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Textile and recycling initiatives- A step towards a circular economy

Authors:

Johanna Löfgren, 910405

Hanna Enocson, 910307

Supervisor:

Gabriela Schaad

**Business Administration/
Environmental Management**
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Preface

We are now in the final stages of our thesis, which has covered over two educative months. We would firstly like to give a big thank you to our supervisor Gabriella Schaad who has taken an important role in our working progress. It has been very helpful to have an outsider's help, who can provide new perspectives and give expertise feedback. The supervisor meetings have also helped us to find relevant theories and to find a theme throughout the thesis.

We would also like to thank the interview participants who are Maria Sandow (Svensk Handel), Tobias Jansson (circulareconomy.se), Elin Larsson (Filippa K), Victoria Swedjemark (Björn Borg) and Karin Sundström (Woolpower). The interviews have helped us to get a reality-based perspective and also from a corporate point of view.

Finally, we want to pay attention to you as a reader. Hopefully you will find this thesis both instructive and interesting. If any questions arise, it is okay to contact us who have composed the thesis.

Gothenburg, 27 May 2014.

Johanna Löfgren & Hanna Enocson

Summary

In this study the reader will get an understanding for a new textile initiatives in the Swedish textile and clothing industry. The initiatives are about collecting garments with the aim of reusing and recycling the material. Furthermore, the textile initiatives will be linked with the concept of circular economy, which, among others, is an approach to a closed loop production system where no materials go to waste.

The thesis begins with a background and an overview of the existing textile and clothing industry in Sweden, where some advantages and disadvantages from a growing industry will be highlighted. To examine the new textile initiatives we have chosen three different companies that are planning to implement the initiatives in their businesses. We have also chosen to interview a person about the concept of circular economy, how it can be related to the industry and a second person about an industry initiative that promotes a national collection of garments.

The study consists of a qualitative and an inductive approach. The focus is on primary data where the interviews are the main source. Furthermore, the fundamental idea with the study is to analyze the chosen companies' business models from a sustainability point of view, where the textile recycling initiatives can be included as a step towards a sustainable business model. In the theory section we have chosen to present conceptual theories about the waste hierarchy, the concept of circular economy and sustainable business models, which are key areas in the study. The framework of analysis will be introduced as a help to structure the analysis. This is followed by a section of empirical findings, which consist of an assembly of the five research interviews.

In the analysis section, the reader will follow how the companies' textile initiatives can be connected to a sustainable business model. The analysis also contains a comparison of the theory, the empirical findings, combined with personal reflections which will lead to a final discussion.

The conclusion is that the chosen textile companies are in the progress of implementing business models for a sustainable development. More companies in the industry should include recycling initiatives to achieve that. A change in the legislation system is required to make the implementation of initiatives economic profitable.

Keywords: textile initiative, circular economy, sustainable business model, textile and clothing industry

Sammanfattning

I denna studie får läsaren en förståelse för nya textilinitiativ inom den svenska textil-och konfektionsindustrin. Initiativen handlar om att samla in kläder i syfte att återanvända och återvinna materialet. Vidare kommer textilinitiativen kopplas till begreppet cirkulär ekonomi, vilket bland annat är ett förhållningssätt till en sluten produktionskretslopp där inget material går till spillo.

Uppsatsen inleds med en bakgrund och en översikt över den befintliga textil-och konfektionsindustrin i Sverige, där vissa fördelar och nackdelar från en växande industri kommer att behandlas. För att undersöka nya textilinitiativen har vi valt tre olika företag som planerar att implementera initiativ i sina företag. Vi har även valt att intervjua en person om begreppet cirkulär ekonomi och hur det kan relateras till industrin. Vidare, har vi intervjuat en person om ett branschinitiativ som främjar en nationell insamling av kläder.

Studien består av en kvalitativ och en induktiv metod. Fokus ligger på primärdata där intervjuerna är den huvudsakliga källan. Dessutom är den grundläggande idén med studien att analysera de utvalda företagens affärsmodeller ur ett hållbarhetsperspektiv, där textilinitiativen angående återvinning kan ingå som ett steg mot en hållbar affärsmodell. I teoriavsnittet har vi valt att presentera konceptuella teorier om avfallshierarkin, begreppet cirkulär ekonomi och hållbara affärsmodeller, vilka är centrala i studien. Ramen för analysen kommer att införas som en hjälp för att strukturera analysen. Detta följs av ett avsnitt av empiri som består av en sammanställning av de fem forskningsintervjuerna.

I analysdelen kommer läsaren att följa hur företagens textilinitiativ kan anslutas till en hållbar affärsmodell. Analysen innehåller också en jämförelse av teorin, de empiriska resultaten kombinerat med personliga reflektioner som leder till en slutdiskussion.

Sammanfattningsvis är de utvalda företagen i utvecklingsfasen av att implementera affärsmodeller för en hållbar framtid. Fler företag i branschen borde engagera sig mer för att uppnå detta. En förändring i lagsystemet behövs för att införandet av initiativen ska bli ekonomiskt försvarbart.

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1 - Introduction

In this thesis new textile initiatives in the Swedish textile and clothing industry will be examined. This type of initiatives relate to the submission of old and torn out garments, where the material will be reused and recycled, as a step towards a closed production system where no materials go to waste or combustion. This section starts with providing a short historical view of the textile industry in Sweden, which will lead to the problems that stems from a growing industry, from an environmental perspective. In the problem discussion a general overview of the textiles environmental impact will be presented.

1.1 - Background and presentation

The textile and clothing industry started to grow in Sweden as a result of the industrialization at the beginning of the 20th century. A new mechanized factory system was introduced with a completely new division of labor where women accounted for the majority of the production of textile. The Swedish textile factories were influenced by the English textile industry with similar weaving and spinning mills that were developed in England at the end of the 18th century. A new production system was introduced which led to a transition from traditional domestic work to production of textiles in large. This was a significant breakthrough for the Swedish textile and clothing industry and the market could continue to grow because there was yet not a threatening competition from the foreign market. The Swedish industry continued to grow because of rationalization and improved machineries, but in the middle of the 20th century the industry faced its first crisis. An increased international competition from newly industrialized countries with lower labor wages and inferior working condition came to be a turning point for the Swedish textile and clothing industry (Länsstyrelsen Skåne, 2014).

Another event that had a significant impact on the textile and clothing industry was when Sweden became a member of the European Union (EU), in 1995. The membership has led to, among others, higher economic growth, lower rate of inflation and increased import and export in Sweden. The membership has also been significant for the textile and clothing industry in terms of simplifications. Through standardization, for example, the products are certified according to EU standards, and can then be sold all over the European Union (Brantingson, 2003).

According to Palm (2005) the majority of the production of Swedish textiles and clothes is, since many years ago, placed in low wage countries, such as Estonia, Latvia, Poland, Lithuania and Hungary. Today the Swedish textile and clothing companies remain on the market because of their developed focuses, for example brands, design or different types of products. Since there is not a dominant production of textile in Sweden, many companies buy material from Southeast Europe and sell them as their own brand. Generally, Sweden has been successful in terms of its design, quality management and marketing. For example, the Swedish fast-fashion company H&M does not own its production factories, which are deployed globally. Instead it has around 90 designers that develop the products in Stockholm (UNT.SE, 2006).

In a statistical report from Tillväxtverket in cooperation with 15 industry associations concerning the growing textile and clothing industry in Sweden, the industry represented a turnover of SEK 229 billion in 2012. This was an increase of 11 % compared to the previous year. The Swedish and multinational fashion company H&M had a turnover of SEK 121 billion the same year which represented 53 % of the total textile and clothing industry in Sweden. Excluding H&M, the Swedish textile and clothing industry is today dominated by micro and small enterprises, which have increased the sales the most during recent years (Nielsen & Sternö, 2014).

1.2 - Problem discussion

The growing Swedish textile and clothing industry has led to several positive aspects. In particular, it has contributed to the economic growth in Sweden. According to Svenskt Näringsliv (2008), “economic growth means that the aggregated production of products and services increases, which leads to an increased welfare”. However, economic growth also brings disadvantages, such as an increased consumption of energy and of the world’s resources, which have a negative impact on the environment. Recent research has shown that it is difficult to make the economic growth sustainable from an environmental perspective and there is an obvious correlation between growth and the climatic changes that have harmed important eco systems (Olsson, 2010).

As mentioned earlier, the majority of the Swedish production of textiles and clothes is placed in foreign low wage countries. From an economic point of view, this can be seen as a positive aspect because it increases employment and the living standard for the people who live in poverty. Although, some general problems have been emphasized in the textile and clothing industry such as low minimum wages, dangerous and unhealthy working environment, long working hours and employee powerlessness due to prohibition of union organization in some countries. Overall, there has been a positive development of the social responsibility and working conditions in the textile and clothing industry (Fair Trade Center, 2013). For example, two years ago H&M was accused of paying minimum wages to their Cambodian textile producers. The producers worked around 70 hours a week, which resulted in a monthly salary of less than 500 SEK. After this scandal was highlighted in media, H&M quit the cooperation with this particular supplier because it went against the company’s code of conduct (SVD Näringsliv, 2012).

Another serious problem that stems from a growing textile and clothing industry is the increasing environmental impact. The industry constitutes a big threat for the environment because both the production of textile products and the completed product harm the environment in terms of resource use, such as water and energy consumption and also the use of large amounts of dangerous chemicals. For example, the production of 1 kilo of cotton requires between 7 000 to 29 000 liters of water and between 0, 3 to 1 kilo of fossil fuel. To produce one simple t-shirt, around 0, 25 kilo of chemicals is used in the production. For a pair of jeans the use of chemicals is almost the double. Furthermore, the production of alternative

fibers, such as polyester and nylon, which are very common in modern day clothing, has a large environmental impact (Ekström et al., 2012).

In Sweden today, there is no legalization regarding producer responsibility. There are neither regulations about the amount of waste nor a limit for how much chemicals a garment may contain (Palm, 2011).

The net inflow of textiles and clothes to Sweden, which consist of the import and the domestic production excluding the export, has increased with 40 % during the period 2000-2009. It amounted to 131 800 tons, or in other terms, 15 kilos per person (2008). This increased consumption has led to another environmental problem which is related to textile waste. It was shown that 8 out of the 15 kilos of clothes and textile bought every year per person are thrown away as garbage. This results in 70 000 tons yearly and represents 3 % of the Swedish total household waste (Ekström et al., 2012).

As a possible solution to the problem, it may be useful to introduce the concept of circular economy. To build a sustainable society and a sustainable economy, our existing economic systems need to be updated so the use of resources gets more efficient. The material flow also needs to be more efficient while sustainable energy consumption is required for a possible future. This is what the concept of circular economy is about, to link the economy with ecology. In foreign countries, the concept has already gained ground and Sweden has recently shown a growing interest (Jansson & Sundqvist, 2013).

The concept of circular economy is also relevant for corporations. It can be linked with a company's business model provided that it is aligned with the company's values and ethics (Elffers, 2014). A business model consists of a description of its value proposition, how to create value and how to capture the value. It can also be defined as the manner by which the enterprise delivers value to customers (Bocken et al., 2013). In this thesis there will be a focus on exploring how companies' sustainability work can affect business models.

During recent years the general customers has become more aware about these environmental problems caused by their consumption of clothes. As a result, many companies in the Swedish textile and clothing industry have taken environmental and sustainable issues into account in their businesses (Rosberg, 2012). For example, the Swedish jeans brand Nudie Jeans is the first company in Sweden that has been licensed with "Bra Miljöval Re-design" and the company works a lot with issues related to sustainable development that also pervades the whole organization, such as social responsibility for the employees and reducing the environmental footprint (Naturskyddsföreningen, 2013). "Bra Miljöval Re-design" is a label that comes from the Swedish non-profit environmental organization Naturskyddsföreningen, with the aim to reduce the chemicals and harmful substances in the production of textile and to strengthen ethical and social claims made by the producers. (Naturskyddsföreningen, 2014).

It is a fact that the Swedish textile and clothing industry has a significant environmental impact, the industry is continually working for minimizing the degradation and wants to take an environmental responsibility. For instance, some Swedish textile companies created Sweden Textile Water Initiative in collaboration with Stockholm International Water Institute, with the aim to investigate and improve the water and chemical consumption in the industry. This resulted in 32 Swedish textile and clothing companies that together developed environmental policies for their suppliers (Yttra, 2012).

This proves that companies, which are involved in the industry, have the willingness and the power to reduce their environmental impact. But still, the companies are far behind to achieve a long-term sustainable industry. This is why an investigation of new sustainable textile initiatives for recycling and reuse of textiles in the industry is needed so the companies can inspire each other and develop new business models, which is necessary for a sustainable development.

There is not much knowledge about recycling of textile and we want to take the first step to systematize it. Since a new phenomenon is investigated in the textile and clothing industry, the thesis might be useful in the future. It can be useful from both a corporate and a customer's point of view. From a corporate point of view it might be good for companies to take after each other's recycling approaches. In turn, from a customer's point of view, the customers might become more aware of the existing environmental problem in the textile and clothing industry. This will increase the demand for recyclable textile and customers also become more motivated to reuse garments or reduce the consumption.

1.3 - Purpose

In this thesis we would like to create an understanding for a new and growing trend of submission of garments, as an initiative in the Swedish textile and clothing industry. Further on, we want to explore companies' submission initiatives and how it affect the companies' business models. The primary purpose is to connect the corporate initiatives with a framework of a sustainable business model, which can be related to a circular economy approach.

1.3.1 - Research questions:

To be able to fulfill the purpose, the following research questions will be investigated:

- How is the concept of a circular economy embraced by the Swedish textile and clothing industry?
- How do Swedish textile and clothing companies integrate the submission of garments in their organizations today and how does this affect their business models?

1.3.2 – Limitations

To make the study feasible, a limitation has been implemented in the thesis. The limitation is the recycling in the textile and clothing industry with a focus on garments and apparel that will be investigated. This delimitation is necessary since the textile and clothing industry includes many different sub-sectors that would make the analysis too wide. It would also make it very difficult to compare all the corporate initiatives being made. Market surveys

have also been avoided to exclude the customers' perspectives and instead put the focus on corporations' perspective.

2 - Methodology

The methodology will account for the choice of research approach, research design and how the procedure of collecting data. This is followed by a personal reflection of how the work has been. The methodology ends with a discussion about the thesis' validity and reliability.

2.1 - Choice of topic

Despite not having much background regarding environmental science and climate changes, we are aware that there are serious present environmental problems and that the society needs to deal with these in the future. This has increased the interest for how companies work with environmental issues and we have become more familiar with today's discussion about environmental problems. We are also interested in the textile and clothing industry, which is why we have chosen to combine these two aspects in the thesis.

Before this project started we made sure that the chosen topic had not been widely studied earlier. Since there are no earlier bachelor thesis about integrating recycling in the Swedish textile and clothing industry, this made us even more interested in investigating this new trend. Another argument for why we wanted to explore this new phenomenon deeper is that we both also imagine ourselves working with these issues and initiatives in the future.

2.1.1 - Exploratory study

Before starting with this study we needed to explore the Swedish textile and clothing industry to see if there were any possible initiatives about collecting clothes and textiles for submission and recycling in the Swedish industry today. To begin the study, we chose some well-known and established clothing companies in Sweden as a representation of the industry. To choose the companies for the study, we wanted to see if there were any companies with a business initiative that collects old clothes in stores with the aim of reusing and recycling. We found six different textile and clothing companies that we considered would make a perfect mix to represent the industry. The companies were Björn Borg, Boomerang, Filippa K, Gina Tricot, H&M and Nudie Jeans. They currently have a submission initiative of garments, which was planned to be the foundation of the research in this thesis.

2.1.2 - Descriptive study

In business research the descriptive study is popular because it is versatile across disciplines, meaning that it can be used for different motives. In a descriptive study the aim can be to make a description of a phenomenon or characteristics of a subject population where the question "when", "who", "what", "where" and sometimes "how" is answered. The aim can also be to do estimations of a population or discover associations among different variables. To be able to answer these questions the researcher needs to describe or define a subject where the study can involve for example the collection of data or the observation of an event.

This means that a descriptive study is based on existing data sources, which is a deficiency because the study cannot explain the reason for example why an event has occurred or why some variables interact in the way they do (Blumberg, Cooper & Schindler, 2008).

The main approach in the thesis is a descriptive study, which is chosen as a research approach to explore and define a new phenomenon in the textile and clothing industry. This means that the Swedish textile and clothing industry needs to be observed. Furthermore, data needs to be collected from the objects that are involved in order to be able to answer the research questions that include the question “how”.

2.2 - Research design

The research design has many definitions, but one of them is that research design is a plan for the investigation to be able to answer the research questions. Furthermore, it explains how the investigation process will be implemented. A research design includes the structure of research problems and a construction plan of the investigation, which is used to acquire empirical evidence on relations of the problem (Blumberg et al., 2008).

2.2.1 - Qualitative study

In a research study, the research design can consist of either qualitative or quantitative data. This research study is based on qualitative data with the aim to get a deeper understanding about how textile and clothing companies work with submission of garments and recycling of textile. According to Bryman and Bell (2011) a qualitative method can include several perspectives, for example sentences, words, narratives and knowledge.

The thesis will consist of a qualitative study since that will give the most fair and significant data, which the analysis and conclusion can be based on. This is because the data will be collected straight from the representatives through in-depth and semi-structured interviews, which will give the respondent a greater opportunity to form their personal answers and argumentations from their own perspective.

2.2.2 - Inductive approach

An inductive approach is linked with a qualitative analysis. It means that there is a focus on the research and the problem discussion which the theory is based upon (Bryman & Bell, 2011). The definition of induction is to draw a conclusion out of particular facts or evidence, which means that the facts support the conclusion and the conclusion explains the fact. The conclusion is only a hypothesis and there can be several explanations that fit the fact, which is the nature of induction (Blumberg et al., 2008).

As mentioned earlier, a correlation between environmental degradation and the textile and clothing industry could be identified and therefore, we wanted to explore what possible initiatives that were introduced by apparel companies on the market to prevent the negative environmental impact. In the research study an inductive approach will be used as a research philosophy because the study will start with a focus on the empirical field, which means investigating what corporate initiatives that can be found in the Swedish textile and clothing

industry for collecting, reusing and recycling. We will also explore how companies in the industry have integrated this into their business model. After that the facts have been collected, the aim is to generate a better understanding for the phenomenon and draw conclusions from the evidence.

2.3 - Methods for data acquisition

Scientific research is based on collecting primary and secondary data. Primary data is data collected for the first time and means that it is generated from an original source. It can, for example, be data collected from an experiment, in a survey or in an interview (Collis & Hussey, 2009). The definition of secondary data is information that has already been gathered by someone else in another study or for another purpose. The main argument in favor of secondary data is that it is already available and can save time since the researcher can immediately start to analyze the existing data. However, it can be difficult to find the right data for the study because the secondary data was not collected for the same purpose or research problem. It is important to consider if the secondary data covers the needed information, if it is accurate enough for the study and if it was collected in a relevant time period (Blumberg et al., 2008).

2.3.1 - Primary data

The primary data is based on qualitative in-depth interviews, which consist of both face-to-face, email and telephone interviews. The difference between these types of qualitative in-depth interviews is that there is a physical interaction between the researcher and the respondent in a face-to-face interview while in a telephone and email interview the respondent can experience to feel more anonymous and feel less embarrassment (Gillham, 2008). This study is based on both face-to-face, email and telephone interviews because some interview occasions could not be arranged in Gothenburg during the time frame of the thesis and some respondents only agreed to do the interviews on telephone and through email.

The chosen method for the interviews is semi-structured, which according to Gillham (2008) is the most important type of research interview because it includes flexibility that is balanced by the structure, which gives a good and qualitative outcome. The main characteristics of a semi-structured interview is that the same questions are asked to all respondents and the form of the questions goes through a developing process during the interview to ensure the right focus. In the semi-structured interviews held for the study, open questions will be asked to the respondent.

Interview test

Before the interviews were conducted, the questions were tested on persons that were not involved in the research with the aim to improve the formulation of the questions regarding obviousness, the grammar and how the questions were understood. In some cases, it was shown that some formulations needed to be clarified and some questions simplified before the interviews were conducted.

2.3.2 - Secondary data

To complement the collected primary data, external secondary data has been used. Primarily, electronic databases, such as companies' webpages and internet magazines have been used. In the beginning of the data collection we tried to find secondary data through relevant databases at the economic library, but with little success. Instead, professors at the university were asked to give recommendations of relevant literature, which helped us to find the right secondary data. Regarding the interviewed companies, the Sustainability or Environmental Reports were a good help to discover the company's values and current business model. This data was also a help to frame and prepare the interviews.

2.3.3 - Data collection

To begin the data collection for the study, we started by sending an interview request through emailing to the six textile and clothing companies that resulted from the exploratory study. Unfortunately, we did not get any responses from H&M, Gina Tricot, Boomerang or Nudie Jeans, but during this time we got a recommendation from a friend about a textile company called Woolpower from Östersund, that plans to work with collection of clothes in their stores and uses local producers in their production. We got in contact with Woolpower and they participated in an interview through email.

All interviews, except for the one with Tobias Jansson and Woolpower, were carried out on the telephone because we did not have the time to travel to the different head offices in Sweden. With Tobias Jansson, a face-to-face interview was carried out because he had his office in Gothenburg and he had the opportunity to meet us. For the companies, we had structured a framework for the interviews with similar questions to the representatives to explore similar initiatives of each firm. All interviews were recorded and transcribed afterwards. The telephone interviews lasted for around 15 to 30 minutes each, which was enough time to give sufficient information according to us.

We mostly conducted telephone interviews, which may have resulted in different answers compared to the face-to-face interviews. This can be explained by a loss of expressions and the representatives might have prepared the answers since we were asked to send the questions before the interview was held. We experience all interviews to have been successful because we, as interviewers, could complement each other very well when we conducted the interviews. Our choice of topic was also very appreciated by the respondents since all of them promote sustainability and want to highlight the initiatives. We consider that this aspect also improved the answers.

Presentation of the respondents

Tobias Jansson

Tobias Jansson works as a freelance writer and has a blog that is called circulareconomy.se, which contains interviews and other news about the concept. The aim with the interview was to answer the research question how circular economy can be related to the textile and clothing industry.

Maria Sandow

Maria Sandow works at the enterprise policy unit at Svensk Handel and is one of the founders of the initiative Textiles for Recycling Initiatives (T4RI). The aim with this interview was to get an understanding about the industry initiative regarding recycling of textiles and how Swedish textile and clothing companies work with this phenomenon.

Elin Larsson

Elin Larsson is the Corporate Responsibility Manager at Filippa K. We wanted to know more about the cooperation with the second hand store Judith Design in Stockholm, which offers the customers the opportunity to submit old and used Filippa K garments to be resold.

Victoria Swedjemark

Victoria Swedjemark is the Corporate Social Responsibility and Sustainability Manager at Björn Borg. We wanted to investigate their new approach of collecting old garments, which will be introduced during spring 2014.

Karin Sundström

Karin Sundström is the Marketing Manager at Woolpower. The company has planned to start a submission of used undergarments made of wool, with the idea to reuse the material in the production of shoe soles. This submission initiative is what we will take a deeper insight into.

2.4 - Analysis and interpretation

The framework of analysis consists of a simplified sustainability business model. Related attributes for the textile industry have been picked out from the model to make it appropriate for the study. The Phase Model of Sustainable Development is included in this section because it describes the companies' attitudes to sustainability and the path to implement it.

2.4.1 - Reliability

The reliability is linked with the findings in a research. The definition of reliability is that a research result is reliable if the same result could be produced in a repeat study (Collis & Hussey, 2009).

The reliability in the thesis is considered relatively high because many different aspects have been taken into account. The aim was to apply different views regarding the corporate initiatives to get a wider understanding and a better and more reliable result in the analysis.

This leads to only one point of view, which might not be critical, since it is a view from a company representative and the interviews and reports may be slightly embellished.

To compensate this fact, the corporate initiatives have been studied from the point of view of two unrelated persons, who are both involved in the industry. We chose to contact one representative that could tell more about the concept of circular economy, Tobias Jansson, and one representative from an industry organization, Maria Sandow.

However, it is important to mention that we did not take any party or include our own values in the research study. Instead, we strived to identify the existing and potential initiatives regarding recycling applied by the textile and clothing companies that were contacted to create our own interpretation of their business models and their attitude towards a circular economy.

2.4.2 - Validity

Validity can be defined as the extent to which the research findings in the study are accurate and reflect the phenomenon the researcher claims to investigate. The validity can be assessed in different ways and one of the most common way is face validity. This means that the content of the research, which can be tests and measures, is ensured to represent what is said to be measured or represented in the study (Collis & Hussey, 2009).

The validity of a study is considered high if the study can be repeated and lead to the same result (Bryman & Bell, 2011). In our thesis it is considered relatively high because the content is not based on personal assumptions. Instead it is based on actions from reality regarding companies' recycling initiatives and the data is collected from research interviews. Though, there is a risk that the respondents give distorted image of the companies. Furthermore, there are not many lecturers for the concept of circular economy, which makes the results particularly dependent on our respondent's answers.

3 - Theoretical Framework

To be able to answer the research questions the theoretical framework is divided in four related parts, which are The Waste Hierarchy, Circular Economy, The Phase Model of Sustainable Development and Business Models. The aim with this section is to define these concepts by implemented and conceptual theories, which will constitute a basis for the empirical section and the analysis.

3.1 - The Waste Hierarchy

The first part introduces the waste hierarchy and describes why the European Union (EU) has developed this model as a key tool for sustainability. This is followed by a deeper explanation about the different steps in the model. The theory about The Waste Hierarchy is necessary to include in the thesis because it is an EU directive which steers how waste is taken care of in Sweden. It is also the fundamental idea and the framework for how the textile and clothing industry deals with textile waste.

The EUs purpose by introducing the concept of waste hierarchy is to create an energy and resource efficient economy. It strives to exploit the full benefits from materials in products and to reduce the amount of waste. The model is supposed to present the pursuit to move up in the waste hierarchy to create maximum sustainability and a long-term perspective on waste. The most preferred alternative from a sustainability point of view is the prevention of waste, whereas disposal is the least preferable alternative (European Commission, 2012).

3.2 - The steps of the Waste Hierarchy

3.2.1 – Prevention

Prevention is the most preferable step in the waste hierarchy. According to the European Commission (2012) waste prevention focuses on improving the producing procedure and to prevent waste from occurring in the first place. That makes this step very important. Further on, WRAP (2011) claims that if a garment's lifetime can be prolonged with 9 months it would save around 20-30% of both water, carbon emissions and waste consumption. The European Commission (2012) claims that preventing waste could for instance entail producing products with less packaging or to minimize the amount of toxic and chemicals. Another way of preventing waste is eco-labelling. This means that products, in this case textile products, are produced from secondary material and are easier to recycle (European Commission, 2012). When it comes to textiles, this is not very common yet since the recycling procedure is not well developed in Sweden (Palm, 2011). According to the European Commission (2012), the member states in the EU are trying to educate and make consumers aware of eco-friendly products, which in turn should increase the demand for these products.

3.2.2. - Re-use

The re-use of textiles is the second step in the waste hierarchy, after lowering the amount of waste from production. When consumers want to get rid of their garments they can either

keep them, throw them in the garbage, sell them or give them away. According to Palm (2011) there are three main ways of re-using textiles:

- Formal: Physical shops where the garments are purchased of a second, unrelated party. People submit and donate garments to the organizations, which aims to help vulnerable people. The best-preserved garments are sold in their own shops and the rest is mainly exported abroad. Examples of famous second hand shops in Sweden are Myrorna and Statsmissionen.
- Semiformal: Where the buyer and the seller have indirect contact, usually through the Internet, for example Ebay and Tradera.
- Informal: Give-away or inherit to siblings or friends.

Except for these three methods of re-using, the rest is hard to measure. It is classified as a “national wardrobe” or a loss. A “national wardrobe” means that families keep clothes inside of their houses and store them at home (Carlsson et al., 2011).

3.2.3 - Recycling

According to Wijkman & Rockström (2011) the recycling rates are very low in general. What could be recycled is far from being recycled today. Recycling of textiles is in the present day not a common industry in Sweden and Scandinavia as a whole. There are not many companies that work with recycling of textile fibers in these parts because it is economically not beneficial and technologically limited. Even though, the method of collecting textiles for recycling has existed on the market for a long time. A problem why recycling regarding textiles is not an established phenomenon is because it is hard to separate and extract different materials in one garment. The condition for recycling textiles today is that it shall only consist of one material, since the challenge is to separate the different fibers in a garment, which can consist of more than one material. However, most of the materials that exist on the market today are mixed, with the aim to get the best characteristics from each material (Palm, 2011).

3.2.4 - Disposal

Disposal is the last resort and the worst scenario in the waste hierarchy. As mentioned, Swedish individuals throw away textiles (including towels, sheets and curtains) of an average of 8 kg per person per year, in an ordinary bin (Carlsson et al., 2011).

According to Palm (2011) disposal is the most common way of treating textile waste in Sweden, after charity submission. Disposal involves mostly energy recovery through incineration, which means that the disposed textiles are burned and become energy (Palm, 2011).

Figure 1. Waste Hierarchy



(European Commission, 2008)

3.3 - Circular Economy

This part is going to define the concept of a circular economy, in what way this mindset can affect companies and what business related changes that can be applied. It will start by explaining the situation today, which is presented by a cradle-to-grave model. This model is adapted to describe that the desire for economic maximization and productivity is not durable in the future. Furthermore, the concept of cradle-to-cradle will be introduced, which is a part of the circular economy mindset. It is presented as the pursuit of more sustainable thinking in a long-term perspective, which focuses on recycling and reusing to prolong a garments lifetime. At last, the obstacles and opportunities for creating a circular economy will be discussed.

3.3.1 - Cradle-to-grave model

The Industrial Revolution has contributed to rapid changes and is characterized by the desire for acquisition of capital and for firms to be as productivity efficient as possible. This way of thinking is built on a cradle-to-grave model. The concept describes a linear system with a short life cycle where a product is being produced, used and then becomes waste. This concept exists because it is usually more expensive to hire someone to repair old garments than buy new ones. Many products are produced to only last for a short time to encourage customers to buy more. Consumers are yet not aware of what is happening with their waste and what it is causing from an environmental perspective (McDonough & Braungart, 2002).

3.3.2 - Cradle-to-cradle model

The cradle-to-cradle model is the opposite of the cradle-to-grave model. This is recognized by following the waste hierarchy promoted by the EU directives, which desire to minimize waste and maximize rates of recycling and reuse, meanwhile long-term wealth is pursued. According to McDonough & Braungart (2002) the solution for reaching a more sustainable

world is not only about reducing and avoiding waste and emissions. The problem is rather about design since it is people who set the ecological footprint, not nature itself. The design can both lower the demand for energy and raw materials, which makes the end-product easier to recycle and more durable. Furthermore, increased recycling rates will decrease the demand for extracting new raw materials. McDonough & Braungart (2002) mention two different nutrients: biological and technical. These components of materials are not designed to interact with each other since it would complicate the recycling and reusing procedures. Products can be used in many cycles if the materials are not mixed up with cheaper materials, so called down-cycled materials. This is the reason why McDonough and Braungart advocate that product design is the key to reach a cradle-to-cradle model and the desire for a long-term perspective. If products are designed for long-term use and can be recycled in the end, a more sustainable model is in our reach (McDonough & Braungart, 2002).

3.3.3 - The pursuit of circular economy

A circular economy is mainly based on resource efficiency and is presented by the use of renewable energy and the pursuit for eliminating waste and toxic chemicals. However, resource efficiency will not be enough to reach a circular economy since the development of economic growth will gradually slow down (Wijkman & Rockström, 2012). This is a result of two main factors. One is the increased price of natural resources because of increased demand from developing economies and decreased supply. The second factor is explained by falling prices in labor and capital.

The concept of circular economy focuses on the use of a product, rather than the production process. Instead of producing new products this concept promotes taking care of the ones that already exist, through recycling and reuse. If producers are responsible throughout the products and materials whole life cycles, they will be economically interested in producing garments that are easy to repair, upgrade and recycle (Wijkman & Rockström, 2012). Furthermore, Wijkman and Rockström claim that there are three main policies that should be implemented if a circular economy model would be able to compete with today's business models, which are based on productivity and maximization. Moreover, these conditions must be fulfilled to encourage producers to take more responsibility for their products. The three policies are:

- Binding targets for resource efficiency, which put focus on maximizing reuse and recycling rates
- Sustainable innovation, which includes sustainable design and closed loop systems
- Tax reform, which is presented by lowering taxes on labor and raising them on the use of new raw materials

A condition for this to happen is especially an effort from municipalities and a change in the legislation system. This system would create new jobs in the service sector at local level since the demand for recycling and reusing will increase, meanwhile the demand for extracting new raw materials will decrease (Wijkman & Rockström, 2012).

3.3.4 - Opportunities and obstacles for creating a circular economy

According to Palm (2011) there are clear economic barriers in the Swedish textile market, which hinder the implementation of a circular economy. There is not enough motivation to recycle and re-use clothes since these procedures are being done in Sweden comparing to the manufacturing processes for producing new clothes, which are mostly taking place in low salary countries. That makes it relatively cheaper to produce new garments than recycle or re-use old ones, which in turn makes the price of second hand garments not competitive enough compared to new ones.

Palm (2011) claims that if the quality in a garment is relatively cheap and supposed to last for a short time, its quality is not good enough to be re-used. Furthermore, it is a social obstacle if the clothes that are being submitted to the second hand shop are out of fashion. Another social aspect is if second hand is not considered as a trend for the consumers or they might not know what to do with their used clothes and where to submit them.

According to Palm (2011) an opportunity for the textile industry is to produce materials that are aimed for recycling, in the long run. The European Commission (2012) responded to this by introducing eco-labelling. This is a label, which gives promise to the consumer that the product is sustainable and produces little waste. This labelling is not yet common for textiles but is seen as an opportunity for the future to gain legitimacy.

The European Commission (2012) also mentions tax incentives and extended producer responsibility as sustainable opportunities in the future. Tax incentive means increased tax either on specific waste streams or tax in relation to the final amount of waste that is thrown away. Extended producer responsibility is another suggested opportunity. It means that the producer responsibility for the end product would increase. If the producers have to pay for how much that is thrown away in the end, it would make them produce more sustainable and recyclable products.

3.4 - Phase Model of Sustainable Development

The “phase model of sustainable development” defines different phases that companies can exist in regarding their sustainability work. The attitudes together with societal contribution are the most important factors for relevant in which phase a company is responsiveness in.

According to Van Tulder et al. (2014) the model consists of four phases where each phase shows how strongly companies are affected by external and internal forces and the fundamental attitude for being responsive to society. Regarding the attitude, companies can act in two different ways towards sustainability issues. In the first, liability is the main attitude adopted by companies. In that case, the most important issue for these companies is to avoid legal claims that can develop from their societal impact. In the second one, responsibility is the main attitude adopted. Unlike the previous, this attitude reflects understanding and taking responsibility for the effects that companies’ strategies might have on the society as a whole. The other aspect is societal responsiveness. It is divided into two sides: intrinsic and extrinsic. The intrinsic is based on internal forces, where motivation is based on either liability or

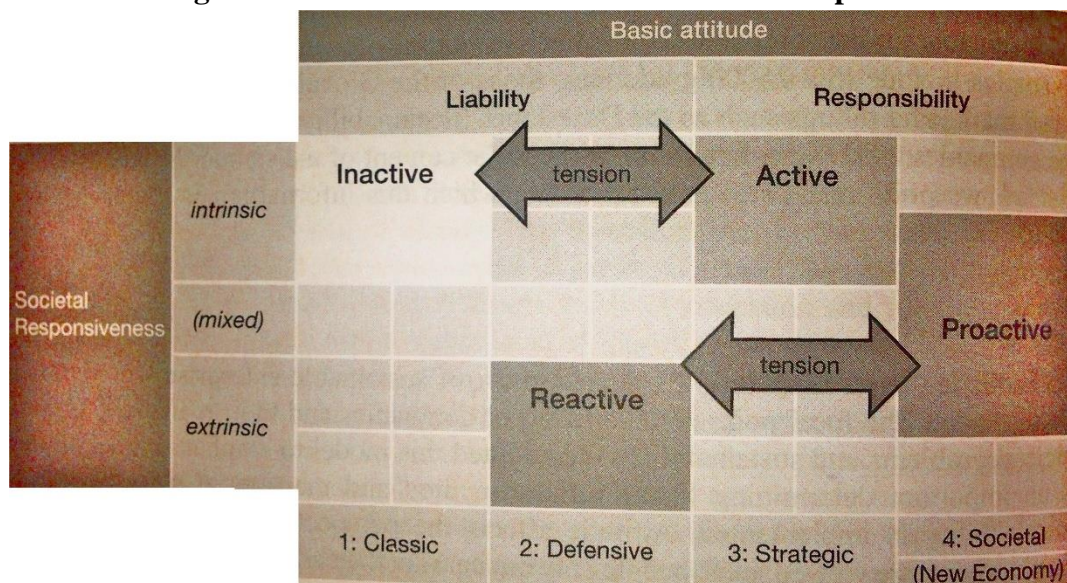
responsibility. The extrinsic, on the other hand, represent external forces where external parties are the main motivation for acting sustainably.

Out of these behaviors just described, four stages that companies can act in towards sustainable development, arise. The stages are followed by one another where the inactive phase is the first and the proactive is the last phase for companies to progress through, to develop and implement sustainability. The stages are the following:

- Inactive phase: this phase is the classic approach. It is represented by avoiding liability, which includes avoiding risk
- Reactive phase: this phase is characterized by an external focus and liability which result in a defensive approach. Companies in this phase act when they have to, they do not seek for opportunities
- Active phase: this phase stands for an internally motivated attitude. Companies apply a strategic approach where they take responsibility for societal problems
- Proactive phase: this phase is based on an externally motivated attitude. Companies cooperate with both primary and secondary stakeholders to act more responsible and to solve the societal issues

(Van Tulder et al., 2014)

Figure 2. The Phase Model of Sustainable Development



(Van Tulder et al., p.12)

3.5 - Business Models

This part puts focus beyond the traditional theories about business models and instead highlights a new way to structure the business with the aim to create value in a sustainable way. It starts by defining a traditional framework for business modeling, the Business Model Canvas, as a help to explain what a business model is. Further on, a new concept of a business model is introduced as a framework, which will be the basis for the analysis. This concept is called Sustainability Business Models (SBM), which includes sustainability as a way to create value in the business.

3.5.1 - The Business Model Canvas

According to Osterwalder and Pigneur (2013), a business model describes the basis for how to deliver customer value in a profitable way. The business model can also be seen as a blue print of a strategy that shall permeate the whole organization's processes, systems and structures. For corporations, the concept of a business model needs to be a common understanding so all companies are on the same track when it comes to discussions about their business models. This is an argument for why a basic concept about how the company functions is needed, where the description of the business is easy to understand without being too generalizing.

One of the most traditional concept that has been implemented and tested in corporations worldwide is the Business Model Canvas. This framework has created a common language of how to describe and manage business models with the aim of creating new and innovative business strategies. The concept of Business Model Canvas is based on nine building blocks that together steer the company in the pursuit of earning money.

The building blocks are plotted as a template on a poster where the company uses post-it notes as a tool to sketch the business model. The nine blocks are key partners, key activities, key resources, value proposition, customer relations, channels, customer segments, cost structure and revenue flows (Osterwalder & Pigneur, 2013).

The model has, however, been criticized. According to Bocken et al. (2013), the Business Model Canvas has a narrow view of the value proposition because it is only focusing on the customer, which is a limitation to generate sustainability across the whole stakeholder network. To develop a holistic perspective that includes the economic, social and environmental dimensions of sustainability within the business planning process, a new tool for better understanding sustainable value creation within the business activity is needed (Bocken et al., 2013).

3.5.2 - Sustainable business modelling

According to the traditional neoclassical theory the primary obligation for a company is to create economic value through maximizing profits for shareholders, whereas the social and environmental goals are subordinate the primary goal. Some suggest that the neoclassical model needs to be transformed by social and environmental priorities to be sustainable and new business models and management paradigms are required to move beyond the "organization as an economic entity" (Stubbs & Cocklin, 2008, p. 103).

Sustainable business models go beyond delivering economic value and include other forms of value for a broader range of stakeholders. Through superior customer value, these business models create competitive advantages and at the same time contribute to sustainable development of both the company and the society. The focus in sustainable business models is to identify solutions that allow the company to capture economic, social and environmental value. It is built upon the triple bottom line approach to define the business' purpose, measure

performance and include a wide range of stakeholders, where, among others, the environment and the society are considered as autonomous stakeholders.

A holistic view of the value proposition is necessary to create a sustainable business. This includes benefits and costs to stakeholders, specifically to the society and the environment. The stakeholders that are observed for a sustainable business model are customers, investors and shareholders, employees, suppliers and partners, the environment and the society. These stakeholders can be extended explicitly which involves tangible and intangible value flows between them to identify relationships, interactions and opportunities for better collaborative and beneficial value creation (Bocken et al., p. 484).

Sustainability Business Model

One framework that goes beyond the neoclassical economic model is the Sustainability Business Model (SBM). The article about the SBM, by Stubbs and Cocklin (2008), has been cited around ninety times by different authors and researchers, mostly regarding the subject about sustainable business models. (Google Scholars, 2014).

The SBM is developed from an ecological modernization (EM) perspective of sustainability and consider different attributes, such as cultural, structural, firm-level and system-level features. The EM perspective is an alternative view to the neoclassical economic perspective. The core belief is that economic growth can be uncoupled from environmental degradation and that EM can be achieved through innovation, policies and new technologies.

The EM perspective also reflects a longer-term view than the neoclassical perspective and organizations subscribing to an EM perspective take a stakeholder view of the firm instead of a shareholder view (Stubbs & Cocklin, 2008).

The SBM is an ideal type and a representation of an idea of a sustainable organization. An ideal type means that it represents an organizational form that might exist and can be used as design guidelines for new organizations. The SBM consists of four characteristics, which are economic, environmental, social and multidimensional or holistic. These characteristics are divided into structural and cultural. Structural characteristics are related to processes, business practice, organizational forms and structures. Cultural characteristics reflects norms, values, attitudes and behaviors. Organizations that adopt the SBM must develop these internal structural and cultural capabilities to achieve firm-level sustainability and collaborate with its stakeholders to achieve sustainability for the system that the organization is part of (Stubbs & Cocklin, 2008).

A presentation of an ideal type of a SBM will be presented below.

Table 1. The ideal type of an organization with a SBM

Core values	The organization's purpose, vision and mission are expressed in social, environmental and economic terms, which are the three aspects of sustainability
Performance measurement	The organization uses a triple bottom line approach to measure its performance, which means that economic, social and environmental performance is measured
Business perspective	The organization adopts a stakeholder view of the firm rather than a shareholder view, where stakeholder engagement and collaboration is a necessary condition
Sustainability approach	The organization promotes environmental stewardship and treats nature as a stakeholder, through using renewable or human-made resources, minimizing non-recyclable waste and pollution, reducing consumption, and transforming the supply chain to become sustainable in a long-term view
Business management	The organization has a visionary CEO to create a sustainability culture and structure that permeates the organization and the stakeholder network
Business system	The organization includes the system perspective as well as the firm-level perspective, which means that the organization can achieve sustainability through its internal capabilities and when the whole system of which it is part of is sustainable

(Stubbs & Cocklin, 2008)

4 - Framework of analysis

In this section a framework for the analysis will be introduced. The idea is to frame the analysis on a simplified Sustainability Business Model, where the most important and realistic attributes from the model have been picked out.

4.1 - Sustainability Business Model

Table 2. Characteristics of the Sustainability Business Model

	Economic Characteristics	Social Characteristics	Environmental Characteristics	Multidimensional/ Holistic Characteristics
Structural attributes	1a. External bodies that track performance of companies and use a triple bottom line (TBL) approach	2a. Stakeholder engagement skills: understanding stakeholders' needs and expectations (being relevant to stakeholders)	3a. Closed-loop systems: responsible for product throughout its lifecycle	4a. Demand-driven model, not supply-driven model (driven by what people need, not driven by companies trying to get people to buy more)
Cultural attributes	1b. Profit is a mean not an end	2b. Stakeholder approach (managing the organization for the benefit of all stakeholders and not prioritizing shareholders' expectations above other stakeholders')	3b. Treat nature as a stakeholder	4b. Reduction of consumption

(Stubbs & Cockling, p.120)

Table 2 shows a simplified SBM, where we have picked out one structural and cultural attribute for each characteristics from the model. The key characteristics are numbered as a tool to facilitate the references in the analysis (see appendix for the original model). This model will be used individually for the chosen companies to link the applied characteristics as a base to the analysis. Thus, the model is a tool to map the companies sustainability work regarding recycling.

5 - Empirical findings

This section presents the empirical material collected through qualitative interviews with different representatives from corporations and organizations. The first part outlines how a circular economy can be related to the textile and clothing industry and what industry initiatives regarding submission of garments that exist on the market. The second part introduces the three corporate initiatives regarding the submission that has been investigated.

5.1 - Circular Economy- rethinking the business

An interview with Tobias Jansson who advocates the concept of circular economy, was conducted in his office in Gothenburg. The aim with the interview was to answer the research question how circular economy can be related to the textile and clothing industry.

Tobias Jansson works as a freelance writer and has a blog that is called circulareconomy.se, which contains interviews and other news about the concept. He has a background from the lifestyle magazine Camino, which has an environmental and sustainability perspective where he used to write about inspiration and how you can create and live a sustainable lifestyle. The inspirational thinking is something he has brought to his blog, where the aim is to demonstrate and inspire other operators to start with a circular thinking.

According to Tobias the concept of circular economy has started to infiltrate the debate in Sweden and it has come to be a widely discussed subject on different corporate levels, even though the existing initiatives in the present day are not yet too many. He explains that circular economy is a concept that combines resource efficiency and business benefits. To understand the importance of the concept, Tobias highlights a global macro trend that has shown a paradigm shift in the price of raw materials since the millennium shift. The price was decreasing during the 20th Century, but from year 2000 the price of raw materials started to increase and will presumably continue to rise in a long-term view. For example, there is a concept called peak oil which is the time when the maximum amount of oil for production is reached, but according to Tobias, we can include a concept of peak everything because many of our important materials are soon reaching the top for what can be extracted. This means that the price of the resources will increase. These related factors make it reasonable to transform the traditional linear economic system to circular, where all materials are spinning in the same system.

Tobias explains that recycling is already an implemented concept but it's not yet so sophisticated. For example, recycling of paper as a material can only be carried out around five times before its dysfunctional and goes to waste. This is because the paper fiber is not designed for recycling. Neither is today's plastic designed for recycling. As a solution, Tobias demonstrates a need for a quality recycling and a need for updated material flows where the materials are designed for recycling and returned to the production without losing quality.

5.1.1 - Circular economy and the textile industry

According to Tobias, the international clothing and textile industry is one of the few industries that are taking the lead with a circular economy because of an ongoing debate since many years ago about Corporate Social Responsibility issues and how to make the industry more environmentally friendly.

According to Tobias there are clothing companies that already have implemented the circular thinking into their business models. For example, a company called Mud Jeans in the Netherlands has as their business idea that the customers buy a subscription on jeans and rent the jeans during a limited time. The benefits with this business model are that the company keeps the ownership of the material and controls its own material flows. Tobias explains that there are two interesting categories of companies regarding the implementation of a circular system in the business. The first category consists of large companies that can afford to set long-term goals and transform the business system. The second category contains small entrepreneurial companies that have the circular thinking implemented in their core values with new and innovative business models.

Tobias believes that the large operators in the Swedish clothes and textile industry in Sweden, such as H&M and IKEA, are aware of the climate changes and that resource extraction will reach its peak in the coming future. This is the reason for why these corporations genuinely want to create sensible material flows, but not genuine in the sense that it is for the aim of charity and to save nature. Instead it is genuine because the corporations want to control their own material flows so they can stay on the market in the future.

Tobias ends the interview with saying that we need to create a way to live in unison with nature and that's why it is important with functional material flows. If we can create these environmentally friendly material flows and an economic system that doesn't harm nature, our present consumption behavior can be more acceptable.

5.2 - T4RI- the industry initiative for the future

An interview with Maria Sandow, a representative from the industry organization Svensk Handel and one of the founders of the initiative Textiles for Recycling Initiatives (T4RI), was carried out. The aim with this interview was to get an understanding about the industry initiative regarding recycling of textiles and how Swedish textile and clothing companies work with this new phenomenon.

Maria Sandow works at the enterprise policy unit at Svensk Handel and is responsible for issues regarding foreign trade, which is linked to environmental issues. Maria explains that her position mainly focuses on corporate social responsibility and supply chain issues. T4RI is an industry initiative that was started in 2011 by Karin M Ekström, professor of business administration at the University of Borås. Karin was doing research in communications and started a network to see what stakeholders can create together if they are connected. She gathered industry companies, waste companies and municipalities to meet to discuss the issue regarding textiles and waste.

Maria informs that one of the members in the network, Johan Sundblad, was at the time working in a project regarding recycling of textile. He had met researchers from the KTH Royal Institute of Technology in Stockholm that just had developed a technique to extract new fibers from mixed fibers of textiles. To be able to test the technique, the researchers needed access to a large amount of textile. Maria explains that it is possible to recycle textiles already today, especially cotton and wool, but the problem is that it must be clean materials if this is to work.

The idea with the new initiative was to connect several textile and clothing companies with the aim to collect textile for the research project. Johan started to contact companies, such as Lindex, KappAhl and some other clothing companies in Sweden, and received a positive response from several companies. As a result, companies like Boomerang, Gina Tricot, H&M, Ikea, Indiska, KappAhl, Lindex, MQ, Rnb and Åhlens joined the network, T4RI. It is the only existing industry initiative on the Swedish market and works as a network or a think tank between the members. The purpose with the initiative is to contribute to an industry responsibility regarding material flow, which means that the textile is reused and recycled in the best possible manner. T4RI also promotes a sustainable society, where the primary focus is the environmental benefits. As a connected network, T4RI seeks to find solutions to simplify the cooperation between different actors regarding textile recycling.

According to Maria, many companies are waiting for a regulation regarding a producer responsibility for textile waste. If there will be a legislation, the goal with the initiative is to start up a recycling company and the collection of textile and clothes in Sweden.

ReNewCell is a company, which has continued to elaborate the initiative and there is a lot of ongoing research regarding renewable materials. Maria explains that the companies participating in T4RI are meeting to discuss the topic about textile recycling and take market and industry expectations into consideration. The issue is very relevant for the future, since present day fabrics use many of nature's resources. Today there is no commercial recycling of textiles. Instead the focus is to follow the steps in the waste hierarchy, which is promoted by the EU waste directives.

Maria mentions H&M as an example of a company that has started an initiative regarding submission of textiles. In cooperation with the company I Collect (I:CO), they allow customers to hand in used and torn garments in their stores all around the world in order to avoid energy expenditure. I:CO has its plant in Switzerland with an own sorting system of garments for reuse and recycling. Primarily, the clothes that can be reused are picked out to be sold in I:CO's stores or forwarded to be sold in other countries.

Maria explains that there is a secondary market for these clothes and it is very attractive in markets such as Eastern Europe and Africa. In the future, T4RI wants to contribute to a cost effective submission of clothes and textile with the utmost consideration for the environment. The submission should be close to the consumer and all the collected textile that can be reused shall be disposed by serious actors. T4RI also wants to encourage the large scale

collection and recycling of textile and an increased consumption of recycled fibers with the objective to close the material cycle.

5.3 - New business initiatives

This part will account for the business initiatives regarding collection of clothes with the aim of re-using and recycling textiles. It will give a review on the initiatives of three different textile and clothing companies to get a wider perspective of the new phenomenon.

5.3.1 – Björn Borg

Basic facts about the company

Name: Björn Borg

Head office: Stockholm, Sweden

Founded in: 1997

Vision: "to make a difference by helping people around the world look and feel active and attractive"

Number of employees: 130

Sales markets: Sweden, Netherlands, Norway, Denmark, Belgium, England, Finland, Austria, Germany

Responsibility approach: "Björn Borg wants to be a good corporate citizen that takes responsibility of their employees, its environmental impact and its customers"

(<http://www.bjornborg.com/se>)

"Give back to nature and contribute to an enhanced environment"

Victoria Swedjemark, CSR and sustainability manager at Björn Borg, explains that during spring 2014 the company will try a new approach by collecting old garments. Today Björn Borg has 13 stores in Sweden where the initiative will start as a test to see how it will work. The idea is that the customers will have the opportunity to submit old and worn garments with their own brand in the stores, which will be beneficial for both the customers, the company and the environment. This is because the customer gets rid of clothes that are not used, the company contributes to the reuse or recycling of the textile, which in turn reduces the firm's impact on the environment.

According to Victoria, the background to the new initiative was that Björn Borg wanted to contribute to more sustainable raw materials use by enabling an extended or new product life cycle for textiles. She explains that the textile industry in general has a huge impact on the planet's resources in the

"The textile industry in general has a huge impact on the planets resources in a sense that we are living in a consuming society in the present day, which demands a lot of resources"

sense that we are living in a consumer society in the present day, which demands a lot of resources, especially cotton in the textile and clothing industry. The purpose with the collecting initiative is that the company wants to see if there are viable alternatives to just throwing old garments away. Instead of letting the textile go to waste when it is worn out, Björn Borg wants to collect it and make use of it in terms of reuse of the product or recycling of the textile to extract the new fibers or other, alternative materials.

The collected garments will be sorted to establish what garments can be reused and what garments can be sent to collaborations with an external company. According to Victoria, the main purpose with the initiative is not to secure recycled fibers for the company's own production, similar to what H&M is doing. Instead it involves looking at alternative options to throwing away old garments and thereby making better use of limited resources in the world. Victoria emphasizes that Björn Borg's collecting initiative during the spring is a mere trial project. Afterwards the company will evaluate the initiative and a decision will be taken on whether or not it is something the company will continue with and if so, how.

For Björn Borg, it's important to look deeper into the textile's life cycle and see what can be done in the different stages of the life cycle to limit negative environmental impact. In the textile and clothing industry there are many ongoing discussions about how to close the loop and embrace the concept of "cradle-to-cradle". But all companies involved in the industry face the same challenge, which is technical limitations that restrict textile recycling.

Many challenges remain with respect to recycling of the fibers and there is a lot of ongoing research about how to develop the technology to make it possible to recycle all kinds of textile. According to Victoria, it would be misleading to say that the goal with the new initiative was to become self-sufficient regarding the material flow. She claims that the more established the environmental problem is becoming in the textile and clothing industry, the more the demand for recycled textile will increase. Victoria also assumes that textile recycling from a consumer perspective will become more common and that the global market for recycled textile will mature in the future, and that this in turn, may result in a more full-fledged closed production system of recycled textiles.

5.3.2 – Filippa K

Basic facts about the company

Name: Filippa K

Head office: Stockholm, Sweden

Founded in: 1993

Vision: “to design, manufacture, communicate and sell commercial fashion garments and accessories with its own, timeless style”

Number of employees: 200

Sales markets: is present on some 20 markets around the world via 50 Filippa K stores and more than 700 retailers

Responsibility approach: “a model for corporate responsibility based on four interrelated and equally important areas: environmental responsibility, social responsibility, financial responsibility and ethical responsibility”

(<http://www.filippa-k.com/>)

“Give the clothes a longer life time and avoid to let it go to waste”

According to Elin Larsson, Corporate Responsibility Manager at Filippa K, the company has a cooperation with the second hand store Judith Design in Stockholm since 2008. The aim with this cooperation is to offer their customers the opportunity to submit old and used Filippa K garments to be resold. It has shown that there are many customers that are handing in their old clothes and because the second hand store is very small and has no storage place, the store has periodically been forced to set a stop for the submission. There is also a great demand for the Filippa k clothes in the second hand store, which shows, among others, that the customers are becoming aware of the clothes’ environmental impact.

Today there is no general submission of clothes in Filippa K’s stores, but the company is planning to start a trial project during 2014. The idea is that the customer will be able to hand in Filippa K clothes, regardless the garments condition. The collected clothes will be sorted and forwarded to different channels. Primarily, if the garments are in a good condition they will be resold in the second hand store. Second, if the condition is okay the clothes will be handed to Stadsmissionen, which is a charity organization. If the garments are torn out it will be recycled. The submission initiative is still in a planning stage at Filippa K, but the core idea is to make it as accessible as possible for the customers to hand in their garments in all Filippa K stores and receive a certain compensation.

“A garment can reduce its environmental impact with around 30 percent if the life-span can be extended with nine months”

According to Elin, the planned initiative has several purposes. First, the most important thing is to avoid that the clothes go to waste and instead give the clothes as long life as possible. Elin explains that according to the Wrap report called “Valuing our clothes”, a garment can reduce its environmental impact with around 30 percent if the life-span can be extended with nine months. Another purpose is to live up to its brand and show that the clothes are made of quality and last for a longer time. Regarding the second hand store the purpose is to offer the customers a sustainable alternative for shopping, which also is a business opportunity. Furthermore, Elin explains that Filippa K is an active member in a handful of different initiatives and collaborations, regarding environmental and social issues. One of them is a collaboration with Lånegarderoben, which is a clothing library where the customer pays for a membership to borrow clothes. Filippa K is sponsoring with garments because the company supports the business idea, that the customers can update their wardrobe without contributing to consumption.

Filippa K is also a member of the Mistra Future Fashion project, which is about collaborations between researchers, students, companies and governmental agencies, where they meet, discuss and test their ideas concerning sustainable fashion. Filippa K Lab Line is one part of the project where different stakeholders are invited to test their ideas in Filippa K’s reality. In that way, Filippa K can participate to affect and develop the scientific research and also take part of previous research.

Elin Larsson ends the interview by telling about the company’s approach to a circular economy. The firm has a business strategy, called Filippa K Circle, which is about an adaption towards a circular economy. The company believes that one solution of the environmental problem for the future is to do businesses within the planet’s boundaries, which, among others, includes clean material flows that do no harm to our health or the environment.

5.3.3 - Woolpower

Basic facts about the company

Name: Woolpower

Head office: Östersund, Sweden

Founded in: 1969

Vision: “develop, manufacture, promote and sell clothes with high quality and function”

Number of employees: 70

Sales markets: around 80 % of the sales goes to export to 25 countries worldwide

Responsibility approach: Certified by ISO 9001:2000 and full control of their own production, which includes a responsibility for all employees in the supply chain

(<https://www.woolpower.se/>)

“Woolpower signals warmth in terms of its products and its social and environmental responsibility”

Woolpower is a company, based in northern Sweden, and is known for its warm undergarments and socks that are made of wool. Karin Sundström, the marketing manager, explains that the company has planned to start a submission of used undergarments made of wool, with the idea to reuse the material in the production of shoe soles. The submission initiative will be a collaboration with one or two of the company’s retail chains in Sweden. In practice, Woolpower plans to let the customers all over Sweden hand in their used undergarments in the closest store. In return, the customers will immediately receive a pair of shoe soles as a gift. Afterwards, the collected undergarments will be sent to Woolpower’s factory in Östersund.

According to Karin, there is a lot of waste materials that emerge from the production. Primarily, it emerges in the production step, where the product patterns are cut out. All material that is left has earlier been thrown away as waste, but today the company found a new way to take care of the waste material. In April 2014, Woolpower launched a new product, a file sole made of the waste material. This has resulted in that no material from the production goes to waste.

Karin explains that since the launch, the product has got a lot of attention by the customers, and to further communicate that the soles are made of reused wool, the company wanted to expand the work in a way that gives the product a more positive attention, which in turn enhances Woolpower’s engagement for a sustainable production.

“The company strives to take care of the merino wool and reuse it in the production, which is a step towards a long-term and sustainable production”

According to Karin, the aim with the submission initiative is primarily to promote the company on the market and its felt soles that are made of reused merino wool. Woolpower wants to communicate a responsibility to the market, not only for its own waste materials, but for everyone’s used wool undergarments. The company strives to take care of the merino wool and reuse it in the production, which is a step towards a long-term and sustainable production. In turn, Karin believes that this initiative will provide the company a good promotion and at the same time the company does something good for nature.

Karin ends the interview by telling that Woolpower has accounted for short-term economic benefits, such as bringing the customers to the stores. In a long-term, the company believes that the initiative will strengthen its brand. Woolpower’s brand shall signal warmth in terms of its warm garments but also as a company that takes a social and environmental responsibility.

6 - Analysis

This section contains an analysis of the three companies and their initiatives on the basis of how well they comply with the characteristics in the SBM. The aim with the analysis is to answer how we believe the organizations fulfill the characteristics of a sustainable organization and how it can be connected to a circular economy. The number and letter combinations in the analysis are connected to the framework of analysis.

6.1 - Björn Borg

To start the analysis we want to begin with the first interviewed company. First of all, our perception of this organization is that the company has not been calculating on any economic profits when the firm has planned its initiative. Instead, it is important for the company to contribute to a better environment and give back to the nature. We believe that this is an argument for that the company sees the nature as an own stakeholder, which is in line with the characteristics of 1b (profit is a mean, not an end) and 3b (treat nature as a stakeholder) in the model.

Regarding the company's stakeholders, the customers were the only stakeholder group mentioned in the interview. According to the company, their main products, which are underwear, is not easy to resell or to be reused by the customers because of hygienic reasons. Instead the background of the initiative was to understand the garments lifecycle and take a responsibility of the resource use in the production. We believe that this attribute reflects the characteristics 3a, which is an approach to a closed loop system and a responsibility throughout the product's lifecycle.

Regarding the social characteristics in the SBM, we found it difficult to identify any attributes based on the interview. But indirectly, we believe that the company strives towards a stakeholder approach instead of a shareholder approach. This is because the company goes beyond the economic profits and can calculate on other benefits for their stakeholders with the new initiative. It is a question about responsibility throughout the whole value chain instead of economic benefits for the own company.

6.2 - Filippa K

On a basis of the second interview, we could identify more characteristics that linked the second company with a SBM. Primarily, the company saw the initiative as a business opportunity, because of the great customer demand. But the company had also other prioritized objectives with the initiative, because the company responds to the customer's needs. These aspects reflects number 1b from the SBM because the profits are seen as an opportunity for the company. It can also be linked with number 4a from the model because the company organizes itself depending on what the customers demand.

We believe that the cooperation with the second hand store also has made the company's customers more aware of the environmental problems and how the textile industry affects the

environment. To link this with the SBM, the company fulfills the social characteristics because we interpret the company to be customer oriented.

One of the main objectives with the initiative is to give the clothes a longer lifetime, which in turn will benefit the environment. Furthermore the company has collaborations with other stakeholders, for example the clothing library Lånegarderoben. We believe that this proves that the company genuinely wants to contribute to a better environment and it tries to affect their customers in a way to make them become more aware of the environmental problems and reduce the consumption. This is clearly in line with number 3a (closed-loop systems), 3b (treat nature as a stakeholder), 4a (demand driven model) and 4b (reduction of consumption) from the SBM.

6.3 - Woolpower

The third company differs from the previous companies. Woolpower differs from Björn Borg and Filippa K because it is a smaller and locally-based organization, with a local production and uses locally produced materials. The company's main focus in the initiative is to collect used material with the primary objective to reuse it in the production, and not let any material go to waste. This can be linked with the characteristics 3a (closed-loop systems) in the SBM, because an avoidance of waste material and an effort in reusing the wool closes the production loop with a responsibility of the product during its lifecycle.

After the interview, we understood that the company's submission initiative is linked with its stakeholder communication, in particular customer communication, because Woolpower will seek to promote environmental responsibility and engage its customers to become more aware of the environmental problems. We believe that the company's communication of environmental responsibility and customer engagement can be connected to the SBM through the characteristics 2a (stakeholder engagement) and 3b (treat nature as a stakeholder).

Regarding the organization's material use, especially the merino wool, which is a high quality wool that can't be mass-produced, it is our understanding that the company produces products of quality. This proves that the company has a demand-driven model, 4a (demand driven model), because the products are aligned with the customer's need.

Finally, we can also identify characteristics 1b (profit as a mean, not an end) from the SBM, because the company accounts for short economic gains in terms of more customer visits to the stores, which will increase the customer communication even more and is also seen as a business opportunity. One of the company's long-term goals is to make its brand signal social and environmental responsibility and implement it to the core values. We believe that this is a sign that Woolpower is approaching a sustainable business model.

6.4 - Phase model of sustainable development

The challenge with the phase model of sustainable development is to get a company to act in the same phase throughout the whole value chain since the motivation factors for sustainability might differ. It is common that managers in a company focus on economic maximization and deal with sustainability issue when external pressure forces them to. Meanwhile, an ordinary employee might rather focus on internal factors and care about the environment and thus, apply an active approach.

We chose to interview companies in the clothing and textile industry that we consider act with the aim to be in the proactive phase. The proactive approach is the best-ranked position for companies to be in, viewed from a sustainable and societal perspective. The reason is because those companies work for sustainability and take society into consideration without having the external pressure as the main force for their acting. Instead the interest comes from internal motivation. We interviewed the CSR managers at Filippa K and Björn Borg and the marketing manager at Woolpower and we consider these companies strive to be in the proactive position. According to us all three companies have a genuine interest for sustainability and they take responsibility for the environment. They do not have external forces and economical focus as their main pressure for their sustainable acting since they do not market themselves for being sustainable. Instead we think that the companies market themselves as the brand where sustainability is a part of their core values.

After analysing each company's sustainability business model it is notable that Filippa K is the company that has been working with sustainability for the longest time. They have developed sustainability through their recycling initiatives and after talking to their CSR manager we believe that their work was genuine from the start but during the progress it has also been successful from an economic point of view. It is clear that Filippa K will continue to develop and put more focus on recycling initiatives in the future. This is why we consider Filippa K to be a practical example for applying a proactive approach in the phase model of sustainable development.

When it comes to Woolpower and Björn Borg both companies will start a recycling initiative as a trial project. These companies have not come as far as Filippa K but they want to take responsibility for the environment and that makes them embrace the active approach in the phase model of sustainable development. However, both companies genuine strive to implement sustainability into the organisation.

6.5 - Discussion of analysis

In this thesis new textile initiatives has been explored in the Swedish textile and clothing industry. The initiatives have been linked with the concept of circular economy and the EU directive about waste. When we discuss the companies' initiatives further, we found it difficult to identify the characteristics number 1a (triple bottom line approach), which is about how the companies measure its performances. According to the model, all structural and cultural characteristics are equally important because they all contribute to a sustainable

business model. Nevertheless, we have decided to not discuss the characteristics 1a in our analysis, because it was very difficult to interpret or determine how the companies measure their performances with only the interviews as a basis. In other words, the focus in the interviews was not to understand how the organizations measure performance.

As a try to explain our view and perception of how companies are dealing with the sustainability issue or trying to transform the organization to become more sustainable, we would like to summarize an important learning from the course “Environmental Management” we read earlier this semester. The learning was that it is very complex to define the concept of sustainability because it has an infinite numbers of different definitions, where no one of them are right or wrong. That is something we have experienced in our thesis, after having interviews with different operators that all work with the sustainability issue in different ways.

There is a reason for why EU has introduced the waste hierarchy directive. The reason is to reduce waste and create a more sustainable society. This can be linked with the corporate initiatives that have been discovered in this thesis, because all steps in the waste hierarchy model are found in the textile initiatives. The purpose with the textile initiatives is primarily to re-use the collected garments and secondly recycle the textiles to the largest possible extent. The goal with the submission initiative is to avoid textile waste, which is also the last action in the waste hierarchy. Furthermore, the waste hierarchy can be linked with a circular economy approach. The goal is to leave the cradle-to-grave model, which is associated with the linear production system, and transition to the cradle-to-cradle model, where waste and emissions are avoided. The focus is instead to create resource efficiency in the economy.

Increased recycling and re-using will result in more local job opportunities. The digitization has resulted in a reduction of jobs but the solution is not necessarily resource efficiency and economic growth. Moreover, economic growth will gradually have to slow down when natural resources become scarcer.

The representatives from the interviewed companies proclaim that a change in the legislation system is required to achieve success in sustainable business. To implement recycling initiatives it has to be profitable for companies from economic point of view. This can be expressed by increased producer responsibility or an introduction of tax reforms regarding waste and the use of chemical. Furthermore, we believe that researchers should be more integrated and have more power to influence the decisions of the government, since they have the expertise and are best acquainted with the situation.

T4RI, is a trial project to affect the legislation system through gathering companies from the textile industry into a network to gain power. This is also why we believe that it is important that new sustainable textile initiatives are highlighted so other companies in the industry adapt the trend to reduce the environmental impact.

Moreover, it would be good if the government would focus on educating consumers even more about environmental issues and make them aware of it. It could be a key tool for creating a more circular economy, since the producers are dependent on what consumers demand. In that way the demand for more sustainable garments might also increase and so will the motivation for companies to prevent waste. It will then turn out to be both financially, socially and environmentally beneficial to apply a sustainable approach if consumers demand increases.

Finally, we are aware that we have only been in contact with the CSR managers for the chosen textile companies. The analysis is based on the statements of these representatives. This makes the thesis limited to sustainable perspectives of the companies and an exclude of economic aspects. The answers in the interviews might have been different if we chose to interview other or more representatives.

7 - Conclusion

We discovered that it is not many companies in the textile industry that has implemented recycling initiatives since it is not considered economic profitable yet. The chosen companies in this thesis are acting in different phases regarding their sustainability work but they are all progressing well. T4RI is a good example of a sustainable effort, which more companies should be involved in or take after similar kind of efforts.

When taking the circular economy perspective into account, legislation regarding textile recycling has to appear. Either the government can introduce tax reforms regarding waste and the use of chemicals or they can introduce producer responsibility, where the producers have to take responsibility for the whole value chain. In that case, if the producers are responsible for the end-product, they would manufacture more recyclable materials and the recycling of textiles would increase. This would make products last longer and the use of new raw materials would decrease, which is advocated from a circular economy perspective.

Recycling and re-using can be a future solution for both jobs and sustainable products, which in turn will benefit the environment. All the persons that we have interviewed agree on one thing, which is that there needs to be legislation regarding textiles. We consider that there is a high probability that this will happen and that the barriers regarding waste will increase. We also believe that consumers and producers have become more interested and informed about environmental issues, which will also result in a demand for legislation.

7.1 - Suggestions for future research

The corporate initiatives in the industry are still in progress, which makes it interesting to follow up the study when they are developed on the Swedish market to see how they affect the companies' business models.

A change in the legislation system seems to be an important factor to motivate companies to become more sustainable and prevent waste. To increase the pressure to enable a legal change consumer demand has to increase as well. This occur through increased consumer motivation and education, which can be provided from both government and companies. To develop the study it is possible to compare the circular economy approach to other industries and identify similar initiatives as a step towards a more sustainable society.

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8.5 - Pictures and tables

Figure 1:

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Figure 2:

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Table 1 & 2:

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9 – Appendix

9.1 - Concept definitions

To help you as reader to better understand the content in the thesis, some basic definitions of concepts will be presented. The definitions are taken from the biggest Swedish encyclopedia, Nationalencyklopedin (Ne.se, 2014).

Textiles: Generic term for materials and goods made of textile fibers. This includes base materials used for manufacturing garments, but also processed and finished garments.

Textile and clothing industry: Involves industries concerned with manufacturing and production of yarn, fabrics and materials.

Reuse: Materials that are used repeatedly with the same or similar purpose as the original, without any processing. This means that a garment is being used as a garment once again.

Recycling: Reversal of used materials or waste with different purposes. Either used for manufacturing new garments or other use of the textiles' characteristics.

9.2 - Interviews

9.2.1 - Intervju, Maria Sandow, Svensk Handel, 17/4 2014 kl. 9.30

Telefonintervju

- Presentation av oss och vårt arbete
- Vem är du?
- Vad är ditt yrke?
- Vad är T4RI för initiativ?
- Vilka företag medverkar i initiativet?
- Vad är syftet med T4RI?
- Finns det andra liknande initiativ på den svenska klädmarknaden?
- Generellt sätt, hur bra tycker du svenska klädföretag jobbar kring insamling, återanvändning och återvinning av textilier?

-Fråga om Marias samtycke om publicitet eller om hon vill vara anonym i vår uppsats

- Erbjud att skicka färdigställt arbete

9.2.2 - Intervju, Tobias Jansson, 22/4 2014 kl. 10.30

Plats: Lusthuset, Södra Larmgatan 6

- Presentation av oss och vårt arbete
- Vem är du?
- Vad är ditt yrke?
- Vad innebär cirkulär ekonomi?
- Hur kan textil- och klädbranschen i Sverige kopplas till cirkulär ekonomi?

- Generellt sett, hur många företag jobbar kring cirkulär ekonomi i Sverige?
(är det ett nytt/implementerat/vanligt begrepp som många jobbar kring?)
- Vilka insamling- och återvinningsstrategier eller initiativ kring detta finns det idag på svenska klädmarknaden?
- Vilka företag anser du jobba bäst med det?
- Vad tror du är syftet med att företagen implementerar dessa strategier och initiativ? (värna om miljön/ ekonomiska fördelar/andra vinster?)

- Fråga om Tobias samtycke om publicitet eller om han vill vara anonym i vår uppsats
- Erbjud att skicka färdigställt arbete
- Fråga om tips på författare

9.2.3 - Intervju, Victoria Swedjemark, Björn Borg, 23/4 kl.14.00

Telefonintervju

-Presentation av oss och vårt arbete

- Vem är du?
- Vad är ditt yrke?
- I er senaste hållbarhetsredovisning skrev ni att ni hade planerade aktiviteter under 2013 varav en av dem var att starta en insamling av uttjänta plagg i butik, på försöksnivå. Vad innebär detta?
- Vad händer med de insamlade plaggen?
- Vad var ert syfte med detta initiativ?
- Hur har det gått?
- Hur kommer ni att gå vidare med detta initiativ?
- Har ni andra liknande strategier eller planerar ni att införa det?

- Fråga om Victorias samtycke om publicitet eller om hon vill vara anonym i vår uppsats
- Erbjud att skicka färdigställt arbete

9.2.4 – Intervju, Elin Larsson, Filippa K, 30/4 kl. 09.00

Telefonintervju

-Presentation av oss och vårt arbete

- Vem är du?
- Vad är ditt yrke?
- Vi har läst på er hemsida att kunder har möjlighet att lämna in använda plagg. Hur jobbar Filippa K med insamling av textilier?
- Vad händer med de insamlade plaggen?
- Vad är ert syfte med detta initiativ?
- Hur har det gått hittills med insamlingen?
- Vi läste även att ni har andra initiativ. Kan du ge några exempel?
- Har ni räknat med några ekonomiska vinster med dessa initiativ?

- Hur marknadsför ni dessa?

- Fråga om Elins samtycke om publicitet eller om hon vill vara anonym i vår uppsats

- Erbjud att skicka färdigställt arbete

9.2.5 Intervju, Karin Sundström, Woolpower, 5/5

Mailintervju

-Presentation av oss och vårt arbete

-Vem är du?

-Vad är ditt yrke?

- Hur jobbar/kommer Woolpower att jobba med insamling av textilier?

-Varför startade ni denna insamling?

- Vad är ert syfte med detta initiativ?

- Vad händer med de insamlade plaggen?

- Har ni räknat på några ekonomiska vinster med detta initiativ?

- Hur marknadsför/kommer ni att marknadsföra detta?

- Har ni andra liknande initiativ eller planerar ni att införa det?

9.3 The Sustainability Business Model

	Economic Characteristics	Environmental Characteristics	Social Characteristics	Multidimensional or Holistic Characteristics
Structural attributes	External bodies that track performance of companies use a triple bottom line (TBL) approach.	Threefold strategy: offsets (do no harm but make amends if you do), sustainable (do no harm), restorative (leave the world better than you found it)	Stakeholder engagement skills: understanding stakeholders' needs and expectations (being relevant to stakeholders).	System approach: <ul style="list-style-type: none"> • Cooperative business strategy and planning. • Collaborative model including supply chain, competitors, government agencies, communities.
	Lobby industry and government for changes to taxation system and legislation to support sustainability.	Closed-loop systems: responsible for product throughout its lifecycle.	Educate stakeholders; "relentless" communication.	TBL approach to measure organizational performance.

	Keep capital local: local shareholders and investment in local sustainability initiatives.	Implement a services model.	Implement stakeholder consultation program.	Institutionalize sustainability in the business: “relentless” communication, stakeholder education, leadership, champions, and align internal performance measures.
		Industrial ecosystems and stakeholder networks.	Get “buy-in” from internal and external stakeholders.	Demand-driven model, not supply-driven model (driven by what people need, not driven by companies trying to get people to buy more).
Cultural attributes	Profit is a means not an ends. Business makes a profit to do something more. “Higher purpose” to business than making money.	Treat nature as a stakeholder.	Stakeholder approach (managing the organization for the benefit of all stakeholders and not prioritizing shareholders’ expectations above other stakeholders).	Medium to long-term focus.

	Shareholders invest for social & environmental impact reasons as well as for financial reasons.		Alignment of stakeholder expectations.	Reduction in consumption.
	Shareholders temper expectations for short- term financial returns.		Sharing of resources (people, profits, and time) among stakeholders to achieve sustainable outcomes.	
			Relationship building (trust, two-way loyalty, honesty, integrity, and fairness, equity).	

(Stubbs & Cockling, p.120)