with less suppliers can bring a superior performance for a company (Narasimhan et al. 2008). In the book “A practical Guide to Sustainable Fashion” by Gwilt, it is mentioned that an involvement in a local system of artisans and manufacturers of textiles could position a company in a good starting point to reduce the, with large-scale production associated, negative environmental impact (Gwilt, 2014). And furthermore, does the report “The Swedish textile industry” by TEKO (2015) mention a prediction, that looking at new developments in the industry much more local production has to be done. The reason for this TEKO sees in, that the sourcing of raw material and the lack of the same will become bigger challenges in the future, which will force the industry into coming up with new solutions (TEKO, 2015). One example could be Sweden’s attempt to enter the viscose market, to use the situation that there is decreasing paper usage in the country and therefore the use of leftover wood for local textile production could be seen as a new approach (TEKO, 2015).

Finally, is it mentioned in the work by David Goldsmith (2014): “Local Fashionalities: Växbo Lin and WomenWeave”, that the proponents of localization consider that a local production among other things could enhance individuals and communities, with the help of tradition and culture as focal points. This could, in turn, lead to the creation of a stronger sustainability in a way that ‘anonymous large-scale systems cannot’ (Goldsmith, 2014, p.55).

4.2.1 Local Sourcing of raw Material for Home Textile Products

When utilizing local production as an approach for a more sustainable value chain, it is necessary to consider different ideas standing behind it. Goldsmith (2014) gives the suggestion to ‘begin with the assumption that the product is derived from resources and capacities available from a particular physically location’ (Goldsmith, 2014, p.64), in this case Sweden. As one of the overall ideas is to have less distance between value chain members, which leads to a necessary consideration of local sourcing of the raw material used, as well as the local manufacturing of textile products. Klewitz and Hansen (2014), in their review, identify different sustainability-oriented innovation practices. In this context they mention the approach of local
sourcing and manufacturing as one of the organizational innovations for increasing sustainability.

González-Garcia et al. (2010) indicate that hemp and flax are considered as highly sustainable fibers, according to a life cycle assessment. It has been proven that these plants are low input in terms of water, energy and pesticides, and low impact crops in terms of greenhouse gas emissions. Besides, a study by the European Environmental Agency (EEA, 2007) proved that flax, as well as hemp show first-rate positive environmental possibilities for agriculture. The study looked at the ecological implications of various crops and provided hereby indications that the cultivation of these plants can bring advantages to the local environment (Bran et al., 2017).

The natural bast fibers, flax and hemp and additionally nettle, are discussed in this research paper, because these three fibers are mentioned as the locally available raw materials in Scandinavia before the 19th century, and therefore before the imported cotton and viscose became the dominant textile materials (Skoglund et al., 2013). As they can be taken into account as being some of the possible raw materials for a Swedish textile production, it needs to be mentioned that they also have properties which make them to be perfectly appropriate for home textile purposes. The cultivation in Northern European countries like Sweden, is not only possible to be implemented, looking at climate and soil quality, but it also has a long history (Skoglund et al., 2013). Hemp and flax were the most common raw materials for textiles, until imported cotton took over their places in the end of the 18th century (Ebskamp, 2002).

The bast fiber flax was possibly one of the first plant-based fibers that was used by humans in the Western hemisphere for producing textile (Cook, 2012). The resultant fabric, linen is often used for curtains or bedding, as it is a heat conductor and hence has cooling capabilities which are rather suitable for such products, especially for the warmer seasons. Its rapid water absorption property also makes it a perfect material for towels and kitchen cloth (Cook, 2012). The production of flax includes the process called retting. This procedure is necessary for all the bast fibers, as it separates through a fermentation process the actual fiber strings from the woody matter and cellular tissue (Cook, 2012). This extra manual process and the accompanied
physical work can be seen as one of the reasons the linen industry got banished with the rise of cotton, even though it is a stronger fiber with excellent properties for home textiles (Cook, 2012). In addition to that, flax cultivation can have a good effect for the environment, as it is a flowering crop, it has a positive impact to the biodiversity of a region (Bran et al., 2017).

The same counts for hemp. It has an alike harvest and includes quite the same processes like the flax production (i.e. retting). It can be cultivated without the use of pesticides, fungicides or chemical fertilizers and is as follows a perfect fit for a catch crop (Musselman & Faye, 1997). The hemp fabric is coarser than flax, more lignified and consequently stiffer. The fiber is dark in color and harder to bleach, compared with for example cotton (Cook, 2012). But in contrast to the flax production, the separation of the fiber from the stray is easier when it comes to hemp plants. And there are some processes for softening the fabric, and even a procedure called “cottonization” which can give hemp as well as flax the properties needed for almost every form of textile material, from a coarse fabric to a very soft, fine one (Cook, 2012). Hemp and flax, are considered to be the most sustainable fibers, according to a life cycle assessment, it has been proven that these are low input in terms of water, energy and pesticides, and low impact crops in terms of greenhouse gases emission (González-García et al., 2010). Besides, a study by the European Environmental Agency (EEA, 2007) proved that flax, as well as hemp show first-rate positive environmental possibilities for agriculture. The study looked at the ecological implications of various crops (Bran et al., 2017) and provided hereby indications that the cultivation of those plants can bring advantages to the local environment.

Nettle as the last natural fiber to be introduced at this point, is one of the many other natural fibers which could be cultivated in Sweden. This fiber actually has been grown for centuries in Scandinavia for the use of making sails and ropes from it (Cook, 2012). As it also needs the process of retting, it is possible to influence the color of the fibers via the care which is taken while doing it. As a result, a creamy white to grey color could be created. With its soft feel and pleasant touch, it is used in some parts of Europe for clothing, and for home textile fabrics as well (Cook, 2012).
The large scale of man-made fibers made from regenerated cellulose, are other fibers which are worthwhile to be taken into account, as they could be sourced and produced in Sweden. The raw material which is used for the manufacturing of these “artificial” fibers is cheap and can be any kind of wood pulp, including wood harvest waste as well. As defined in the book “Fabric for Fashion” by Hallett and Johnston (2014, p. 462):

The term “artificial” is used to discuss man-made fibers that have their genesis in nature but require either chemical or bio-chemical intervention to be converted into fiber.

The properties of the fiber can be modified in a variety of ways (Cook, 2012), to perfectly fit the requirements of home textiles. These properties, as defined by Hibbert (2002) can be breathability, washability and strength. In recent years there were many innovations in the production of this kind of fibers, as initially a great amount of water and chemicals was used in their manufacturing (Cook, 2012). The goal of these innovations is mainly to reduce the consumption of these scarce resources to have a lower environmental impact and to make the capabilities of the fiber even more suitable for a big range of application areas (Cook, 2012). In the Report “Roadmap 2015 to 2025 – Textile materials from cellulose” from RISE, it is mentioned, that an emphasis on regenerated cellulose-based textile materials and products could strengthen Sweden’s future competitiveness in textile production. Looking into Sweden’s potential to contribute to a more sustainable textile manufacturing, can also mean looking into its potential of new value-adding products for another industry, Sweden is well-known for: The forestry industry (Alkhagen et al., 2015). Here is a raw material for fiber production provided, which comes with a high amount of cellulose and at the same time it does neither harm the environment with hazardous pesticides, nor compete with cultivated land for food production (Alkhagen et al., 2015).

Nevertheless, there needs to be an even stronger focus on the development of resource-efficient production processes with low or negligible environmental impact to implement the vision of a forest-based textile industry (Alkhagen et al., 2015). Above all, because there are still possible improvements to properties of such fabrics.
For instance, the durability, color fastness, dirt repellency and abrasion resistance could and should be enhanced (Alkhagen et al., 2015).

### 4.2.2 Local Manufacturing

Looking into the field of manufacturing in the context of locality, the main idea from “The potential for hemp: locally produced organic textiles” by Sue Riddlestone (1999) can be co-opted. The paper lists different benefits of local production, including the reduction of freight transport, therefore less pollution and environmental damage, additionally the creation of employment and wealth in that region. Furthermore, it is explained how the proper use of local resources can contribute to a universal responsibility due to the decrease of ‘imports produced in socially or environmentally damaging ways’ (Riddlestone, 1999; p. 237). Aiming on less pollution and environmental damage, local manufacturing close to the market on which the products are sold, to prevent long-distance transports of the goods is a crucial contribution to sustainability (Dyllick and Rost, 2018).

Through the shift of the production to low-cost countries the textile jobs that still remain in European countries are for the most part not manufacture-related, but managerial and coordinative (Plieth et al., 2012). It is for this reason, that Plieth et al. argue, the revitalization of knowledge and experience in the manufacturing of garments matters and needs to be addressed. As both things tended to disappear during the last decades, and the capability to use manufacturing know-how became less present, they stress out the importance of preventing the loss of the knowledge about the technical manufacturing processes. The argument is, that it can be an important part of a country’s heritage and the emphasizing of a traditional way in production with time honored knowledge could be used as a valuable part of a company’s marketing strategy (Plieth et al., 2012; TEKO, 2015).

Furthermore, Plieth et al. (2012) argue that a local production can provide the region with a socially desirable manufacturing environment. This can contribute to more social wellbeing if it includes secure, full- or part-time jobs for local workers and may even create jobs for disadvantaged people. A similar point is emphasized in the paper “Sustainability Issues in Textile and Apparel Supply Chains”, by Shen et al. (2017). Here it is mentioned, that the employees’ attitudes towards their jobs due to a
secure workplace in the local environment, as well as through the presence of an ethical working environment can be positively enhanced and could additionally bring an improvement in the organizational sustainability performance.

Cohen and Zysman state in the text “Why Manufacturing matters: The Myth of the Post-industrial Economy” (1987), that in addition to the basic textile manufacturing jobs, like spinning, weaving and sewing, a focus on local manufacturing can bring new employment opportunities for those who are responsible for repairing and servicing the machinery used in the plants. ‘In almost all cases, they have to be located close to the machines that will need servicing’ (Cohen & Zysman, 1987, p. 19).

Seeing local manufacturing as an alternative to the predominant industrial processes, Ketokivi et al. (2017, p. 20) argue in their paper: “Why locate manufacturing in a high-cost country? A case study of 35 production location decisions”, that:

location decisions must be understood not just through the lens of economic attractiveness of one region or country over another, but also as a decision where many organizational and technological interdependencies become relevant.

One of the points they emphasize is the proximity to locations of research and development activities. It is necessary to consider the reliance of all the value chain steps to each other and the advantages a lower distance between for example the manufacturing plants and the places where the innovations are developed can bring (Ketokivi et al., 2017).

Some of the companies, which are mentioned in the report “The Swedish Textile Industry” by TEKO, are emphasizing the focus on traditional craftsmanship when it comes to producing textiles. Especially, in the interior textile segment the companies see it as a big part of their brand and an important tool for customer loyalty in their traditional way of producing (TEKO, 2015). This could be a base for a new version of local high quality and low environmental impact textile manufacturing (TEKO, 2015).
4.2.3 Local Value Chain Transparency

Transparency could be defined as ‘disclosure of information’ (Egels-Zandén et al., 2015, p. 95) and it has a positive correlation with sustainability (Gong et al., 2018). Gong et al. (2018) addressed that a rise in transparency could lead to a more sustainable value chain, as well as consumer and social empowerment. The author further divided and summarized transparency into four ideal segments, which are management transparency, regulatory transparency, consumer transparency and public transparency. Each of these categories connects with different parties and communicates with distinctive channels. Management transparency is linked with upstream actors (i.e. primary producers or raw material processors) to downstream actors (i.e. final processors, retailers and consumers) via top quality management. Regulatory transparency relates to the economic actors and regulation and inspection bodies, through EU tracking and tracing system. Consumer transparency relies on the connection between economical actors in the chain, consumer and certification bodies via eco-labels and certifications. While public transparency emphasizes on the relationship of the economical actors in the chain, certification bodies and public, which could be connected through carbon disclosure projects. By referencing to the four categories suggested from Gong et al. (2018), management transparency and consumer transparency are more fitting into the scope of this research paper - industry and consumer perspective. Therefore, further account for these two aspects regarding a domestic value chain will be given in the following parts.

4.2.3.1 Management Transparency

In the management transparency level, a local value chain is more likely to create trust and relationship within the upstream and downstream actors in comparison to a global value chain. Abdullah and Musa (2014) highlighted the benefits of building a more visible value chain, in the case of information sharing, it brings efficiencies, effectiveness, competitive advantages, as well as smooth operations and a better buyer-supplier relationship. It is discovered that information sharing has a positive influence on the relationship of companies and their value chain partners (Abdullah and Musa 2014). The authors further suggest that through improving trust and
information sharing, commitments are increased, which could lead to a better performance. More importantly, from the results of the interviews of Ashby (2016), it is reported that brands who choose closer proximity suppliers, believe that there is more transparency found between both parties, and hence it leads to a long-term trust relationship. These findings could imply that a local value chain allows more transparency, which enhances the overall performance of a value chain.

4.2.3.2 Consumer Transparency

Consumer transparency is achieved by communicating through information sharing, particularly in labeling and marking, and it is done from upstream actors directed towards consumers. The market is currently demanding more transparent value chains because of their questionable practices, such as sweatshops regarding the outsourced practices (Egels-Zandén & Hansson, 2016). However, the Swedish labeling and marking policy has no strict regulations in terms of transparency regarding textile products. The labeling and market regulations of Sweden could refer to regulation (EU) No 1007/2011, which states that the required information for labeling and marketing are mainly the fiber name and fiber composition with percentage indication (Eur-Lex, 2011). Yet, some of the important information related to sustainability are not mandatory to disclose, such as the country of origin (also known as ‘made-in’) and some more informative and detailed ways of labeling (also known as ‘ecolabels’).

But why is the exposure of these information essential for building a more sustainable value chain? First, even though the “Made-in” label is not required to be displayed on the product, it is commonly found on the labels. The concept “Made-in” has a direct connection to consumer perception and purchase behavior. Findings from a consumer research conducted in Malaysia have suggested that consumers tend to have a preference of locally produced clothing items over the imported ones (Mohamad et.al, 2000). Although the result could differ from place to place, culture to culture and product to product, it could indicate the importance of the labelling of the country of origin on textile products. And hence, there is a need to investigate how consumers in different countries perceive the locally produced products, especially in this case, the home textile products. Nonetheless, is the marking of “Made-in”
enough to convey how a textile product is made? And how could consumers determine if the products are ethically produced without being given more specific information about the manufacturing sites, or even the working conditions of the employees? Since there are no regulations for brands to disclose the factory identifications of the products, several scholars suggested to strengthen the transparency law (Doorey, 2011). Proposals such as including factory identity and address in the labels have been made (ETAG, 2003). Still, some companies disagreed with the idea of ‘factory disclosure’ due to competitive, economic and proprietary reasons (Doorey, 2011). This is hinting that the success of establishing a more transparent value chain relies on the cooperation between the industry and the government.

Eco-labeling is another important communication channel in consumer transparency. Eco-labelled alternatives are often stereotyped as more expensive than conventional products. Their market potential is often measured within a cognitive approach identified as consumers’ willingness-to-pay. The willingness to spend money on certain products is used as a measurement for consumers’ values and attitudes. This willingness is dependent on a large number of well-known factors, such as price, quality, availability, social context and the social and economic background of the consumers (Tukker et al., 2008). When it comes to ecolabel regulations in Sweden or Europe in general, it is considered as a voluntary environmental labelling scheme, which often used for marketing purposes to encourage consumers to purchase more eco-friendly options, as well as to support sustainable production and consumption (Eur-lex, 2009). The first ecolabel, known as the ‘Blue Angel’, was created in West Germany in 1978 for the purpose of showcasing why the products are considered as less environmentally harmful (Salzhauer, 1991). Since then, Sweden and other nations started to have their own seals of ecolabels, and both EU and national ecolabels in Sweden can be co-existing. The common Swedish ecolabels are the Swan, “Good Environmental Choice” and The KRAV label and the Swedish Seal, which aim at offer consumers clear environmental information of the product and service.

But what is the connection between ecological labelling and domestic value chain? It has been reported that obtaining certifications and ‘green’ labels increases the cost of
production, and for some textile factories in developing countries, that is impossible to be obtained (Nimon & Beghin, 1999). The authors further point out that none of the companies awarded the EU environmental label from the European Commission at that time were from developing economies, but the developed ones. This could imply that local industries located in the more developed world seem to be more trustworthy to the certification issuing organizations and placing the sourcing and production back to developed countries benefits from this (Nimon & Beghin, 1999). Last but not least, in previous chapter, it has mentioned how a local value chain contributes to sustainable value chain in Sweden by minimizing chemicals, pesticides, carbon emissions and other harmful practice on the planet. Yet, it is also essential to acknowledge consumers about the ecological benefits of purchasing the locally produced textile products through labeling or marking, in order to encourage ‘green’ production and consumption (Nimon & Beghin, 1999).

4.3 Consumer Perception and Awareness

A number of studies both in and outside Sweden show that new technology and knowledge and product development (the supply side) are not sufficient for the switch to sustainable consumption and production. There is also a need for change on the demand side – there has to be demand for sustainable products and services (UN, 2011, p. 2).

Examining consumers’ purchasing habits, Hansen and Schrader (1997) considered the creation of consumer awareness to be a necessary precondition for change towards a more responsible consumption. While focusing on the role consumer awareness plays in responsible consumption, Buerke et al. (2017) shortly explain that: in a way that they propose the view that consumer awareness is nothing else but the extent to which the consumers actively ponder on their purchasing choices and behaviors. Consumer awareness relates to the idea that consumers are making informed choices related to their purchasing and consumption of products. Those choices are based on the consumers’ existing knowledge about the positive and negative environmental effects of the specific products, but also on the information provided by the companies, related to the products they offer to the consumers. Another important aspect is the expectation of the consumers that when they
responsibly choose environmentally friendly products, that choice makes a difference in contrast to buying non-environmentally friendly products (Buerke et al., 2017).

Hiller Connell et al. (2014), based on previous research findings, point out to the connection between environmental knowledge and environmentally sustainable behavior, saying that the former can be identified as a factor for forecasting the latter. Hiller Connell et al. (2014, p. 47) further clarify that:

when consumers are aware of environmental issues and believe that they, through their personal behaviour, have the ability to contribute towards solving an environmental problem, they are much more likely to engage in environmentally positive behaviour.

The awareness of the customers about sustainability, and the knowledge of the connection with it to their consumption is considered to influence their purchasing behavior. ‘If from a consumer’s standpoint, sustainability considerations are typically separate from the characteristics of the products themselves’ (Galbreth & Ghosh, 2013, p. 128), it would not be wrong to assume that companies must carefully consider how they inform the customers about their products’ sustainable features, and with that try to contribute to raising their awareness.

The desirable change in consumption patterns, towards acting in a more responsible and environmentally friendly way should be also the wish of the consumers, change will not happen if they are not consciously involved in it, as presented by Austgulen (2016).

Information being communicated properly by the companies does not necessarily mean that consumer awareness level will be changed, and consumption habits altered. The consumer awareness level is not sufficient by itself if it does not lead to responsible consumption. Hiller Connell et al. (2012), while examining students that are having apparel and textile educational background, with embedded sustainability aspects in it, concluded that even though the examined individuals exhibit a high level of knowledge about environmental issues related to textile processes and consumption, the knowledge does not transfer into their purchasing habits. That is due to diverse factors identified, such as the high price of sustainable products or a
perception that such products lack stylish moments etc. So, companies must think how to attract customers for them to apply their sustainability knowledge in their purchasing practices, as consumer awareness is not always sufficient by itself to lead to responsible consumer behavior.
5 Analysis and Discussion of the Literature Review – Industry Perspective

The findings that generate point of relevance for the industry perspective are summarized and presented in the upcoming paragraphs. The potential for establishing a local value chain in Sweden is including both advantages and disadvantages, by following the logic of the above presented theory (see chapter 3: Theory).

5.1 Advantages and Disadvantages

When looking at the big picture of the potential for building a local value chain in Sweden’s home textile segment, it might be useful to consider both the advantages and disadvantages associated with it. Therefore, companies interested in a local production can be presented with a complete overview when researching the market and before making the decision. This way they can be better informed about which advantages can be exploited and thus help them to gain success and also which aspects can be taken in consideration as potential risks or drawbacks.

5.1.1 Advantage 1: Suitable Environment for Cultivation of natural Fibers

It is important to look at the possibilities that a northern European country like Sweden can provide when it comes to local production. Moreover, which options there are for the home textile industry to contribute to a more sustainable textile industry through building a local value chain and the advantages it could bring for the companies is being explored. As local production includes the sourcing of raw materials, as well as the manufacturing of the textile products, it was the aim to seek out alternatives to conventionally produced and imported fibers. Furthermore, the focus on sustainability lead to researching about the matter on raw materials which could be sourced locally in Sweden. As a large part of the home textile products consist of cotton or synthetic fibers, it becomes interesting to explore the possibilities a country like Sweden has, in order to produce their own material. This could be possible for synthetics, but in its conventional form it is not considered a sustainable source of material because it consists of mineral oil from limited sources and the
microplastics coming from the textiles can have a huge negative impact to the environment (Carr, 2017). Therefore, some time-honored materials and in addition man-made regenerated cellulose fiber, which can be considered as innovative, are taken into account and looked at more closely. Hemp, flax or nettle fibers were indicated as possible options. These fibers have rather suitable properties for being used in the home textile sector, could be grown in Sweden and hence can even bring further positive benefits as explained below. Either from hemp, as well as flax and nettle can be made strong and long-lasting fabrics with a high abrasion resistance (Hibbert, 2002). This is a reasonable and important quality for home textiles since these products are most of the time used in a rather different way than for example fashion products. The flax fiber, hereafter the resulting fabric linen is shrink-proof and has good laundering characteristics, which, mentioned in the Textile outlook international No.190, is strongly asked for by the consumers, saying ‘functionality and washability are key’ (Economist Intelligence Unit & Textiles Intelligence, 2018; p. 9).

Additionally, linen is mentioned as one of the ‘best choices of natural raw materials to guarantee relief from stress and provide good-quality sleep’ in the report from The Swedish Textile and Clothing Industries’ Association (TEKO, 2015; p. 5). The fabric also dyes evenly and therefore can be produced in a wide range of pure bright colors for more variety and every customer need (Hibbert, 2002). Hemp fabric is a good insulator and has natural UV protection which makes it suitable especially for curtains or drapes (Riddlestone, 1999). The hemp fibers also are hypo-allergenic, suitable for people with sensitive skin (Hibbert, 2002). In addition, both of the fabrics, linen and hemp, have a high moisture absorption rate, linen up to 50% of the weight, a good dirt-repellency and linen even has antimicrobial capabilities (Hibbert, 2002). The point why nettle-fabrics are suitable for home textiles is their fineness, high tensile strength and very high breathability. This could be suitable for example for very fine and durable blankets or cushion covers. All of these three fibers hemp, linen and nettle are from natural renewable resources (Hibbert, 2002). Following the idea ‘local production for local needs’ (Riddlestone, 1999; p. 237), they could be grown in Sweden and are an attempt to become more autonomous when it comes to raw material fiber sourcing. Further, the local cultivation could reduce the environmental footprint of the country/company, as the material would be grown in a greater
proximity to the manufacture sites which lowers distribution distances and provides diversification opportunities for the local farmers (Hibbert, 2002).

5.1.2 Advantage 2: Regulations on Environment and Work Safety

The next argument is Sweden’s determined legislation when it comes to both either work safety, or the pollution of the environment through the output of hazardous chemicals into the nature. There are hardly any fertilizers or pesticides needed to grow hemp which makes it, at least for this fiber, easier to be grown organically. The application as a catch crop can even have a positive effect on the crop yield, due to the fact that hemp smothers weeds (Riddlestone, 1999). A study on ‘the ecological effects of different crops’ by the European Environmental Agency (EEA) shows that both fibers, hemp and linen have first-rate credentials in their cultivation (EEA, 2007). Looking into the manufacturing process, as Testa et al. (2012; p. 1) point out:

Industrial production is a major source of global pollution, and it is widely recognized that regulation is required to reduce this pollution for the benefit of society.

Talking about pollution prevention and waste water management, the Swedish textile industry has to follow various EU directives for example the ‘Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)’ (Eur-lex.europa.eu, 2018) which ensures inter alia the prevention or minimization of the discharge of dangerous substances into water, air and land (Eur-lex.europa.eu, 2018) and determines the usage of the best applicable technique for example ‘the use of low-waste technology’ or ‘the use of less hazardous substances’ when it comes to dying or finishing or ‘the consumption and nature of raw materials (including water) used in the process and energy efficiency’ (Eur-lex.europa.eu, 2018).

The goal is to save the environment from as much negative impact as achievable. Other regulations are providing the Swedish workers with very high workplace and safety standards. Hence that could contribute to a more sustainable production, looking at the social aspects of sustainability approaches as well. The ‘directive 89/391/EEC on measures to improve safety and health at work’ aims on positive
development in work-related health and safety (Eur-lex.europa.eu, 2018). This law promotes workers’ rights for proposing change relating to health and safety issues and ‘to stop work in the event of serious danger’ (Eur-lex.europa.eu, 2018), it also includes the use of adequate protective clothing, insure proper protection for the skin as well as the respiratory tract, if the workers come into contact with hazardous chemicals (Eur-lex.europa.eu, 2018). The states of the European union are free to adopt stricter rules for the protection of their workers, still fulfilling the minimum standards, which leads to a variety of national safety and health legislations across Europe, but the Fourth European Working Conditions Survey points out, that there is a ‘low level of physical health problems’ among the Swedish workers, compared to other European countries (Parent-Thirion, 2007; p. 64).

5.1.3 Advantage 3: Global Recognition for good Quality

Internationally the Scandinavian countries in general have a good reputation as being ethically and environmentally concerned (Klepp et al., 2015). The demand for high qualitative and durable products is changing with an increase in sustainability awareness coming from the consumers (Hoguet, 2017). This standing, that the company produces locally, could be used as a tool to build stronger customer loyalty, utilizing the argument and reinforcing the sustainability and quality aspects of it. In the market brief “Focus on the Swedish Market” by the Swedish Chambers the authors mention that the consumers have the impression, that companies hold ‘a moral obligation towards their workers and society as a whole’ (Sida, 2009; p. 6). The customers judge the companies in the same amount on their social responsibility or business conscience as for their products and services. In Sweden that can be motivated by a long textile industry history. As industrialization reached Sweden, a strong and diverse textile industry formed, especially around the city of Borås in Västra Götland County (Web.archive.org, 2018). This flourishing industry remained until the 1960s when the European and the Swedish textile industry had to face a shift, triggered by the mass production of cheap textile products and consequential the offshoring of production to low wage countries (Rosenkranz, et al., 1993). By no means was that triggered by quality issues, but almost based solely on financial reasons (Gwilt, 2014). The remaining long-time experience in textile production, is a big advantage especially for the companies that are still involved in local
manufacturing. With the storytelling focus on the heritage of the company and an adjusted PR, they could utilize the label “Made in Sweden” as a trademark with positive acknowledgement, representing high and durable quality. There is a tradition in producing quality interior textiles in Sweden, as for instance carpets have been produced in Scandinavian countries for a long time (TEKO, 2015). Furthermore, a strong local supplier relationship coming from either long time cooperation or geographical closeness could be used as a PR tool to create a competitive advantage for the company (Ashby, 2016). In addition, the Nordic design which Sweden is famous for, especially in the home textile sector, is still gaining popularity. As TEKO emphasizes in the report about the Swedish textile industry, the factors which are the prominent strengths of the local industry are ‘high quality, production with small lead times and small series, production of specialized products, environmentally products, flexibility and high level of service’ (TEKO, 2015; p. 10). A local production can influence lead times essentially, and from this a competitive success in service quality could be build (Ferdows et al., 2004).

In addition, a high amount of the consumed products in Sweden are produced and imported from countries where maybe no sufficient control and consideration of the environmental and working conditions is provided (UN, 2011). Locally manufactured home textile products follow EU restrictions when it comes to chemical use as well, during production and as what is allowed on the end product, and therefore could bring better control over the production process.

5.1.4 Advantage 4: Focus on Innovation and Education

Sweden can be seen as a highly innovative country. The World Intellectual Properties Organisation ranked Sweden in 2017 on the second place within the most innovative countries in the world (Wipo.int, 2017). The Swedish School of Textiles in Borås is an important research center, which could contribute to a development of a local home textile industry, for a better economy and a stronger local value chain. But nevertheless, this availability of people with high education level, does not mean, that the knowledge about traditional production processes is plentiful. A local value chain would lead to an increased need to educate people for the crafting segment of the production, and it could counteract the situation that education in the textile sector
nowadays is no longer designed for the production of a piece of textile from the design to the final product, but rather for more administrative and engineering positions (Plieth et al., 2012). This is mentioned in the report about the Swedish Textile Industry as ‘an overall challenge’ that many of the textile companies face (TEKO, 2015) and also:

If it is not attractive enough to get educated in these types of professions it will be hard to keep the industry going in Sweden. (TEKO, 2015; p. 28)

The preservation of knowledge for later generations, above all for the companies which are still manufacturing in Sweden should be a high priority. Especially as they face the fear to lose the skill and knowhow as soon as the older generation of personnel retires (TEKO, 2015) and the focus on educating young people needs to be put, as it is easier to build on something which is still there, as to start all over from the scratch (Plieth et al., 2012).

Looking at the possibility to produce home textile products made from regenerated cellulose based man-made fibers, an amalgamation of the highly educated textile engineers and the forestry industry could bring new innovations in the segment of the man-made plant-based fibers (Alkhagen et al., 2015). The problems with the high chemicals and water usage associated to the production of viscose fibers, could be reduced with the innovative approach of a closed loop system. That means, that no waste water is extruded in the environment, and the chemical use is under constant control (Alkhagen et al., 2015). Such an approach aims on zero-waste in every production stage and thereby not just includes the production, but also the end of use phase (Dyllick & Rost, 2018). A tight collaboration with close distance between the research centers and the production sites would bring convenience to both parties. The local production sites can contribute to the newest innovation and the research centers can benefit from the machinery and the first-hand trial of the new developments. The innovative project “Establish locally grown textiles in Sweden” (ENTIS) is one already existing example of how the high educational level of a country like Sweden can positively interact with the textile industry and therefore push technical innovations in textile production to a new level. This project goal is to

Furthermore, when discussing potential innovations, and what fosters their development and utilization, in the article “Introduction to automation in garment manufacturing”, Nayak and Padhye argue that cheap labor in developing countries and the high initial costs are the main reasons for which the textile and fashion industry are not implementing the available innovations (Nayak & Padhye, 2018). But, if home textile manufacturing is considered less labor intense than the labor-intensive apparel industry because the manufacturing of a home textile product could contain fewer steps of procedure, one could claim, that the higher initial investment is worth bearing, as it could provide several benefits in the long term (Nayak & Padhye, 2018). Furthermore, the argument, that automation eliminates jobs for the human workers can be seen from different perspectives, and some can be seen as advantages. The negativity associated with the elimination of jobs can be refuted, as the new technology can also generate new workplaces in the labor market, for example people to assist on the automatic tools and equipment or in the development itself (Russakoff Hoos, 2000). Even if the switching to more automated processes in the home textile industry might lead to a decrease in job places in production, that might be seen as advantageous when producing in Sweden, from two points. The situation is that there is an insufficient number of skilled employees for some of the production processes in the textile industry, so a reduction in the number of employees required might be seen as an advantage for companies choosing to produce locally. Additionally, the high average wages in Sweden are seen as a burden for companies having a local value chain there, so the reduction of workforce could be beneficial, and create a more attractive environment for production.

5.1.5 Advantage 5: Control over Value Chain

Bringing back processes of the value chain that have been previously offshored, to the country in which the brand originates and/or is being sold, can be one way to increase the supplier control and it is believed to lead to an increased level of transparency and visibility (Caputo & Palumbo, 2006). When production is done
locally, whether it is that way from the beginning or the value chain is being reshored, it means that all the stages of the value chain are performed locally, or within close reach to the company. That creates a situation in which control over the whole value chain can be established and it can be pointed out as an advantage for the home textile companies that are choosing to produce locally, and in this case in Sweden. It can start from selecting adequate suppliers and participants that make up the value chain, all of them available within close distance to the company and among each other. Since it can be an important aspect for the functioning of a business to establish a firm relationship with distinct parts of the value chain, visiting suppliers and seeing in person what they offer is beneficial for all parties. It can continue as an advantage with having all the parts of the value chain within close reach, so that frequent visits and control can be easily done, and faster reactions and check-ups if changes and problems occur. As a report from TEKO (2015), discussing Swedish companies that produce locally, points out:

The companies that produce in Sweden also say that this is a big strength of theirs, because they can control the production to a higher extent than if they produced in another country. (TEKO, 2015, p. 26)

The advantages of having more control over the value chain can be seen from different perspectives. First, with a better control and transparency in the value chain, the quality of the product and with that, the company's image can be positively influenced. Communication, modifications and changes can be carried out in a fast and effective manner, and quality control can be done frequently in all the stages of the production. Another advantage is that if it is seen from a sustainability perspective, suppliers can be chosen according to their working practices and how they affect the social and natural environment, and that will be according to all of the relevant Swedish environmental and social standards. As suggested in a study analyzing the relations between suppliers within the value chain, 'the supply chain itself can only be as strong as its weakest link' (Blome et al., 2014, p. 657), a greater control within the value chain might lead to a better performance, and having all the stages of the value chain positioned locally, enables a chance for increased control, thus strengthening of the value chain as a whole.
The company can then offer more transparency and thus be held more accountable for what it offers and stands for. It can also play a bigger role in deciding the environmental impact of its production practices, by a careful selection of supplier partners, but also by seeing what they actually do in practice.

5.1.6 Advantage 6: Proximity

Having a local value chain brings the benefit of being close to the suppliers, or simply put, the benefit of proximity. Proximity can be seen from different perspectives, and divided on parts such as closeness to the customer and closeness for distribution. One of the advantages of being close to the customer is that the companies can have a faster market response. As this is pointed out in a report by the Chamber Trade of Sweden (Sida, 2009), the home textile segment shows a tendency to be sold seasonally and to try to assimilate the fashion industry by having different trends in a given season, that's why being able to bring products fast to customers can be seen as an advantage.

Customers require a high level of performance, not only in terms of cost but also in terms of the transport speed of the goods to the right place (Aït-Kadi et al., 2012, p. 13).

Restocking and inventory management opportunities arise when the whole value chain is located near the retailers. The closeness for distribution advantage has business oriented and sustainability-oriented aspects related to it. It can save time and the distribution time, from suppliers to retailers, and with that to end consumers, can be done in a fast manner. As a report from Teko (2015) presents, there is a burden for the companies that the shipping is expensive, if the products are exported on a bigger distance, and what makes it even more challenging, considering the situation is that many of those companies sell and distribute big and heavy products.

Shortening the distribution distance can be beneficial when it comes to the costs of the delivery and distribution, with the facilities being located near the retailers.
As we move to a more carbon-constrained world, business will have to continue to meet customer needs but in a way that generates fewer carbon emissions (Carbon Trust, 2006, p. 1).

The sustainability advantage of the proximity aspect is that it is less polluting to the environment when the transportation routes and distances are shortened. What Aït-Kadi et al. (2012, p. 14) present is that:

Various energy sources are necessary for the transportation of materials, parts, and finished goods between suppliers, manufacturers, distributors, retailers, and finally consumers. They are generally not renewable.

This is why it is important to have all of the suppliers located close to each other, and to the retailer or final destination, and with that, the product produced will reduce the carbon footprint during the transportation process. Also, the transportation that is related to the delivery of the product from the retailer to the consumer can be taken in consideration. That distance, and with that the pollution impact will be reduced, with the proximity advantage. When it comes to customer returns of the products, it is also an advantage if all the stakeholders are within reach, in terms of profitability and sustainability as well. If the company offers customer return options, repairs or if the company’s operations include reverse logistics, being near to the customers and retailers can be beneficial for the company.

5.1.7 Advantage 7: Production Capacity

The Swedish Textile Industry has manufacturing and production facilities that are still operating and being in function. That is good news, as they can be used for the manufacturing of the home textile products. In the research named ‘Competitive Textile and Apparel Manufacturing’ conducted by Pal et. al. (2017), the opportunities for producing locally are analyzed and presented, with having the Sjuhärad region as a main focus of the work. The advantages and possibilities of producing in Sweden, that can be summarized from their research are that the local production facilities offer flexibility when it comes to different quantities and diverse types of products that can be produced. In addition to that, the researchers report that there is still available capacity for production that can be found in the area, and companies that have been
the focus of the study have exemplified that ‘there is significant available capacity that could be better utilized, and that they have difficulties with seasonal demand’ Pal et. al. (2017, p. 12). Even though the textiles production and its possibilities in Sweden have been notably decreasing in the previous decades, there are production facilities that are still operating and there is a production possibility for companies that would choose to produce locally in Sweden.

5.1.8 Advantage 8: Political and Economic Stability

Companies are conscious and caring about the political and economic conditions of the countries in which their production is taking place. Burns et. al. (2016, p. 265) sum this up by saying that:

Political instability or economic problems can dramatically affect the availability of materials and the reliability of transportation and shipping alternatives.

The political and economic situation in the country of production is important for the company for them to feel safe with their investments and sure for reaching their targets. An unstable country would be risky for a company to be able to plan the current and future development of their business, and might not serve as a stable or permanent solution for a location. As all the stages of the value chain are proposed to be local, it is important for that territory to offer stable conditions and favorable opportunities for businesses and individuals. The companies depend on multiple stakeholders throughout the value chain, therefore for getting a representable final product, it is more favourable if the stakeholders’ position is stable, which makes the whole setting more reliable. ‘Sweden’s strong public finances, sound banking system, political stability and well-performing economy make it a robust place to run a business’ (Business-sweden.se, 2018). That is one of the advantages that Sweden can offer for producing there locally. Home textiles companies that would choose to go for local production there, can use to advantage of being exposed to a lower level of risk associated with the environment in which they would operate. That is also a relevant social aspect, as a politically unstable country might have a higher risk for unfavorable working environment for employees in different segments of the value chain.
5.1.9 Advantage 9: Infrastructure

A well-developed physical infrastructure, including roads, electricity, water and telecommunications, is central to competitiveness and growth of an economy. Quality infrastructure efficiently connects firms to markets for inputs, products, and technologies. It reduces the cost of production and enhances the competitiveness of firms in domestic and international markets (Enterprisesurveys.org, 2018, p. 5).

Infrastructure of the country of production is an important aspect when choosing it. According to (Akenji, 2014), having a final product is a combination of success influenced by various aspects, and the social environment and the physical infrastructure are two of those aspects. The physical infrastructure of the environment in which the product is produced and distributed is an important factor for the positioning and success of the product. Especially that many stakeholders are involved in the textile value chain, it is crucial for them to be able to have good accessibility and communication. Burns et al. (2016, p. 264), point out that ‘when making sourcing decisions, companies must also analyse the availability and reliability of each country’s infrastructure and support areas’. If choosing to produce in only one country, in this case Sweden, the matter is simpler, than if different stakeholders from different countries are included. This is connected to the different terms that might apply and serve as an obstacle for having a smooth movement of the product within various stages of its’ entire lifecycle. The advantages of choosing Sweden, related to its infrastructure, as reported by the European Commission (2018; online) are stated as such:

Swedish transport infrastructure quality is rated higher than the EU average in road, rail and ports infrastructure, as well as very high in air transport infrastructure. Sweden scores second best in the EU as regards the timeliness of shipments.

Even though a local value chain for a local consumption is advocated in the research, good infrastructure might prove beneficial even if the distances are shorter than if the companies operated in the global market.
The good infrastructure in Sweden can be listed as one of the advantages for choosing to produce locally as it would increase the chances of deliveries on time, it offers an easy access to different stakeholders, and it is associated with a high level of certainty and that makes it a positive climate for choosing it as a location for doing business.

5.1.10 Advantage 10: Sustainability Role-model

A home textiles company that would choose to have a local value chain in Sweden, with an emphasis of the assumed sustainability advantages the business model brings, it can serve as a role-model for other already existing companies considering going from global to local, or as an inspiration for start-up companies thinking about operating with a local focus. Such a company can not only serve as a role-model in a moral and behavioral way, promoting sustainable practices, but it can have practical implications as well. It might serve well as a guideline, or in a way as a proof that such a model is existing and operational, so that companies considering such a move would have a realistic example motivating their decisions. A company choosing reshoring or local production, with sustainability as a focus, might influence positively not only potential business candidates, but also the consumers and the society. It might be an indirect contribution to sustainability and to its surrounding. The example can also serve as a role-model and motivation for different branches and businesses, not only for home textile companies. The advantages of doing business locally can be an effort to have a sustainable impact beyond the one directly related to the company and its practices. The company then can be seen as a ‘social enterprise’, as Bocken et al. (2014, p. 53) present the term in their article “A literature and practice review to develop sustainable business model archetypes”, ‘They are ‘for-profit’ enterprises, but the profit motive is secondary to delivery of the social mission; hence they are not generally profit-maximising.’ In TED’s Ten (2018), on their official website what is listed as goal 10, and called Design Activism, this possibility is explained further as:

In this final strategy we encourage designers to leave behind the product and work creatively with the consumers and society at large. It is about designing events and communication strategies beyond product design to increase
consumer and designer knowledge about the environmental and social impacts of fashion and textiles. Here, the textile designer becomes a ‘Social Innovator’

So, when connected to locality, it can serve as an inspiration or role-modeling for its surrounding.

5.1.11 Advantage 11: End of Life and Repair Models

Looking at the sustainability approaches which refer to a more circular economy, especially the end of use models such as repair – reuse – recycle, a focus on shorter distance between the different value chain steps can be seen as an advantage. The required locality in both, the production and the consumption can be advantageous for either party, talking about the industry as well as the customer. In connection with an implementation of a reuse industry the report of TEKO (2015) mentions that more local production needs to be a focus, to successfully pull models like this through. The TED’s Ten number 9 - Design to Dematerialize and Develop Systems & Services also emphasizes the importance of repair and mending services to achieve a longer use of the products and help to meet the consumers’ needs (Tedresearch.net, 2018). Simultaneously, this kind of services can create economic and environmental benefits for the country.

For the Swedish textile industry being flexible in an environment of rapid changes and necessary adjustments to new developments, is one of the stronger competitive advantages (TEKO, 2015). To provide the customer with possible end of use solutions, as well as the offering of services to gain a higher longevity of the products, like a repair service, can build customer loyalty. A seamless and fast repair process can be more easily provided in a local context, because of a closer cooperation between the various steps, and in addition the elimination of long-distance shipments through close by productions sites also leads to the possibility to conduct the repair close to the market (Pal, 2016). For the consumer, the shorter transport distances always bring shorter delivery times. This is also valid for repair and other connected services which can bring more value for the purchased textile products.
5.2 Disadvantages

5.2.1 Disadvantage 1: Legal Uncertainty of some Sustainable Fibers

One of the concerns of growing raw materials locally may be due to the historically inconsistent regulations on some fibers in Sweden, particularly on hemp. In viewing the history of hemp production in Sweden, there were a lot of ups and downs for hemp. First, its cultivation was booming during the forties to sixties, however, it was prohibited in the Mid-Sixties due to the rising drug problem. After Sweden joined the European Union in 1995, experimental hemp cultivation is allowed for scientific purpose with licenses from the government. Since 2003, commercial hemp cultivation with a THC (Tetrahydrocannabinol) content below 0.2% is once again allowed (Svennerstedt, 2009). Since the restriction on commercial hemp cultivation in Sweden has been loosened, the hemp cultivation area has almost been doubled in 2016 (Carus, 2017). Every industry takes time to evolve, the fluctuation of the legal conditions interrupted the development in hemp production, which could trigger concerns for farmers and companies to choose to produce this fiber. Since the future for hemp production is uncertain and the development in Sweden needs to catch up with the innovations in hemp production from some other parts of the world (Fortenbery & Bennett, 2004), its uncertainty poses an unfavorable factor for the prospect of hemp textiles. It needs more support and confirmation from the legal department. More importantly, there is a need to change the general regulations and the impression about hemp in order to make it more lucrative for the industry as well as the consumers.

5.2.2 Disadvantage 2: Lack of Processing and Production Facilities

The lack of processing and production facilities is one of the major disadvantages that Sweden has. During the 1970s and 1980s, most of the Swedish textile companies started to outsource in the low-cost countries, which has caused a great negative impact on the local manufactures. Since most of the factories lost their major customers, it was difficult for them to sustain their businesses, which led to a decline of the local manufacturing companies (TEKO, 2015). Besides, even though there are still some local manufacturers that exist in the country, but the machinery is
not that advanced. TEKO (2015) reported that some of the small manufacturers in Sweden are still using the old traditional machines in production, which possesses a high potential risk of machine breakage and high cost of repairing or replacing. This lack of proper machineries and the related costs could cause big problems in motivating companies to reallocate their production lines back to Sweden.

5.2.3 Disadvantage 3: Lack of Skillful Labor for Production

In the previous chapters, it is mentioned that Sweden has many well-educated people. When it comes to the workforce trained for crafts and manufacturing, however, they are still missing. In Sweden, the total number of employees involved in production were around 7512 out of 60130 employees working in the textile industry, which was around 12% of the total textile business workforce in 2013 (TEKO, 2013). The author points out that the majority of the workforce in textile industry is working within retail industry and it is hard to find people who have the knowledge and skills to work as a textile factory worker, such as seamstresses. It was easy to find people with those competencies in the past when the manufacturing industry was still booming in Sweden. Nowadays, those talents get old and the young generations are uninterested to be educated in such skills and stepping in such professions (TEKO, 2013). This threat has triggered companies concerns of finding the new generations in the local textile production industry and an urge to preserve the still existing knowledge.

5.2.4 Disadvantage 4: High Cost

Local production of textiles is still challenging to implement due to the high production, operation and infrastructure costs in Sweden, comparing to the developing countries such as India, China, Bangladesh. TEKO (2013) addressed that one of the major reasons of local production making production costly in Sweden is the high labor cost. From 2008 to 2016, the average labor cost in manufacturing in Sweden has raised for more than 20% (Statistikdatabasen, 2018). Apart from the labor cost, in order to adapt to the sustainability demand from the Swedish market as well as the high requirements for environmental certification, some firms are worried that this will add an extra burden to the cost and cause an increase in the product
price (TEKO, 2013). Eventually, the price-conscious consumers might shift to cheaper and imported alternatives.

5.2.5 Disadvantage 5: Small Market with a Keen Competition

Although the Swedish population has reached ten million in 2018 (Statistiska Centralbyrån, 2018), comparing to the global market of billions, it is relatively small for business growth. For example, in 2009, the top five sales regions for Ikea were Germany 14%, USA 14%, France 8%, UK 7%, and Italy 5%. And the top five purchasing countries were China 25%, Poland 19%, Italy 8%, Sweden 5% and Lithuania 5% (Ikea, 2015). From a business point of view, if a business only emphasizes on the local Swedish market, it could miss out the profits generated from other potential markets. Apart from the market size, the product price could be another concern. Since imported textile items from the low-cost countries are generally cheaper in retail price in comparison to the locally produced ones. In the context of a local value chain, it could be hard to compete to the cheaper foreign products like the mass-produced textile items. In general, large enterprises have a high negotiating power in terms of cost since they are able to order big bulk quantity and distribute in different markets. However, due to the small market in Sweden, the production volume will be lower, and hence it might have a higher production cost. At the end, the cost could shift to the consumers in order to maintain the profit margin. Therefore, the retail price of the textile products could end up to be more expensive than the ones that are produced in foreign countries. This means the locally produced textile products might be hard to reach the price-conscious consumers. This could be considered as one of the major concerns for companies to invest in a local based business model.
6 Consumer Perspective

Chapter 6 contains the summarized and interpreted results of the interviews that were conducted. This part of the research work is with a focus on the consumer perception and explores that side of the potential for establishing a local value chain for home textiles in Sweden.

6.1 Analysis and Results of the Interviews – Consumer Perspective

The answers from the interviews were transcribed and put in a table to be easily analyzed. The answers are put in relation depending on the interviewees’ responses connected to a specific point, in order to be able to draw conclusions about the group of people being interviewed, and with the effort to create a general picture for the consumer perception and awareness locally. The analysis was guided by 11 distinct propositions that were formed with the intention to give an insight into several areas connected to the main topic of the paper. The propositions are presented and explained below.

P1

The first proposition was built on the assumption that the knowledge that individuals gain while studying or working in the textiles industry sector makes them more aware and informed about sustainability issues, compared to people without a textile background. Based on the findings of Hiller Connell and Kozar (2012), there is a significant change in the knowledge of textile undergraduate students of social and environmental issues concerning the textile industry. The students were questioned prior to and after finishing of a course that treated topics concerning sustainability of the textile industry. Therefore, this proposition is challenged by asking questions about their perception of sustainability and its importance when it comes to purchasing home textile products.

P1: Textile background individuals are more aware of sustainability when it comes to home textiles, compared to people with non-textile background.
The analysis of the interviews’ responses shows that there is awareness present on the topic of sustainability, among both groups of individuals that were subjects of examination. Even though both groups seem accustomed to the theme of sustainability in textiles, there were still some recurring phrases that would separate and distinguish them as two groups. The textile background participants associate sustainability related to home textiles with concepts like durability of style, longevity of product use and color fastness of the material. Participant No. 1 for example said, talking about the design in a visually and textural context: “It is important for me that I like the things, this way I keep them much longer and use it a lot, otherwise it would be a waste of resources”. The same textile background participant also had a strong opinion about what material different home textile products should have. She said: “In general I want natural fibers. Kitchen towels could be linen or other materials, curtains could be anything in material and for blankets I prefer wool” (Participant No.1). When asked to what extent sustainability is relevant to them when shopping for home textile products, the average grade for the participants from the group with textile background was 4, on a scale from 1 to 5, with 5 representing the highest relevance.

The interviewees without textile background also mentioned durability as an important sustainability aspect, relevant for them, based on their knowledge. Other phrases that were repeating in their answers are: concern about the effects of the products on the environment and recycling as a sustainable option. However, the average grade regarding the relevance of sustainability for this group of participants was 3.

The average relevance grade calculated is 3.4. On that base, it can be assumed that there is a general interest in sustainability, but with some distinctions looking at the background of the participants.

The proposition, after summarizing and interpreting the answers from the questions connected to it, can be considered as partly true. The textile background individuals did not seem much more informed about the sustainability aspects of home textiles, even though their explanations were more specific and considering various points.
When shopping home textiles, textile background participants expressed a higher consideration of sustainability through self-assessment.

**P2**

The second proposition comes from the results of Laitala et al., asking Norwegians about their main considerations when buying textiles in general. 54% named “price” as an important consideration, 25% even said it is “very important”. This makes “price” the second most important consideration in this survey, after “Quality and durability” (Laitala et al., 2014). This proposition should help exploring how customers view the price regarding local production in the home textile sector and whether the price is an important concern and a selection criterion when they are choosing such products.

**P2:** Price is the main concern associated to locally produced home textiles.

Proposition 2, after analyzing the answers of the participants, can be stated as valid. “It might be that they have a higher price and are not competitive for the market” participant No.10 answered. Both textile and non-textile background people’s primary concern is the price, or more specifically that they would expect locally produced home textiles to be more expensive than the imported ones. Other concerns that were mentioned were the style of the products, their material (as cotton was the preferred material and it cannot be grown in Sweden) and only one participant had no concerns regarding such products.

**P3**

The next proposition examines the connection between quality and locally produced products in the mind of consumers, as “research suggests positive relationships between a positive country-of-origin and perceptions of product quality” (Suri & Thakor, 2013; p. 121). It might be useful for companies to know how consumers view this aspect, as it might be a valuable marketing and promotion tool.

**P3:** The consumer perceives locally produced products as having high quality.
There was not much explicit information about how consumers are perceiving locally produced products’ quality, to be able to confirm or reject the guiding proposition. Most of the participants were lacking experience with locally produced home textile products and hence could not confirm a higher quality nor relate it to such products. Apart from their limited experience, this situation might also be an opportunity for companies to try to influence their perception through different marketing approaches.

**P4**

If production in Sweden is researched as a potential option, it would be relevant to find out about customers’ attitude about the country of origin of the home textile products. The idea a consumer has about the country of production is a factor which has strong impact on purchase decisions of consumers (Yavas & Tuncalp, 1984), therefore, the assumption is challenged: therefore, the assumption is challenged:

**P4:** The “Made in” – aspect of the product is an important factor for customers, when choosing a home textile product.

The results from the interviews show that the “Made in” - aspect of the product is an important factor to half of the participants, and that is regardless of their background. The other half of the interviewees did not label it as important or as something worth considering for future purchases of home textile products. Thus, the proposition cannot be held as valid. It is crucial to mention that the “Made in” - aspect was examined as a general idea, not with a specific relation to any origin.

**P5**

The next proposition is related to how consumers would react to locally sourced materials, like hemp, flax and nettle, as they are the main raw material possibilities for Sweden. Eifler and Diekamp (2013) have investigated consumer acceptance of sustainable fashion in Germany, and the result suggested that the majority of the interviewees associate natural fibers as being sustainable. However, the research is fashion-oriented and it did not specify which fibers, it is essential to also gain a more in-depth insight into how consumers react to a specific group of fibers, in this case to
hemp, flax and nettle. If the participants were never exposed to such materials, it would be good to see their attitude about trying such alternatives.

**P5**: Consumers would be willing to try locally produced home textiles from hemp, flax and nettle.

Participants exhibit a positive attitude and show interest for trying home textile products made from locally sourced materials like hemp, flax or nettle. P5 can be accepted as valid. When companies would choose to establish a local value chain, this could in a way serve as a green light for them, as consumers exhibit a positive attitude towards the materials that have the potential to be sourced locally.

**P6**

The next proposition is that locally produced home textile products are positively associated to sustainability, in a way that they contribute towards it. This proposition is supported by the investigation of how consumers’ likelihood of purchasing organic apparel will have an effect on their attitudes and self-identity, which was conducted by Hustvedt and Dickson (2009). The authors revealed that consumers who prefer to purchase local products were more likely to identify themselves as environmental, organic and socially responsible consumers. In other words, they see the locally produced products as sustainable. Even though the focus of the above-mentioned research is organic cotton, when it comes to local products, the concept proposed by this paper is closely related. Therefore, the below proposition is suggested:

**P6**: Consumers perceive locally produced home textile products as contributing to sustainability.

The overall impression of the participants is that locally produced home textile products can be seen as contributing to sustainability. They were mentioning shorter transport distances, stronger environmental and safety standards, and also positive contributions to the local economy, as relevant sustainability aspects. None of the participants have the perception that such products are not contributing positively to sustainability.

**P7**
A research conducted by Yukie Nakano published in the book ‘Ecotextiles’, revealed that most of the consumers do not purchase clothes made from recycled material because they do not know such products exist (Miraftab & Horrocks, 2007). It has been pointed out that there is a lack of acknowledgement of the environmental benefit of the clothes with recycled content and the availability of information is the key to change consumers’ consumption behavior. Since the focal point of the above findings is on the clothing segment, it is important to also investigate if there is sufficient acknowledgement on sustainability in the home textiles segment. Thus, proposition number seven goes in the direction of finding out whether there is a perception among customers that they are presented with sufficient information on sustainability, or if there is a demand to inform them more.

P7: Consumers need more information about the sustainability in the home textile sector.

For the seventh proposition there was a conformity of the feeling among all participants, that they would like to be better informed about sustainability related to the home textile products that are offered to them. Participant No.4 specified: “Of course I would like to be better informed, as I for example never see where the material comes from, this is a very hidden part”. Their suggested ways for that information to reach them were for companies to be more transparent and informative on their websites and put more information on the labels and packaging of the actual products. Emails, social media and newsletters have also been pointed out as useful and necessary communication means, for companies to reach consumers. Their impression was that the labeling is not always clear and does not provide sufficient information related to different sustainability aspects, like origin of material. Thus, this proposition can be counted as valid. For its relevance for companies, it should be taken in consideration that the answers were based on personal perceptions and impressions, so their objectivity can be challenged.

P8

Previous research done by Brough et al. (2016), called ‘Is Eco-Friendly Unmanly? The Green-Feminine Stereotype and Its Effect on Sustainable Consumption’, with the intention of examining differences and similarities in sustainability perceptions
between different groups of people, in this case dividing the participants based on gender, has been the inspiration for Proposition 8. These interviews are using a small pool of participants and therefore it is not realistic to be able to draw valid conclusions whether there are differences among genders regarding the topic of sustainability awareness related to home textile products. Nevertheless, it would be interesting to see if there are distinguishable differences in the answers of the participants that can be noted. So, proposition 8 is formed as following:

**P8**: There is a different level of sustainability awareness when it comes to home textiles between genders.

This proposition is rejected based on the findings from the interviews, as all of the participants, regardless of their gender, expressed themselves as being aware of sustainability issues concerning home textile products. When they graded how relevant sustainability is for them when they shop for home textile products on a scale from 1 to 5, male participants had a slightly lower average grade than the female interviewees.

**P9**

The ninth proposition attempts to investigate, if given the right information about the advantages of locally produced home textiles, consumers would consider paying more for the products. That would give companies an understanding whether the higher price would be an obstacle for consumers to consider going for those products. In the literature review, the part examining consumer awareness related to sustainable products, researches like the source ‘Environmentally Sustainable Clothing Consumption: Knowledge, Attitudes, and Behavior’, conducted by Hiller Connell and Kozar in 2014, indicate that even if knowledge and awareness are present, there might be obstacles related to choosing these products, and one of them is the potentially higher price of those. Some researchers have investigated consumers’ willingness to pay a premium price for organic cotton, it is suggested that consumers are more likely to pay a premium price when companies are involved in corporate social responsibility (Nassivera et. al. 2017). The above research is not specific for home textiles; therefore, it is useful to examine what consumers think
about paying a higher price for locally produced home textile products, and for that purpose, Proposition 9 is formulated as following:

**P9:** Consumers would be willing to pay a higher price for locally produced home textile products, if they are assured that those products have a high sustainability aspect.

Proposition 9 can be confirmed as valid based on the answers of the participants. “If it's well communicated - yes, but the difference should be obvious.” participant No.2 mentioned. They expressed willingness to pay more if they knew that locally sourced and manufactured home textile products are environmentally and socially more sustainable than imported ones. However, they made a remark that it depends how much more they would have to pay for those products. They were not presented with different options suggesting how much higher would they pay, they were presented with a yes or no question. Furthermore, there is no distinction between the answers among textile and non-textile background people regarding their willingness to spend more on such products.

**P10**

As there is limitation of the types of raw materials that can be sourced locally in Sweden, this proposition has the purpose of generating a view of how or whether the material composition affects the consumer choice. That would be relevant for companies deciding to produce locally as it would show them which is the most preferred type of material among consumers, and how it can be connected to what could be available in Sweden. Reports on consumer transparency, like the EU regulation No 1007/2011 (Eur-Lex, 2011), also put an emphasis of the importance of labeling in detail what is being sold to the customers and that is also a mandatory component of a product and regulated by law. But it is also interesting how consumers feel about this issue and how it affects their selection of sustainable products, in this case home textiles products.

**P10:** Material composition is an important factor for consumers selecting home textile products.
Both from textile and non-textile background participants, the majority says that the material composition of home textile products is an important factor for them. There is a tendency for them to refer to natural fibers as more preferred than synthetic fibers when it comes to products with functional use. As participant No.1 said: “I look for functionality, a kitchen towel from polyester would not work for me”. For decorative home textiles the material composition is less important to be natural, synthetics are acceptable as well. When mentioning natural fibers, either all-natural fibers are favored without specific ones most preferred among some customers. Some of the participants listed cotton as their most preferred fiber, when talking about material composition. Other keywords that were frequently repeated are touch and feel of the fabric as a decisive factor rather as actually checking the material composition on the label. Based on the answers the proposition can be claimed as partly valid. Even though touch and feel and previous experience associated with textiles can be indirectly connected to material composition, the answers provided not enough depth to be able to completely confirm P10.

**P11**

While measuring the consumer demand for locally sourced and produced home textiles it is relevant to find out about their previous experiences with such products and how would those affect their future purchasing decisions. This proposition stemmed from the interview idea itself, as the interviews have been conducted to inform firms interested in producing locally, it might be useful for them to know about the past experiences of their potential customers. The feedback gotten from the consumers is after all very important and valuable for companies to know whether they are performing good and to know how to prepare for the future, by evaluating and considering past experiences. It has been mentioned in the study by Sproles & Geistfeld (1977), named ‘Issues in analyzing consumer satisfaction/dissatisfaction with clothing and textiles’, that served partially as an inspiration for this proposition that consumers might not be satisfied with a textile product, but that does not necessarily mean that they will report their dissatisfaction and complaints. So, for companies it might be useful to find out whether:
P11: Consumers that have already bought locally produced home textiles are satisfied with their purchases and would buy again.

The participants that have already bought and used locally sourced and produced home textiles are exhibiting satisfaction with those products and put an emphasis on their good quality and design. Even though the number of participants with previous experience was rather limited, they say that based on their experience they would buy such products again. Therefore, P11 can be confirmed.

6.2 Discussion of the Interviews – Consumer Perspective

The purpose of the interviews is to try to get a deeper understanding of the customer perception regarding locally sourced and produced home textile products. The aim of that is to reinforce companies’ decision making and to give them a small insight of the situation in Sweden. The information gotten from the interviews are covering relevant aspects such as material composition, willingness to buy locally produced home textiles and sustainability awareness connected to the textile industry. The answers are gotten from a group that is questioned and is consisting of young individuals (20 - 30 years old), which are not living with their parents anymore. Those aspects are relevant to be connected to the consumer demand for the local market in terms that the interviewed individuals are supposedly consumers of home textiles and making active decisions for what they are buying. Another connection important for exploring is the relation of their limited incomes at this point and the high prices associated with sustainable products. Companies can use the findings to identify the critical points for success and being competitive on the local market. The main findings from the answers from the interviews that could be useful for companies are: Price - Durability - Labeling / Information - Material.

6.2.1 Price

One of the main concerns of customers that they associate with locally produced products is their higher price level. Companies should pay attention to explaining and justifying the higher cost, so that customers will know what they are paying for and the additional value they get from it. If this would be properly communicated they would be willing to pay a higher price. Companies should be aware that price is the
biggest obstacle from the consumer side for buying such products. Another advice that can be taken from the price concern is that companies should try to find ways to use innovation, technology, and clusters to decrease costs and thus be more competitive and attractive to the consumers.

6.2.2 Durability

When discussing important properties of home textile products, seen from a sustainability point of view, interviewees put an emphasis on durability as a desired property. Durability is seen as longevity of design and style, participants think that for a product to be sustainable it needs to have a design that can be desirable for use for a longer period of time. Apart from timelessness in design, the other aspects of durability are long-lasting functionality and a high quality of the product. The product not to lose color, shape or shrink and distort is also important.

6.2.3 Labeling / Information

An integral part of the perception for the product is how it is labeled. Meaning that, apart from the material composition listed on the labels, the interviewees would like to be better informed in general. And for this purpose, increased transparency could be used as a tool to educate them more about the environmental and social sustainability contributions and the production processes. They express their impression that they could be better informed about sustainability in home textiles and that that information can be communicated to them either by being put directly on the packaging of the products or via websites and social media.

6.2.4 Material

There is a general positive acceptance among participants for natural materials used for home textiles, followed by a lower interest for synthetics. Even though not many of the interviewees were acquainted with natural fibers other than cotton, like hemp, flax, and nettle, they showed openness for trying and using products made of those materials, if proper functionality is ensured. For companies which are aiming on producing in Sweden this might be an opportunity to overcome the obstacle of not being able to source cotton locally. As the alternatives to cotton are not commonly
used, the introduction of products made from locally sourced material should be properly promoted to the customers.
7 Conclusion

From the findings of both perspectives it could be concluded that Sweden has a promising potential for introducing a local value chain and consumers are generally interested in locally produced home textile products. However, it requires the action and cooperation between different parties and having the information about the consumers and their views, when considering to operate locally.

Based on the analysis and discussion of the literature review the findings of this paper indicate that Sweden has the suitable climate and abundant agricultural land to grow some of the more sustainable fibers, such as hemp. The stable political, economic, environmental and governmental support also favor the development of a local value chain. Apart from that, the good reputation of quality of the products of the country, the advanced infrastructure, technology and innovation are also some key aspects to be highlighted. More importantly, the home textile companies could also benefit from establishing a local value chain such as cost saving via proximity and production capacity, control over the value chain, better brand image through sustainability etc. These conditions could be the motivation for home textile companies to go local. From the above findings, the answer of the first research question - ‘What are the advantages and disadvantages for a Swedish home textile company to produce locally?’ was attempted to be acquired. That was achieved with looking in detail at the relevant aspects for trying to evaluate the local potential of producing home textile products. The answer should be able to give an insight of the situation to companies interested in doing their business locally, which want to have a sustainability focus, instead of being solely profit-driven.

By interviewing the locals regarding their purchase behavior and awareness of sustainability in home textile products, the findings offered insight for the industry into the local market demand. It is worth to highlight that Swedish citizens are generally interested in locally produced home textile products and they think it is more sustainable to purchase such items. However, they have some concerns on price, durability, labelling or information and materials of local products which could be the aspects the industry has to work on. Especially, the relatively high price of the local textile goods influences their purchase decision, which is a point that the industry has
to consider. Moreover, most of the consumers were urging for more transparent communication via receiving more information from labelling. Therefore, it could be summed up that there is a demand for sustainable locally produced home textile products, however, the industry has to adjust the price to make them more affordable and improve the transparency of the products in order to reach the gap. Even though the interviews were completed with a limited number of participants, not sufficient to provide a general picture of the situation, the results gotten from the interviews provide an insight of the potential for the consumers to buy such products.

The needed change cannot be named just as a task of the industry and companies, neither can it be called the consumers’ fault of not implementing sustainable attempts more persistently. As we showed, there is potential in a local value chain approach for Sweden in the home textile sector. There needs to be collaboration between every single step of the value chain and the end user has to be informed about the possibilities of a more sustainable consumption in a sufficient and suitable way.
8 Recommendations for further research and the Future

As already mentioned in the delimitations chapter, the scope of this research can easily be extended. A practical recommendation for further research is, to maybe conduct a field study on the home textile industry in general. If applicable, there also can be done a case study of a relevant company, exploring how the approach of a local value chain can be translated into the day-to-day business, especially looking at the financial profitability of such an approach. Furthermore, how niche or big companies can contribute to implement a local value chain can be explored. There is also the possibility to carry out interviews on the industry side, for example shop assistants and employees from the marketing sector can be interviewed, to get an insight in how the customers and their buying preferences are perceived from this perspective. It might be also interesting as it might lead to different insights, if the research on the same topic is explored from the lense of another relevant theory, or maybe even with the use of several theories integrated as a theoretical framework. Additionally, it would be interesting to see a more in-depth survey on the consumer side, maybe a quantitative approach to reach more people and to get a better overview of the current situation.

Even if it is already a very important marketing tool, the sustainability of a locally produced home textile product is not yet a prior purchase factor for most of the consumers. The interviews show that the main factor remains the price. This shows, that there needs to be a stronger focus on the awareness building of the actual value of a textile product. Information about local products and the knowledge about their advantages and positive effects, for the environment and people working in the textile industry, needs to be more and easier to reach for the consumer. To build awareness for the actual value of a textile product, and also pass the information about the right treatment, to make it more durable and last longer, could help the consumer to handle and consume home textile products in a more sustainable way. A formation of knowledge about possible and more sustainable local alternatives among the consumers could support the attempts of the Swedish consumers to live a sustainable, close to nature life.
The understanding of the common problems, which are caused by unsustainable textile production and wrong treatment of the products in the use phase, and the transparent exchange of information between the different parties, from the sourcing of raw material to the consumer, could bring an answer to the question if this kind of information is just used as a marketing tool.

Some of the Swedish consumers are already taking in consideration the environmental and social impacts of the products they purchase (TEKO, 2015), but to convince the mainstream of the Swedish consumer to buy locally produced and socially and ecologically sustainable home textile products can be seen as one of the big tasks of the future.

The industry should focus on the amalgamation of what is still available (the historical heritage in textile production) and new innovative ideas. This includes the development of the locally produced products to be more sustainable, as well as the innovation in the smart textile sector. Both these issues, combined with good and durable products and services, could also help to build a strong customer loyalty. An orientation towards new possibility like recycled materials and materials from new sources like: wood pulp, coffee or milk fiber, which would count as waste otherwise, or the development of a textile value chain with a circular approach, could bring the necessary sustainability for the home textile industry.

The involvement of other industry sectors and a strong collaboration could lead to a better commitment between all parties of the value chain. Therefore, the transparency would be higher and the communication with the customer could be improved this way. Collaborations between the industry and various institutes, like universities and research centers could be build. In addition, the potential to use the well-educated textile engineers, for innovation and new development, could be drawn to bring highly innovative textile products to the market. Nevertheless, without a stronger focus on educating people in the production steps and resource extraction, the innovations cannot find an implementation in the local industry. Thus, it is necessary to combine all these ideas to build a green local production and consumption for achieving the sustainable goals.
Globalization should not be demonized, as we all can profit from it. But the way it is at the moment is not sustainable for the environment and neither for the people. Finding the next cheaper production countries, which was the goal the last decades will find its end in the near future and countries which changed the way for production in time will profit of this action. The ability to produce textile products nearby with well-educated people as well in the production as in the development and innovation phases, could be the center of a healthy industry. On the one hand it will always bring independence to the country to provide one goods for the citizens and on the other hand the Swedish people can profit from the provided work places and secure jobs.

“A love of nature keeps no factory busy.” Aldous Huxley

It is a rather acrimonious quote but in the context of a sustainable life for the individual it is what it says. Not to consume will not help to find a solution for the big problems our generation has to face. We need to find new ways how to handle things and figure out new innovative approaches in production and consumption, to jointly make the world great again and give everybody the possibility to live a better life.
## Primary Sources

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References


Shen, B., Li, Q., Dong, C., Perry, P. (2017). Sustainability issues in textile and apparel supply chains. Sustainability (Switzerland), 9(9).


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Appendix

I – Questionnaire

**Subject**: Sustainable Home Textile - Survey on the consumer perspective

This survey is part of a master thesis for the Textile Management program. The aim of this questionnaire is to find out consumers perception, demand and consciousness regarding to sustainability in the home textile industry.

Home textiles in this case refer to the textiles used for home furnishing. Included are bed linen, pillow cases, curtains, carpets and kitchen cloth and tablecloth. In short necessary items for everyday purposes as well as decorative items or products used mainly for decorating homes.

As sustainability is a broad idea, the survey focusses mainly on the opportunities local sourcing of material and local manufacturing can contribute to sustainable efforts of home textile companies.

Gender (please tick ONE OR MORE boxes)

- O Male
- O Female
- O Other: ________________________

Age:

- O Under 20 Years old
- O 21 – 30
- O 31 – 40
- O 41 – 50
What is your occupation?
O Employed
O Self–employed
O Student/Pupil
O In training
O Unemployed

What is the highest level of education you have completed?
O Graduated from high school
O Bachelor – Program
O Master – Program
O PhD. – Program

1. Which factors affect your choice of home textiles?
   And Why?

2. Is the materials composition an important factor in your purchase decision?

3. Do you have any fibers that you prefer when it comes to home textiles?
   Explain why?
4. Is the country of origin of a home textile product important to you?

5. How do you define sustainability when it comes to home textiles?

6. In what extent do you think sustainability is relevant to you when you shop for home textiles products? in a scale of 1-5, please specify and explain why?

1 2 3 4 5

7. How do you perceive locally sourced and produced home textile products?

8. Do you think local production of home textiles can contribute to sustainability?

9. What are your concerns when it comes to locally sourced and produced home textiles?
   (Price/Functionality/Style/Trend/Brand/Material)

10. Have you ever purchased locally sourced and produced home textile products, why did you buy it?

11. If not, will you consider buying locally sourced and produced home textile products? If yes, would you consider buying again?
12. If locally sourced and produced home textile products are environmentally and socially more sustainable than imported ones, would you be willing to pay more?

13. Would you be willing to try out locally sourced materials for home textiles, for example hemp, linen or nettle fabrics?

14. Would you like to be better informed about the sustainability of materials and the production process in home textile products?

15. What would be the best way to reach you as a home textile product purchaser?

Thank you for your participation!
II – Effort Agreement

Effort agreement

Indicate your individual contribution to the project in the table below and attach this as an appendix in your report.

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<th>Name</th>
<th>Contribution (%)</th>
<th>Signature</th>
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<td>Lisa Mayinger</td>
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This research was conducted during the spring of 2018. We declare to have worked on the entire thesis “An explorative study on the potential to establish a local value chain in the Swedish home textile industry” on our own under the supervision of Erik Sandberg associate Professor of the University of Borås and to have listed in it all literal and other scientific resources in accordance with legal regulations, internal regulations of University of Borås and internal acts of Textile Management of University of Borås.