

**Can fashion retailers operate in a  
more socially and  
environmentally responsible way,  
and which are the feasible  
approaches?**

---

Bachelor Thesis for Obtaining the Degree

Bachelor of Business Administration in

Bachelor of Science

International Management

Mak Ho Sze

1721504

## Affidavit

I hereby affirm that this Bachelor's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed.

The thesis was not submitted in the same or in a substantially similar version, not even partially, to another examination board and was not published elsewhere.

---

Date

---

Signature

## Table of Contents

<b><u>1. Introduction</u></b>	5-6
<b><u>2. Literature Review</u></b>	6-23
<u>2.1 Globalization</u>	6-8
<u>2.2 Sustainability</u>	8-9
<u>2.3 Fashion Industry</u>	9-12
<u>2.4 Fashion Retail and Sustainable Concerns</u>	13-16
<u>2.5 Fashion Retail and Sustainable Practices</u>	16
<u>2.5.1 Environmental Sustainable Practices</u>	16-19
<u>2.5.2 Social Sustainable Practices</u>	19-22
<u>2.6 Literature Gap</u>	22-23
<b><u>3. Methodology</u></b>	23-25
<b><u>4. Hypothesis</u></b>	25-26
<b><u>5. Results</u></b>	27-51
<u>5.1 Descriptive Statistics</u>	27-43
<u>5.1.1 Role in the Fashion Industry</u>	27-29
<u>5.1.2 Description of Fashion Business Involved</u>	29
<u>5.1.2.1 Vision of the Fashion Brand</u>	30
<u>5.1.2.2 Target Customer</u>	30-31
<u>5.1.2.3 Product Price Range</u>	32-33

<u>5.1.2.4 Store Type</u>	33
<u>5.1.2.5 Target Continent</u>	33-34
<u>5.1.2.6 Garments' Manufacturer(s)</u>	34
<u>5.1.3 Ideas related to Sustainability</u>	35
<u>5.1.4 Current Fashion Industry Environment</u>	35
<u>5.1.4.1 Major Change(s) Required to Hold for Sustainability</u>	36
<u>5.1.4.2 Main Obstacles to Overcome for Sustainability</u>	37
<u>5.1.4.3 Individual Contribution in the Fashion Industry</u>	38
<u>5.1.5 Evaluation of Sustainable Practices</u>	38-43
<u>5.2 Inferential Statistics</u>	43-49
<u>5.2.1 Hypothesis 1</u>	44-46
<u>5.2.2 Hypothesis 2</u>	46-49
<b><u>6. Discussion</u></b>	50-53
<b><u>7. Conclusion</u></b>	53-55
<b><u>8. Bibliography</u></b>	56-68
<b><u>9. Appendices</u></b>	69-74
<u>9.1 Appendix 1 – Global levels of biocapacity, ecological footprint and ecological reserve</u>	69-70
<u>9.2 Appendix 2 – Questionnaire</u>	71-74

## Abstract

The general business operation model has been reformed to be more globalized, because of technological and social development. With these changes, overconsumption in the apparel industry has become a popular trend due to the introduction of fast fashion. Together with negative impacts of fashion retailing companies, sustainability is being damaged environmentally and socially. As the adverse influence of the industry expands worldwide, various sustainable practices specified in the fashion supply chain model are applied in different scales. This study will focus on the sustainable effects on the sustainable practices from the perspectives of the fashion retailers and students who study fashion related programs. Hence, this paper investigates variables, feasibility, usage range and the likelihood of using, which affect the degree of sustainable impacts in the chosen 21 sustainable practices. The aim of the thesis is to process data obtained quantitatively, along with the application of survey. The survey is designed according to existing literature. It was distributed and 51 responses were received in total. Probable relationships of the factors were examined, and used to refer to the hypothesis of this research. In addition, the current industrial environment and insights about sustainability in the field are analysed.

The data collected and testing results provide proof for the hypothesized model. A positive relationship is identified between the variables in some of the chosen practices. The variables in each sustainable practice are also rated with a scoring system. Also, the meaning of sustainability, major obstacles and changes that required to hold in the fashion industry are clarified, with support from the responses collected.

Consensuses and disagreements among the primary and secondary resources about sustainability in the apparel industry are concluded in this study.

Key words: Globalisation, social sustainability, environmental sustainability, fashion industry, fashion supply chain, fast fashion, slow fashion, corporate social responsibility, overconsumption, product durability.

## 1 Introduction

We live in a world that some may find abnormal, as there are now longer summers and shorter winters. This can be explained by the damaged ecosystem caused by years of social development from human activities. Under the presence of globalization, higher emissions of pollutants take place intensively (Dinda, 2006). Among different industries, the retail sector has grown at a rate of over 3% of since 2008, which is over 30% of the total Gross Domestic Product in the world (Eastern Daylight Time, 2016). In addition, in the fashion retail sector, there is a continuous waste rate of over 10% of fabric that is not utilized and discarded in the manufacturing process (Rissanen, 2005). The awareness of sustainability and ethical conduction is raised with the new concept of “ethical consumerism” in the fashion industry (Moisander & Personen, 2002; Pookulangara & Shephard, 2013). Also, corporate social responsibility has been an issue introduced in businesses since 1950 (Poddi & Vergalli, 2009; Steuer & Konrad, 2009).

Under the required increasing expansion rate and the phenomenon of climate change, the fashion industry is being influenced and transformed to be sustainable. Diverse approaches are imposed by various stakeholders in the industry. According to Pookulangara and Shephard (2013), the slow fashion movement raises the practices of the usage of green fibers, technological utilization and more thorough consideration for supply chains. Moreover, fashion companies actively execute corporate social responsibility in their businesses (Dickson et al., 2009). Thus, further improvements on performing socially responsibly are continuously discovered. In Déri’s research (2013), the introduction of the code of conduct among fashion retail companies has added into their supply chain management. Several initiatives of the code of conduct are included, for instance, the improvements on skills and capacities of producers.

However, an overview of current sustainable business strategies while showing their feasibility, usage range and likelihood of using is missing. To evaluate the variables of sustainable practices, corporations may consume extra resources and costs, such as more labour forces and lengthier time. Hence, the intention of improving their social performance may be weakened accordingly.

From this research, a list of sustainable practices will be generated by reviewing different relevant studies and the current fashion retail industry. Besides this, insights of the potential stakeholders will also be analysed, in terms of the sustainability in the fashion retail. The survey's target population are people who are part of the industry, for instance, fashion designers, employees in logistic companies and students who study fashion. Open-ended questions are included in the survey specifically, in order to collect the views and recommendations from the respondents. In this research, the listed sustainable practices will be evaluated by giving ratings and rankings with the three listed variables. Based on this list, a survey will be conducted in order to investigate the feasibility, usage range and the likelihood of using each sustainable practice. The design of the hypothesis enables further possible relationships between the variables in each sustainable practice to perhaps be found.

To summarise, the evaluation of sustainability for the sustainable practice list will be concluded, providing additional information gathered from the respondents. This will be the evaluation of current practices, and that it can fluctuate in the future.

## **2 Literature Review**

### **2.1 Globalization**

Referring to the Cambridge Academic Content Dictionary (n.d.), globalization is “the development of closer economic, cultural, and political relations among all countries of the world as a result of travel and communication becoming easier”. The world development over recent years are defined by summarizing the impacts of the economic, cultural, social and political alterations (Guttal, 2007). Researchers and organizations have a large range of its meanings. In this research, global improvement is described as “the acceleration and extension of the interdependence of economic and business activities” (Shenkar et al., 2014).

The operation of businesses can be expanded to the globally due to globalization. Hence, international business has increased, which indicates business events in relation to the exchange of tangible and intangible products without geographical barriers (Shenkar et al., 2014). Information, raw materials and final goods can be

exchanged in the transfer. Financial, political and social interactions are more frequent without geographical, time and technological boundaries. Business may expand to foreign countries. Multinational corporations have started appearing in the business environment, with rising international business practices.

In the supply chain, global companies may outsource their operations to a domestic or foreign third party. In Figure 1, a growing expenditure in the outsourcing market was predicted, which increased from US\$ 600 billion to nearly US\$ 1000 billion within four years, starting from 2016 (Andriopoulos et al., 2019). In the future, a continuous increase in the global outsourcing and shared services with a gradual increase of the required spending can be concluded.



Figure 1. Expenditure in Global Outsourcing and Shared Services Market in 2016-2023 (Andriopoulos et al., 2019)

With current business development, the world's consumption level is increasing alongside increasing global trade of consumer goods. Based on information retrieved from the World Bank database (2019) and the World Integrated Trade Solution database (2019), the rising trends are analysed in Figure 2 and 3 respectively. From Figure 2, the world final consumption expenditure develops significantly in the period from 2002 to 2008, which rises over \$170 trillion. Although a slight decrease of expenditure occurs in 2009, it gets back on a growing track afterwards. Besides this, in Figure 3, a gradual expansion of the international trade of consumer goods is shown from 1988 and 2017. In particular, the amount exchanged in 2003 rises approximately



US\$ 25 trillion significantly. An expansion of the world trade amount can be predicted in the future, according to the growth in 2017.

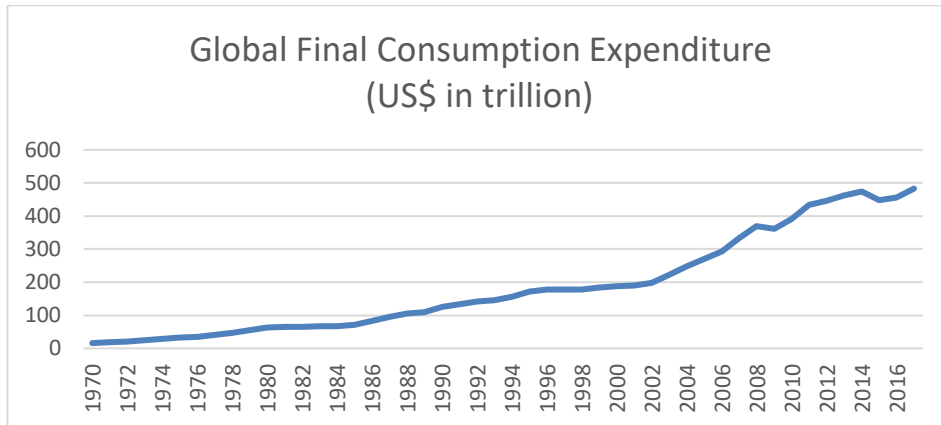


Figure 2. Global final consumption level (in US\$ trillion) (World Bank, 2019)

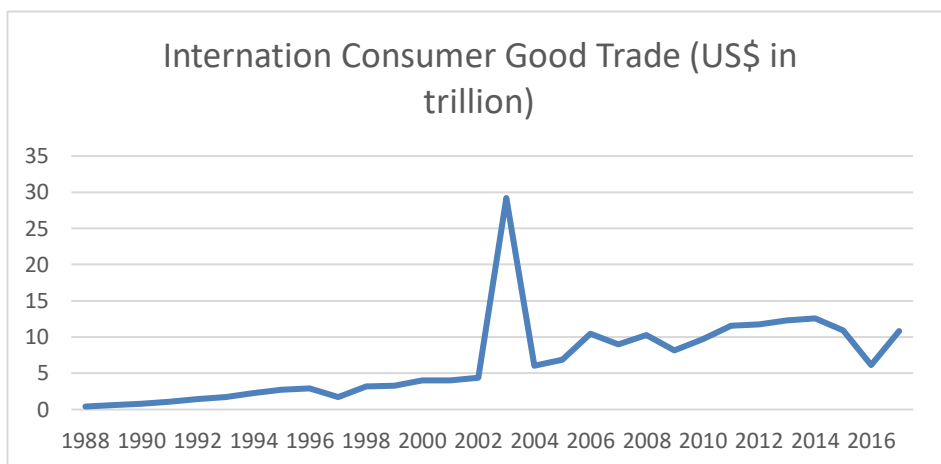


Figure 3. Global trade of consumer good (US\$ in trillion) (World Integrated Trade Solution, 2019)

## 2.2 Sustainability

With regard to the high consumption of final goods and the globalization phenomenon, the exploitation of resources will further increase, satisfying the rising demand. According to data retrieved from the Global Footprint Network (2019), the total global ecological footprint has increased, along with a regression in the Earth's biocapacity. The world overconsumption of resources is indicated by calculating the level of the ecological reserve, and subtracting a specific year's biocapacity with the

required world's ecological footprint (Global Footprint Network, 2019). In Appendix 1, between 1961 to 1969, the levels of global ecological reserve are positive values. A surplus on the total quantity of the global resources is reflected. However, after 1970, the shortage of resources is observed, due to low ecological reserve levels (ibid). The Earth has already started being incapable to support our increasing demand since the year of 1970 (Watts, 2018). Based on past records of resource consumption, people started over-using resources in 1970 (Earth Overshoot Day, 2019). The consumption keeps increasing further, and on 1<sup>st</sup> August 2019, over 1.5 units of the Earth's biocapacity are required to meet the current consumption level. The problem of resource exploitation is severe on a global scale.

Overall, the depletion of resources is summarized in terms of environmental degradation (Johnson et al., 1997). A widely discussed topic, sustainability is introduced under the relationship between the growing degradation and the existence of global environmental problems (Spindler, 2013; Williams, 1993). In the declaration of the United Nations Academic Impact (n.d.), sustainability is defined as "Meeting the needs of the present without compromising the ability of future generations to meet their own needs." The idea of sustainable development was recognized in the United Nations World Commission's report on Environment and Development (1987). The Triple Bottom Line is created as representing the pillars of sustainability, which include social, environmental and economic goals (Jeurissen, 2000). It has raised the attention of researchers from diverse fields and drives the pressure of considering sustainability in the business operations across different industries (Misopoulos et al., 2018). The issue of corporate social responsibility is raised within these studies.

### **2.3 The Fashion Industry**

Clothing is an essential type of consumer product for the human species, which initially provided protection from environmental conditions (Harms, 2014). Then, people started wearing clothes as decoration and differing themselves in communities (Horn, & Gurel, 1981; Ross, 2008).

The term fashion, was created to explain the impulsive affirmation of people's identity at a specific moment in a particular time (Brun et al., 2008). The concurrence of the

fashion and clothing industries is being noticed in the society (Priest, 2005). In this research, the fashion industry is introduced. To clarify the concept of the fashion industry, it is defined as identical as “fashion retail”, and considers the entire textile and clothing industry (Strähle and Müller, 2016).

In the fashion industry, different stakeholders from various professions are required to participate. According to Jones (2002), the flow from the production to the consumption of an apparel item is shown in the textile-apparel pipeline model. The interaction of the stakeholders and the material’s flow can be analysed and sorted into levels. In the model, the first and second level are the fabrics’ production and the textile manufacturing respectively. On the second level, textiles are made and sold to a fashion corporation for its apparel production. On the last level, the fashion products are distributed and traded. The overview of the whole model is shown in Figure 4.

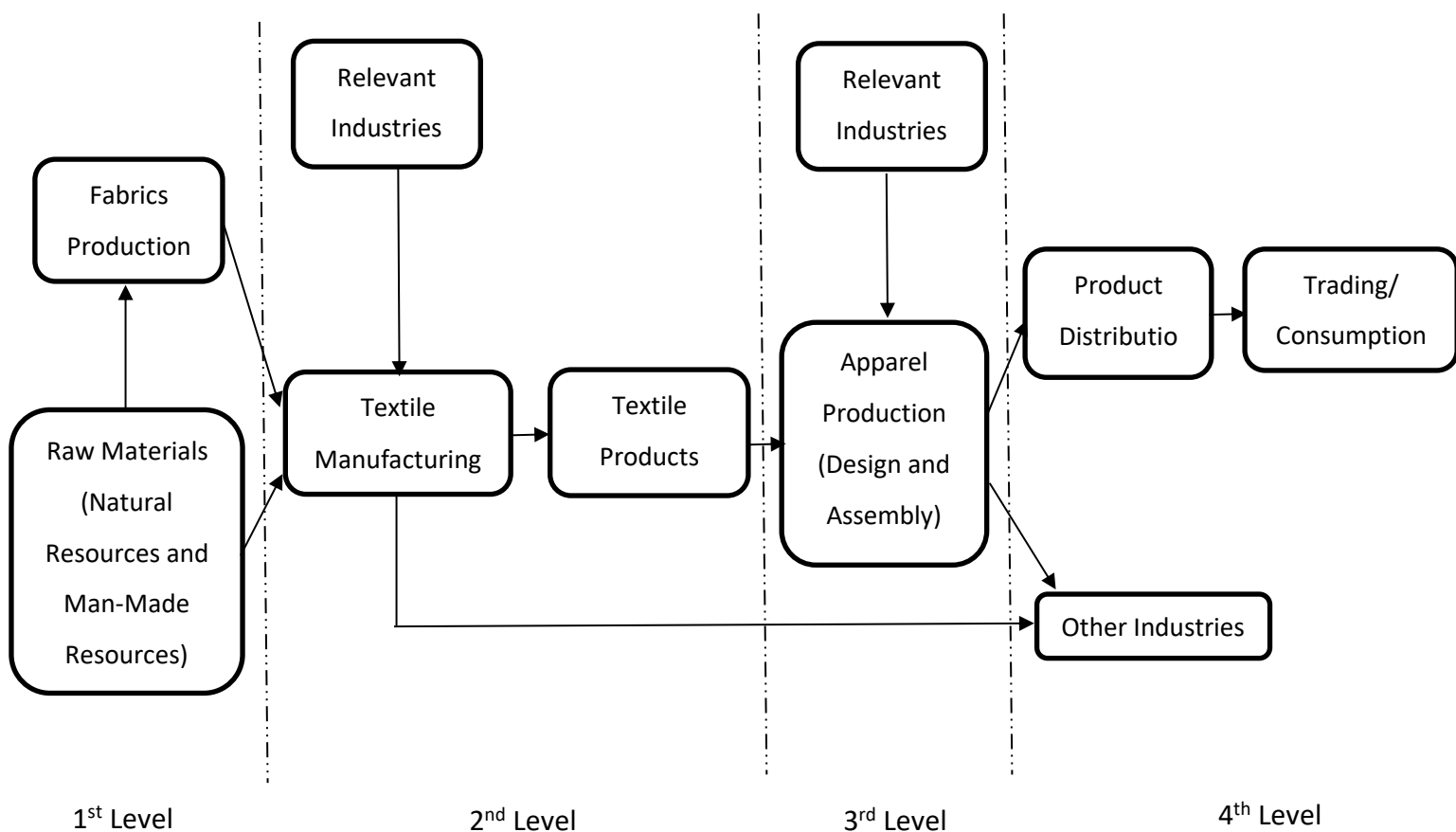


Figure 4. The textile-apparel pipeline. (Jones, 2002)

Meanwhile, the “fast fashion” model has become a popular business practice, in light of the success from the first adopter of this model, Inditex (Crofton & Dopico, 2007).

It aims to shorten the lead time between stages of the clothing design and the customer consumption (Taplin, 1999). Shifting the updated fashion trends from runway to retailers as fast as possible to the society (Hines, & Bruce, 2001). The low product price, trendy product offerings with a short product life cycle are the characteristics of the fast fashion business (Bruce, & Daly, 2006). In addition, the world apparel market has been growing consistently, as reflected from the data provided by O’Connell (2019) in Figure 5. From 2012 to present, the growth rate has increased by 3% approximately. The entrance of new global fashion companies leads the changes in the fashion retailer’s supply chain (Ferne, & Grand, 2015).

The most notable reform of the fashion industry’s supply chain is the relocation of business operations. The sourcing and supply chain functions are being offshored (Ferne, & Perry, 2011). Outsourcing logistics has become popular among fashion corporations (Wen et al., 2019). With the high labour-intensive manufacturing of garments, specialised manufacturers and suppliers are chosen externally by using outsourcing (Taplin, 1997; Ni, & Srinivasan, 2015; Georgiadis, & Rajaram, 2013). The manufacturing process is operated in low-paid nations (Ferne, & Sparks, 1998). Hence, fashion companies enhance the flexibility and competitiveness of their business by outsourcing supply chain functions (Wen et al., 2019).

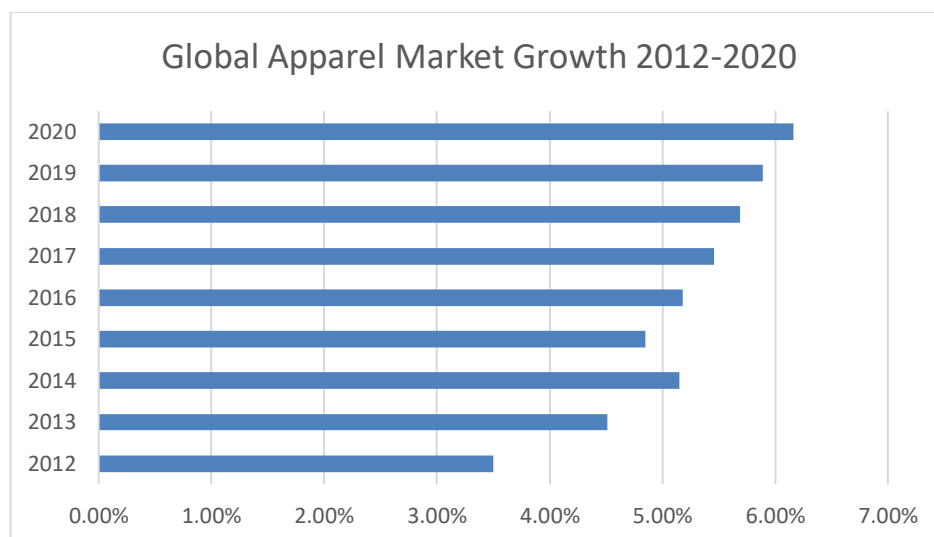


Figure 5. Global Apparel Market Growth 2012-2020 (O’Connell, 2019)

A general international fashion retail supply chain model summarises the influences brought about by the globalisation towards the fashion industry (Ferne, & Grant,

2015), which is presented in Figure 6. The diagram assumes the types of engagement for a local retailer, the offshored sourcing, product production in foreign countries, and the distribution and consumption in the local market. Notably, two-way communication takes place among the fashion retailer and cooperated parties. In general, the general public also participates in the fashion industry. In the fashion industry, particular roles are introduced, which are the post-consumer actors and service providers (De Brito et al., 2008). Based on the definition of their role (De Brito et al., 2008), the recycling companies in the second-hand market and the related software developers can be examples.

Overall, the fashion industry has experienced operational changes based on the introduction of fast fashion and the offshoring of supply chain functions, with the effects of globalization.

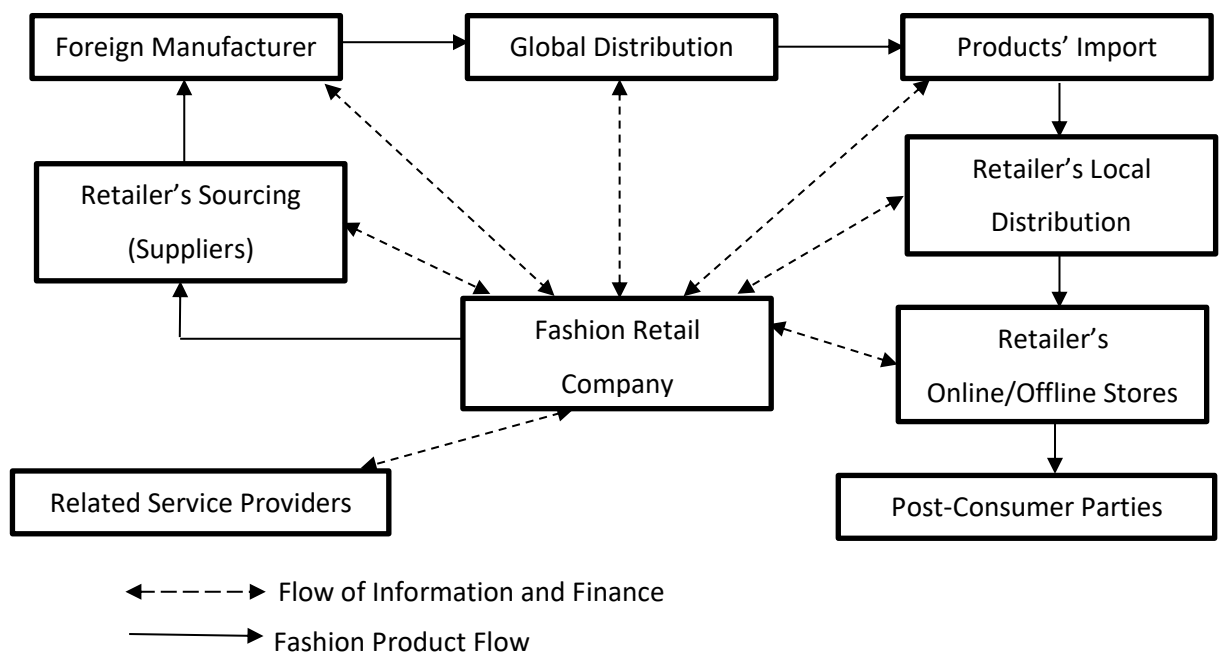


Figure 6. General international fashion retail supply chain (Ferne, & Grant, 2015; De Brito et al., 2008)

## 2.4 Fashion Retail and Sustainable concerns

The fashion retail business influences the condition of the environment through the garment's production and textile manufacturing. Negative environmental impacts can be a result of the production of fibres and the manufacturing of garments. One instance being a high annual global carbon emission in the fashion industry, compared to the logistic industry (The World Bank, 2019).

The environmental effects of raw materials production accounts for a huge portion in the fashion retail sector (Šajn, 2019). In the global fibre production industry, over 100 million mt of fibres are produced, which has doubled in quantity in the last 20 years (Opperskalski et al., 2019). The types of fibre produced in the world is reflected in Figure 7 (Opperskalski et al., 2019). From this figure, polyester is produced the most, which accounts for over 50% of the global fibre production market. Polyester is a non-biodegradable fibre made from fossil fuels (Šajn, 2019). The energy-intensive production of polyester acquires fossil fuels as the raw material (Winkle et al., 1978). Over 330 million barrels of crude oil was extracted to produce polyester fibres in 2015 (Common Objective, 2002). High consumption of non-renewable resources can be concluded. Nearly 15 kg of carbon dioxide is emitted in the process of combusting fossil fuels to producing a kilogram of polyester (ibid). In addition, the dyeing of polyester causes can cause dermatitis for those who are allergic (Hatch, 1984).

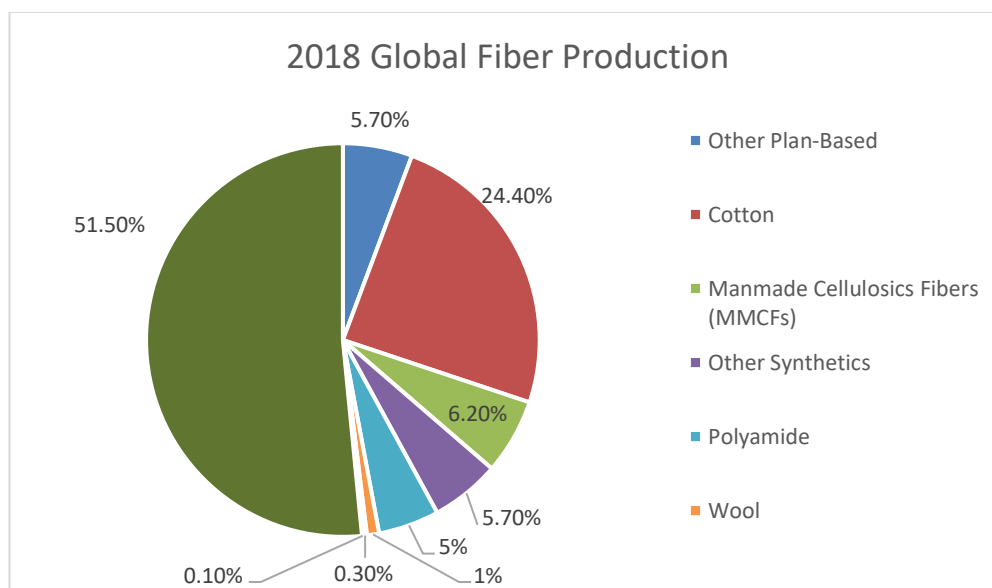


Figure 7. 2018 Global Fiber Production (Opperskalski et al., 2019)

The production of cotton, the second most fiber produced in Figure 7, also harms the global environment. Pesticides and neurotoxic chemicals are used in cotton farming because cotton plants are vulnerable from attacks from pests (Che, & Burns, 2006; Déri, 2013). On top of killing pests, human and animals can be affected by the toxic chemical usage (Environmental Justice Foundation, 2007). In the list of chemicals used by cotton farmers, aldicarb is the most poisonous for human health (Kishi, 2002). Headaches, diarrhea, loss of coordination and death can be effects of pesticides (New Jersey Department of Health and Senior Services, 2001). In a report from the Environmental Justice Foundation (2007), farmers are affected the most because of insufficient farm safety precautions and the inappropriate storage method of pesticides.

Apart from the production of raw materials for fashion items, the manufacturing and assembly of garments causes environmental pollution as well. In different production methods of garments, wet processing is one of the indicated potential environmental pollution sources (Lomas, 2008). The preparatory processing, dyeing and finishing are main stages of the wet processing (Saxena et al., 2016). The relevant sustainability problems can be illustrated by denim fabric production. Firstly, the cotton fibres are prepared by dissolving the waxy surface, known as the “scouring” procedure, with aqueous sodium hydroxide (Saxena et al., 2016; Chen, & Burns, 2006). Indigo dye is commonly used in the following process of dyeing, which is an obstinate chemical, with low quality dye (Paul, 2015; Balan, & Monteiro, 2001). Lastly, the finished denim products are dried and washed numerously during stone washing to create a fading pattern (Paul, 2015). A large amount of stones and toxic chemicals are applied in the washing process (Paul, 2015), which results in problems of water contamination and intensive water consumption. In wet processing, effluent problems are raised by the discharge of used chemicals to rivers (Lomas, 2008). High water conservation also results in environmental water scarcity (Moore, 2011; Bartels, 2012).

In the future, the high resource consumption and high emission of pollution will be more severe based on the remarkable forecasted increase in the fashion industry’s environmental footprint (Pulse of the Fashion Industry, 2017). Despite the negative environmental outcomes, social sustainable problems are also raised in the stage of manufacturing and consumption in the fashion supply chain (Déri, 2013). For instance,

Brotherton (2020) reported that Bangladeshi workers in clothing factories have been fighting for fair wages and working conditions for over 10 years by holding protests.

In fashion retail manufacturing, underpayment and poor working conditions are social adverse impacts (Pulse of the Fashion Industry, 2017). Lack of management and cooperation with dispersed sourcing companies are the causes of the problems (Déri, 2013). With poor labour practices, textile workers in developing countries are paid a low wage which is 50% less than the living wage (Hewa Kuruppuge, & Prasanna, 2014). Research from the University of Sheffield (Edwards et al., 2019) shows that garment labourers continue to be paid below the living wage based on the unmet wage compliance from garment manufacturing companies. Although salaries have increased in 2011, their general wage is only slightly higher than the respective living wage, which is less than 37%, in the United States and developing countries it studied on (Worker Rights Consortium, 2013).

Apart from the problem of insufficient salary payment, the mistreatment of workers is also concerning. In these working environments, high gender discrimination and poor health and safety standards can be found. From the Clean Clothes Campaign website (2020), textile factories intend to recruit women who are single and childless, and yet will encourage them to sign agreements on raising children during their employment period. Recruiters prefer females rather than males due to national cultural stereotypes, where women are considered passive and have low social status (Labor Behind the Label, 2020). In addition, sexual harassment is common in garment factories (Kashyap, 2019). Based on the analysis from International Labor Organisation (2019), sexual harassment is a major concern among workers. From the result of their survey, four of every five workers state the worry on being sexually harassed or touched in their workplace. The occurrence of sexual harm is prevalent in employment relationships where females are the subordinates of male supervisors and managers in general (Global Labor Justice, 2019). Textile workers may be in an insecure position because of improper operation management.

Another social sustainability concern, the “throwaway mindset”, is shaped among consumers (Déri, 2013). With the popularity of fast fashion, textile products are designed to be low quality (ibid). Shorter product life cycle is often a result, where fashion items are already unwearable before being out of the current fashion trend



(Zamani et al., 2017). People will purchase products more frequently because of low product durability. In terms of clothes durability, there are two types: physical durability and the emotional durability, which represent the product's resistance against damage and wear, and the duration of the product's attractiveness towards consumers respectively (Anthesis, 2015). In the aspect of physical durability, fashion products will be less durable, due to fast fashion business practices. In the aspect of the emotional durability, the products can be also considered as less durable. A dynamic consumption based on affordability is suggested over numerous seasons of apparel products in a year (Cachon, & Swinney, 2011; Déri, 2013). Replacement of clothes becomes more convenient than repairing in the fast fashion clothing (Harris et al., 2015). Based on the problem of low emotional durability, over-purchasing and impulsive purchasing in fashion stores can be found (Morgan, & Birtwistle, 2009; Mintel, 2007).

Overall, the production and manufacturing processes of fashion brands lead to negative impacts on the level of sustainability in environmental and social aspects. Excess consumption of fashion products is another sustainable problem, based on weak product durability. The global fashion society is generally running unsustainably.

## **2.5 Fashion Retail and Sustainable Practices**

The sustainability of fashion retail has been questioned recently, for instance the high disposal rate of end-use fashion products (Global Fashion Agenda, 2017), underpaid workers in manufacturing factories (Kitroeff, 2019) and the overproduction problem (Cernansky, 2020). Additionally, since the triple growth of online searches for "sustainable fashion" (Berg et al., 2019), the trend of rising eco-consciousness among customers can be found. Thus, researchers have suggested approaches to handle the sustainability concerns in the fashion industry.

### **2.5.1 Environmentally Sustainable Practices**

Firstly, backward supply chains are integrated with forward supply chains and form a close-loop supply chain (Oh, & Jeong, 2014). Unwanted or defected final apparels from customers are collected back and sent to consolidation centres or suppliers (Atasu et al., 2013). In addition, new supply chain functions are added, such as

gatekeeping, collection, sortation and disposition of apparels (Schwartz, 2000, & Tibben-Lembke, & Rogers, 1999). The overview of the integration was introduced by Beh et al. (2016). The simplified diagram that focuses on the backward supply chain is shown in Figure 6. In the diagram, products are first collected from customers in the retail stores. Then, they are disassembled into useful resources or newly finished products. After that, they will be reused by re-entering the company's forward supply chain. Otherwise, the unwanted final items will be donated to charitable organizations or sold in secondary markets.

Besides this, the management of a product's distribution is concerned in terms of logistics and transport function in the close-loop supply chain (De Brito et al., 2008). High demand on using clean transport modes (rail, maritime and inland waterways) and flow management optimization can be observed (ibid). Fashion retailers may adopt various relevant green sustainability distribution programs. For example, Hennes & Mauritz (H&M) reduces energy consumption and carbon emission effectively in its distribution stage (Hennes & Mauritz, 2020a). They have successfully shifted over 80% of products to be transported through sea and rail between their suppliers and distribution centres (Shen, 2014). Also, it cooperates with eco-conscious logistics companies, Green Freight Asia, BSR's Clean Cargo and Network for Transport Measures' Pathways Coalition (Hennes & Mauritz, 2020b). With these logistics practices, the fashion industry can be sustainable.

At the same time, the rental business is evolving in the fashion industry due to the high demand for consuming new products and rising interest in holding sustainable fashion (Amed, et al., 2018). Fashion retail companies establish their own rental stores or collaborate with existing rental stores (Little, 2019). The value of the online clothing rental market can grow nearly 10% in 6 years from 2017, which reaches to over \$1.9 million in 2023 (Iqbal, 2017). Last year, the URBN Family created Nuuly as their own rental online store (Moore, 2019). Consumers can enjoy its services with a monthly subscription. Nuuly's subscribers can borrow fashion items with a significant low price, which only costs a tenth of the retail price. Instead of launching a rental program individually, building partnerships with online rental agencies can be the alternative for fashion brands. Rent the Runway is a competitive rental agency that sells products from over 550 fashion designers and brands (Rent the runway, 2020). By paying less

than \$200, customers can rent unlimited number of products per month (Little, 2019). Not only fast fashion brands, luxury brands are also starting to join in the rental business market. Popular luxury brands, such as Prada, Gucci and Chanel, cooperate with My Wardrobe HQ to deliver rental services (My Wardrobe HQ, 2020). By developing the rental business, the fashion industry can be sustainable, as well as improve profitability of fashion retail.

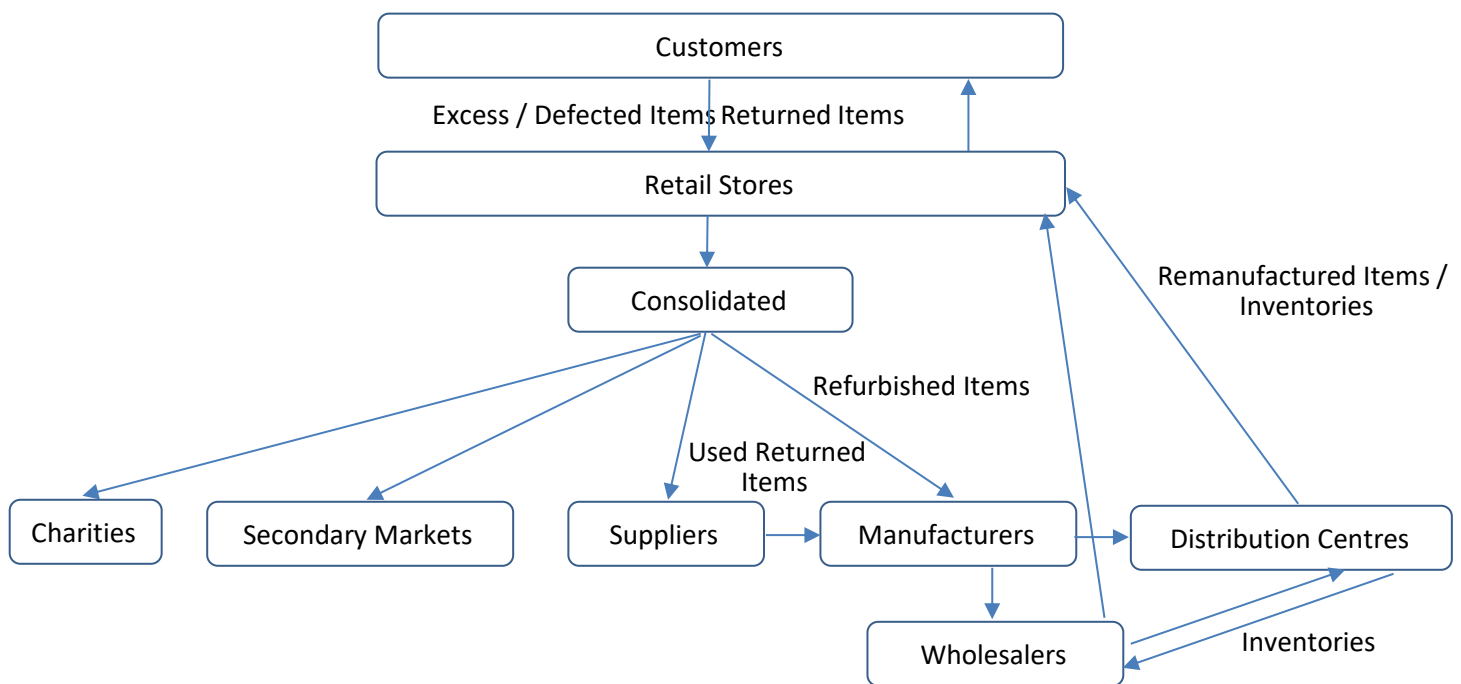


Figure 6. Simplified reverse logistics systems captured from “Figure 1. Typical retail forward and reverse supply chains” (Beh et al., 2016)

Furthermore, the “slow fashion” movement exists to promote sustainability by exercising slow down actions through the fashion cycle (Jung, & Jin, 2014). To improve environmental sustainability, more durable and sustainable fabrics have been invented for fashion brands. For instance, organic hemp fabric has been invented to improve the product’s strength and toughness (Ramadan, et al., 2017). Hemp clothing collections can be found in various fashion brands. At Patagonia, an individual line offers workwear and sportswear made with hemp, organic cotton, recycled polyester and TENCEL’s fabrics (Patagonia, 2020). Hempy’s sells specifically hemp fashion items and other living necessities in the United States (Hempy’s, 2020). Furthermore, a new durable Japanese fabric, Sasawashi, is generated by blending and weaving Japanese

paper and a herb plant. This results in outstanding abilities on antibiotic and resistance against washing (Sasawashi, 2020). Linda Loudermilk, who is an eco-couture designer, uses these fabrics in her collections (Sasawashi, 2020; Firth, 2010).

Lastly, fashion retail has adopted new sustainable dyeing skills in the manufacturing process. For the common usage of cotton, sustainable dyes are created and applied. One of these dyes is AVITERA® dyes, which is a restricted arylamine-free chemical for producing cellulosic fibres (Huntsman, n.d.). Notably, half of total water and energy consumption is saved throughout the dyeing process (ibid). Ralph Lauren Corporation has replaced the traditional dyes with AVITERA® dyes in its production of classic polo shirts since 2017 (Ralph Lauren Corporation, 2017). Referring to the company's sustainability report (Ralph Lauren Corporation, 2019), over 40% of water and 80% of energy are conserved. To add to this, Jeanswest brand cooperates with Advance Denim to make denim-related fashion items. Advance Denim has launched a production line that uses new aniline impurity-free indigo from Archroma (Archroma, 2018). With the application of the indigo, remarkably lower water pollution levels are measured (Archroma, 2019). Apart from using more sustainable dyes, new sustainable production methods may be implemented. In the Levi's' Water<Less® Innovation, 21 production techniques are designed to be adopted, where 12 litres of water can be saved at most (Levi's, 2016; Levi's, 2018). The industry can be sustainable by consuming less resources and energy, under the practices of using sustainable chemicals and new production methods.

### **2.5.2 Social Sustainable Practices**

To form sustainable fashion design, the creation of emotional attachment to wearers on their outfits is required (Saha, & LeHew, 2018). This practice is inspired by the emotional durable design, which lengthens the product's emotional durability (Chapman, 2009). The six-point experiential framework has been introduced to investigate the level of emotional attachment is as follows (ibid):

1. Narrative: The product symbolises a special personal history for users, that is usually related to the acquirement method and background of the product.

2. Detachment: Absence of emotional attachment to the product causes lower demand, with the effect of a user's low expectations.

3. Surface: The product stays wearable physically and becomes meaningful via multiple usage and lifespan.

4. Attachment: Significant emotional linkage is formed between users and the product, with regard to the product's function and underlying meaning.

5. Delightfulness: The pleasure of owning the product recently bought is developed through the exploration of it.

6. Consciousness: Users required to be skilful in order to interact with the product that has no perceived usage.

When practising the framework, unique values and meanings of a wearer are suggested to embed into the product's design (Fletcher, 2012; Saha, & LeHew, 2018). Designers can strengthen the linkage between a product and the wearer through immersing culture symbols, relating to memories and social values in the product (Saha, & LeHew, 2018). To lengthen the product's emotional durability, slower consumption of new fashion items can be a result (Fletcher, 2017). Through this, sustainability in the fashion industry can be enhanced.

Also, the imposition of green campaigns is another social sustainable practice in fashion retail. A green campaign is a means of promoting environmental greenness in a company, which is related to corporate social responsibility (Lee et al., 2012). In broader terms, the corporation's reputation, the consumption level and the alteration of customer's belief are improved by green campaigns and promotions (Birgelen et al., 2009; Brown, & Bacon, 1997). Additionally, the promotion is a more persuasive communication channel to consumers because it does not commercialize (Lee et al., 2012). The consumption of green products is encouraged by the environmental advertising, compared to the traditional advertising (Baldwin, 1993; Chekima et al., 2015).

In fashion retail, green campaigns send several types of messages, for instance, reducing negative environmental impact, introducing green characteristics in product

design and business functions, and influence on establishing eco-friendly lifestyles (D'Souza et al., 2006). Various campaigns are operated by fashion retailers globally. The luxury fashion brand, Chanel, established the “Chanel goes Eco” campaign at its Fashion Show in Paris, and included the promotion of waste-not-want-not attitude by the appearance of the waistcoat’s textiles used (Blanks, 2016). Zady was also established as a brand to promote slow fashion by aiming for “style over trends” and products with high quality (Moth, 2015). Social sustainability concepts may be delivered to the society accordingly, by implementing green campaigns and advertising.

Furthermore, the publication of a corporate performance report is a common sustainable solution applied in fashion industry. A corporate performance report, known as a sustainability report, is a publicly available report reviewing a company’s stances and activities in environmental, economic and social aspects (World Business Council for Sustainable Development, 2002). According to Kozłowski et al. (2015), fashion companies can publish sustainability reports via different channels, such as the company’s official website. The corporation’s social duties are further strengthened, because of the establishment of legislations for sustainability reporting and concrete governmental assistances (Kolk, 2003). Besides this, the guidelines on reporting the company’s sustainable performance are suggested by various international organizations. The frameworks suggested by the Global Reporting Initiative is commonly used in the fashion industry (Global Reporting Initiative, 2013). The Higg Index from the Sustainable Apparel Coalition, which is a sustainability measurement method, is also built with assistance from major fashion retailers (Sustainable Apparel Coalition, n.d.). H&M is one of the best known fashion brands with reporting its efforts in sustainability. Since 2002, it has started to issue a “Sustainability Performance Report” annually on its website to the public (Hennes & Mauritz, 2002). This includes for example, the updates on the management of their textile workers’ fair salaries and working conditions (Hennes & Mauritz, 2019). Lots of fashion corporations are starting to publish these reports, under the growing trend of considering sustainability drivers within their business (Caniato et al., 2012, & Kozłowski, 2015). Reports on corporations’ social performance will be widely applied in the fashion business, because it is one of the many reasons being good publicity for sustainability .

Alternatively, the production of fashion products made from animal-free materials is also a social sustainable practice. Examples of animal-based materials are leather, fur and wool, which are symbols of luxury, staying physically warm, comfort, durability (Schwebke, & Krohn, 1970; Weibel, 1952; Lee, 2014). Thus, it holds a high position in the fashion sector (Schwebke, & Krohn, 1970; Stone, 2008; Weibel, 1952; Wilcox, 1951). Meanwhile, the protection of animal rights have been a concern throughout society since animal cruelty in factories was revealed (DuFault, 2013; Peta, 2013). In the current fashion market, fashion brands try to avoid to using animal-based materials in their products. For instance, Delikate Rayne commits to be cruelty-free and has zero animal-based materials, making only vegan garments (Delikate Rayne, n.d.). Furthermore, an expansion of the customer base in the vegan fashion market has been reported, where one out of three customers would prefer to purchase from animal-free fashion companies (Wood, 2020). The sustainability level in a social aspect can be improved by producing more cruelty-free and vegan fashion products.

Aside from holding the above social practices, fashion retailers may cooperate or donate some of their profits to Non-Governmental Organisations (NGOs). The reason for interacting with NGO would be the contribution of NGO's campaigns to sustainability in the fashion industry and the general society (Khurana, & Ricchetti, 2016). Nike partners with the Better Work, which is an NGO that provides practical and academic support for sustainable manufacturing, especially on fair labour practices (Nike, n.d.; Better Work, n.d.). Fast Retailing Company Limited collaborates with the UN Refugee Agency to distribute their second-hand fashion products collected for refugees and the needy (Fast Retailing, 2020). Besides this, fashion luxury brand, Balenciaga, donated money to the World Food Programme (WFP) by selling a collection printed with the WFP's slogan and logo (Croft, 2018). From numerous similar programs in the fashion industry, fashion retailers can be more sustainable in either fashion or other aspects in the society.

## **2.6 Literature Gap**

With regard to tremendous worldwide development and sustainability concerns in fashion industry, various sustainable business practices have been offered to modify the fashion sector. In terms of improving environmental and social sustainability, it remains unclear which of these approaches are more promising within the industry.

Therefore, a research question of this thesis is to find out the most promising business practice among the introduced implications to be more socially and environmentally sustainable. Concurrently, the underlying considerations when deciding the feasibility on these approaches will be analysed. In addition to this, major obstacles of adopting sustainable practices, the concept of sustainability and the key sustainable concerns in the fashion retailers will be indicated.

### **3 Methodology**

The research question in this study is finding the most feasible solution among sustainable practices provided by analysing the considerations accounted for. A deductive research method is used to form a quantitative, numerical and analytical study. The quantitative approaches in data collection focus in the perceptions of category or quantity (Portney & Watkins, 2009). Quantifiable data is collected concerning the judgments of specific sustainable practices in this study. Moreover, additional insights, problems and obstacles with operating more sustainable fashion business are presented.

In order to gather relative data on various variables, a survey was designed and distributed online. The questionnaire was self-administered to respond on five close-ended questions with subsections and four open-ended questions. By holding a distanced and self-administered survey, the honesty of the respondent is enhanced with a reduction of “socially desirable” answers possibly received (Holbrook et al., 2003). From the sustainable business practices introduced in the literature review section, further implication options are used in fashion retail. Therefore, a list of 21 relative sustainable actions, which are shown in Table 1 in the next section, are designed for this research accordingly. To study the feasibility, usage range and likelihood of applying sustainable business practices, close-end questions are asked in the survey. Numeric scaling is used in the close-end questions, as it reduces the burden and hesitation in participating a survey (Kothari et al., 2016). For all the close-ended questions, a 5 point scale is offered for ease of answering. In evaluating the feasibility of a sustainable action, 1 point and 5 points are rated as highly infeasible and highly feasible respectively. For comparing the usage range of sustainable actions, 1 point and 5 points are rated as few cases and global usage respectively.



Furthermore, 1 point and 5s point are labelled as very unlikely and very likely, for viewing the possibility of using a sustainable action in a business. Open-ended questions are asked for discovering unbiased professional in-depth opinions on sustainability, because of the strength in collecting instinctive responses from individuals (Reja, et al., 2003). In the survey, four open-ended questions are presented, which shown below.

- What does sustainability mean to you in general?
- In your opinion, what are the major thing(s) that the fashion industry that need to change in order to become more sustainable? Please state.
- From your perspective, what are the major barriers preventing the fashion industry from becoming more sustainable? Please state.
- What can you do to personally contribute to this cause in your current (or future) role in the industry? Please state.

The target population of this study is individuals who are engaged in the fashion retail sector and fashion-related students in Australia, Austria and Hong Kong. The first party is targeted because of a higher probability in them knowing the most current updates in fashion knowledge. Since students who study in fashion-related programmes will work in the fashion industry in the future, they are targeted as the second group of the target population. Because of their widespread locations, the web survey is delivered through direct internet link and an electronic word of mouth approach. The electronic data collection can be scalable, faster and low cost (Marcano Belisario et al., 2015). Furthermore, in order to ensure the respondent's personal privacy, their participation was consented as completely voluntary, anonymous and confidential under GDPR compliance.

In the time of May and June 2020, 51 respondents who are mostly from Hong Kong were gathered via the online questionnaires generated in SurveyLab. After data collection, the analysis process took place. The statistical programming software, R, was used for summarizing the findings. Descriptive analysis and thematic analysis were performed on descriptive variables and open-ended questions respectively. An ANOVA test and the multiple regression test were applied in categorical variables. For ranking the order of variables, tables were made for a clear overview on the results.

In favour of obtaining useful statistical information, the unanswered observations will be filtered and deleted in the conversion process of the raw data.

## **4 Hypothesis**

A list of sustainable practices in the fashion industry is formed with examples found from current fashion companies, which is shown in Table 1. The data was collected for studying the relationship between the feasibility level, range of usage, and likeliness of using in their own business. In addition, major obstacles in operating with sustainable actions and underlying considerations in evaluating the feasibility level were indicated, under the present fashion industry's environment. The variables were chosen as to determine which fields can be further studied, in order to develop more practical practices to be a more socially and environmentally sustainable industry. The hypothesized relationships of this research are shown in Figure 6.

Sustainable Practice in the Fashion Industry	
1.	More clothing exchanges, as an alternative to purchase (i.e. the recirculation and re-use of garments)).
2.	More repair and/or alteration of garments to extend their useful life.
3.	Products produced for greater durability (i.e. less easily damaged/worn out, and a longer useful life).
4.	Production using materials obtained only from ecologically responsible sources (e.g. organic and/or eco-certified sources).
5.	Upcycling: the use of clothing waste as components in new designs (i.e. recycling fabrics).
6.	In-house and closed-loop production: the reprocessing of the firm's owned garments into new items at the end of their useful life.
7.	Clothing rental services offered by PRODUCERS (e.g. fashion labels) as an alternative to purchase.
8.	Clothing rental services offered by THIRD PARTIES (e.g. hire agencies) as an alternative to purchase.
9.	Promote "slow fashion", involving the lifetime used by consumers of fewer, yet qualitatively better garments.
10.	Reduce fashion advertising in general to reduce aggregate demand.
11.	Avoid the use of animal-based materials (e.g. leather and fur).
12.	Ensure that all production (of materials and garments) takes place under "Fair trade" conditions to promote the safety of workers throughout the supply chain.
13.	Ensure that wages for textile workers in developing countries are sufficient to provide a decent living wage.
14.	Avoid the use of dyes and other chemicals which are harmful to human health.
15.	Avoid the use of dyes and other chemicals which are harmful to the environment.
16.	Reduce the amount of energy used in production processes (gaining materials and producing garments).
17.	Reduce the amount of energy used in distribution processes (transportation and retail).
18.	Measurement of the various environmental and social impacts resulting from business operations.
19.	Publish the various environmental and social impacts in a sustainability report to inform consumer and other stakeholders.
20.	Provide community outreach to educate consumers on responsible fashion, or contribute to other societal causes.
21.	Donate a portion of profits to assist Non-Governmental Organisations (NGOs) working either in fashion or in other fields.

Table 1. List of Sustainable Practice in the Fashion Industry

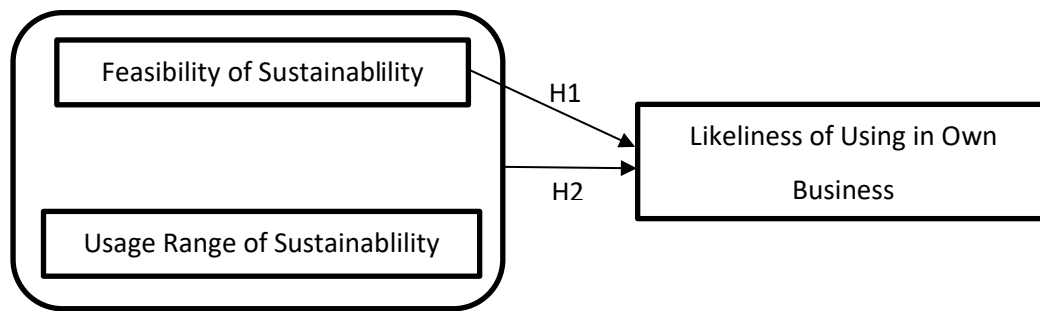


Figure 6. Hypothesised Relationships of the Variables

## 5 Results

After the collection of the survey's data, findings and analyses will be presented from this primary data. In order to facilitate further discussion, data will be shown through tables and diagrams. Overall, this study received 51 responses during the distribution of the survey.

### 5.1 Descriptive Statistics

In this section, demographic data with additional information about the respondents are presented.

#### 5.1.1 Role in the Fashion Industry

<b>Role in the Fashion Industry</b>	<b>Yes</b>	<b>No</b>	<b>Total</b>
Respondent who is current fashion student	33	18	51
Respondent who is currently or previously worked in the fashion industry	26	25	51

Table 2. Role in the Fashion Industry

<b>Job Description</b>	<b>Number of Respondent</b>
Accountant in a fashion company	1
General store manager in a fashion company	2
Designer of own fashion brand	3
Market researcher in a fashion company	1
Intern of a fashion brand	3
Online clothing shop owner	3
Part-time sales assistant	7
Designer of design team in a fashion company	1
Junior market editor in a fashion company	1
Sales assistant	3
Employee of human resources department in a fashion company	1
<b>Total</b>	<b>26</b>

Table 3. Job Description of the working experiences in the industry

<b>Future Planned Role in the Fashion Industry</b>	<b>Country of Study</b>	<b>Number of Respondent</b>
Designer maker	Australia	2
	Austria	1
	Hong Kong	13

Fashion buyer	Australia	1
	Hong Kong	1
Fashion marketer	Hong Kong	3
Member of design team in a fashion company	Hong Kong	2
Public Relations in a fashion company	Australia	1
	Hong Kong	1
Owner of own fashion brand	Austria	1
	Hong Kong	1
Fashion merchandiser	Australia	1
	Austria	1
Market researcher in a fashion company	Hong Kong	2
Brand manager	Hong Kong	1
<b>Total</b>	<b>33</b>	

Table 4. Future Planned Roles of Fashion Students

According to Table 2, 33 of the 51 respondents are current students who study fashion-related programs, whereby 8 of them also have work experience in the fashion industry. The other 18 respondents are working in the industry or have previous fashion related working experiences. The diversity of these existing working experiences is shown in Table 3, covering a range of functions in fashion companies, from the sales and marketing department to the design team and even the business owners. Table 4 shows the career aspirations of the student respondents and the country in which they study: designer is clearly the most favourite future occupation for the respondents who study fashion-related subjects in Hong Kong.

### 5.1.2 Description of Fashion Businesses Involved

Details of fashion brands that the respondents engage in or plan to join are summarised in this part. The relevant information is collected via seven closed-end questions in the survey that listed below. In Question 10, 11, 13, 14, 16, respondents are allowed to type their own answers. While, options are provided in Question 12 and 15.

#### 5.1.2.1 Vision of the Fashion Brand



Figure 1. Key terms of the Vision Statements

In the Graph 1, major key terms used most in the vision statements of those fashion companies are extracted and shown below. “Sustainable”, “unique” and “style” are generally mentioned among those vision statements. Interestingly, frequent usage of “sustainable” in the description of brand’s vision may be explained by the prompt of introducing the concept of sustainability while informing the introduction of the survey to respondents.

### 5.1.2.2 Target Customer

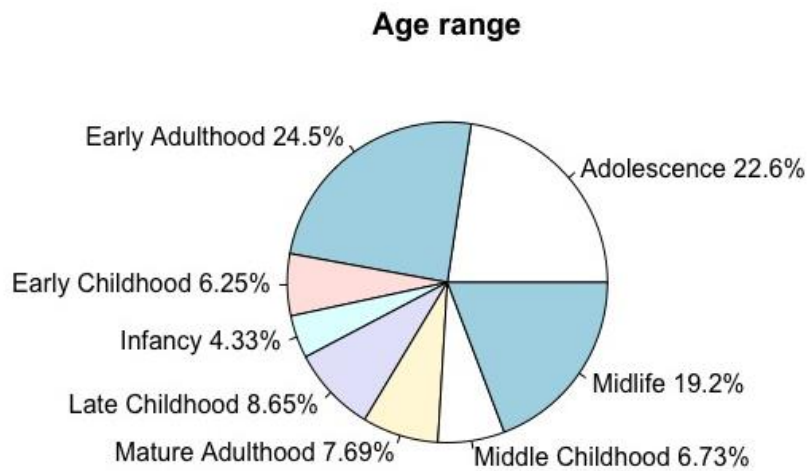


Figure 7. Age Range

The target customer of fashion brands is studied based on the age ranges they focus on. The ranges defined refer to the book, “The Human Odyssey: Navigating the Twelve Stages of Life”. In the Figure 7, nearly 23% of fashion brands target the adolescence group, people who age between 12 to 20. The second largest target group is the midlife group in which people age between 35 to 50.

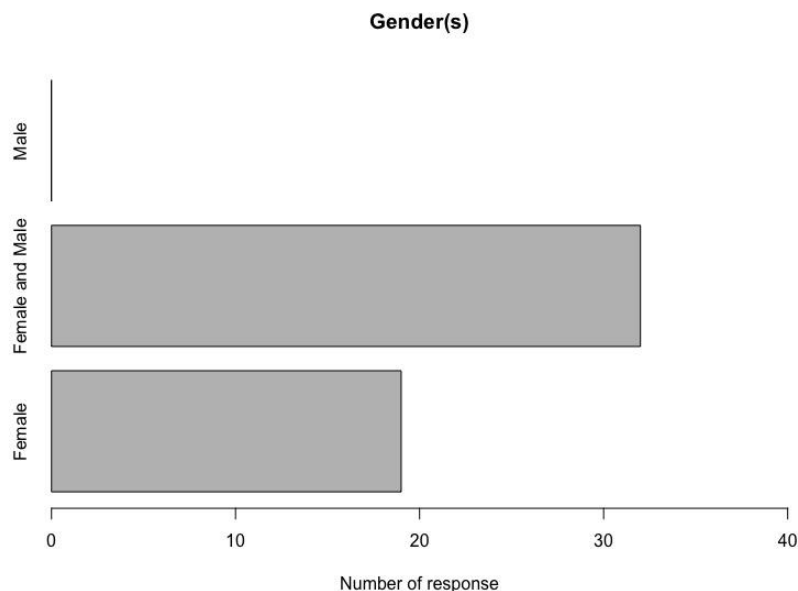


Figure 8. Gender of target group

Referring to Figure 8, the fashion brands focus on a female or a female and male group. Over 30 of the responses focus on providing fashion items to both women and



men. Less than 20 of the fashion brands target female only. 0 of the responses focus on selling male's fashion items.

### 5.1.2.3 Product Price Range

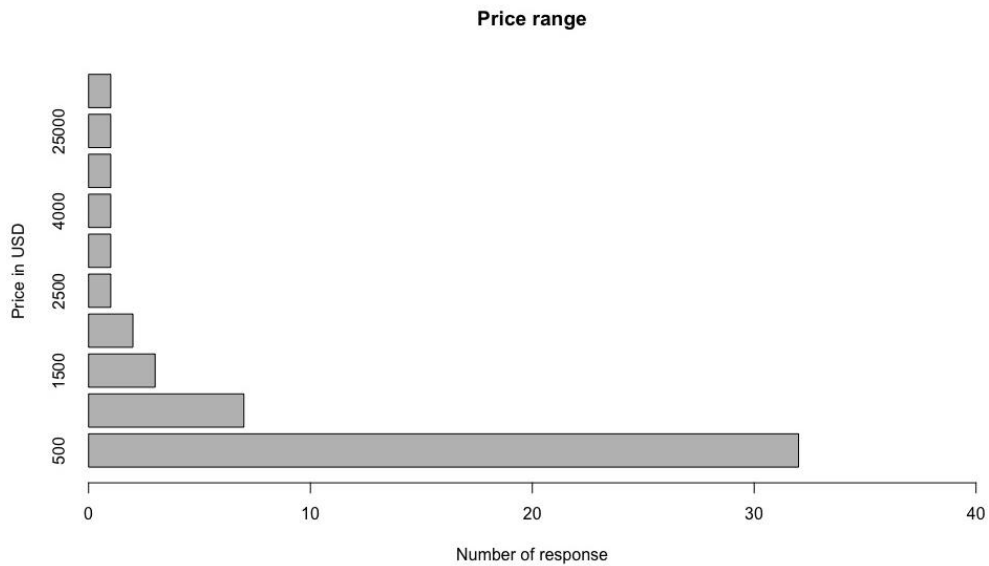


Figure 9. Product Price Range

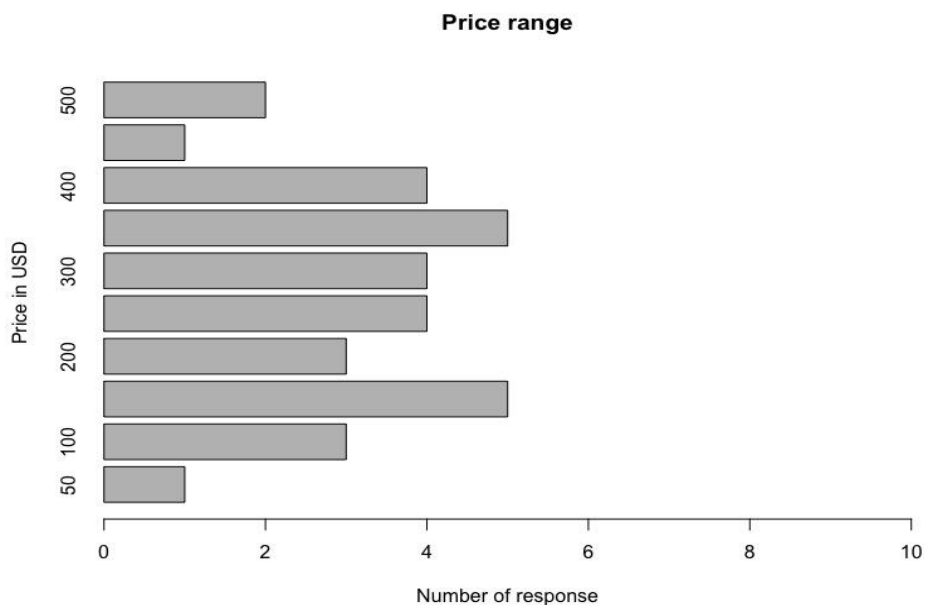


Figure 10. Further Analysis in Product Price Range

From Figure 9, the price range from USD1 to USD500 are the major target price range among the fashion brands, which accounts for nearly 35 of the total responses. The maximum product price is usually under USD2.000. In order to study the response

group of the price range from USD1 to USD500 specifically, the respondents are further divided into several groups in terms of the maximum price, which are presented in Figure 10.

#### 5.1.2.4 Store Type

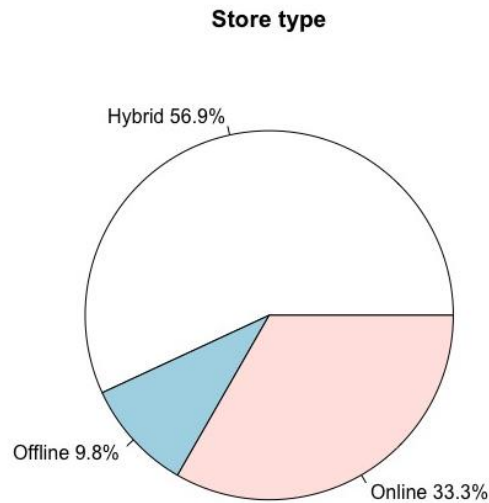


Figure 11. Store Type

Based on Figure 10, stores are operated in a hybrid format most often, which shares 57% of the responses approximately. One-third of the brands sell their products online only. Few of them implement brick-and-mortar stores.

#### 5.1.2.5 Target Continent

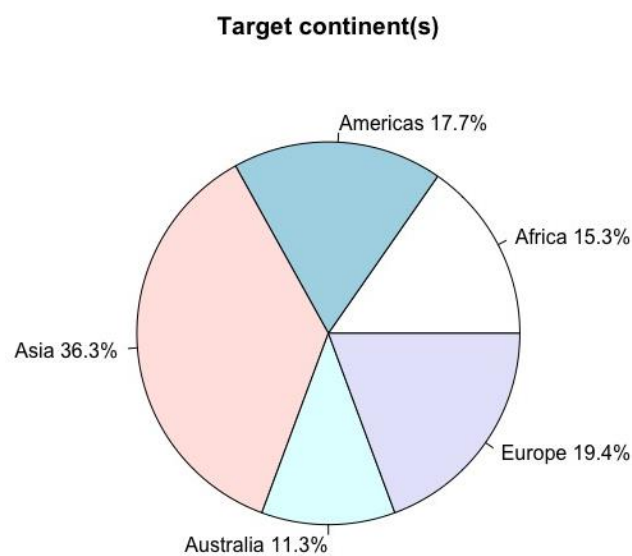


Figure 12. Target continents

From the Figure 11, Asia is the continent focused on the most in fashion companies, which constitutes around 40% of the respondents. Regions in Europe and the Americas are the second and third the most targeted among the brands.

#### 5.1.2.5 Garments' Manufacturer(s)

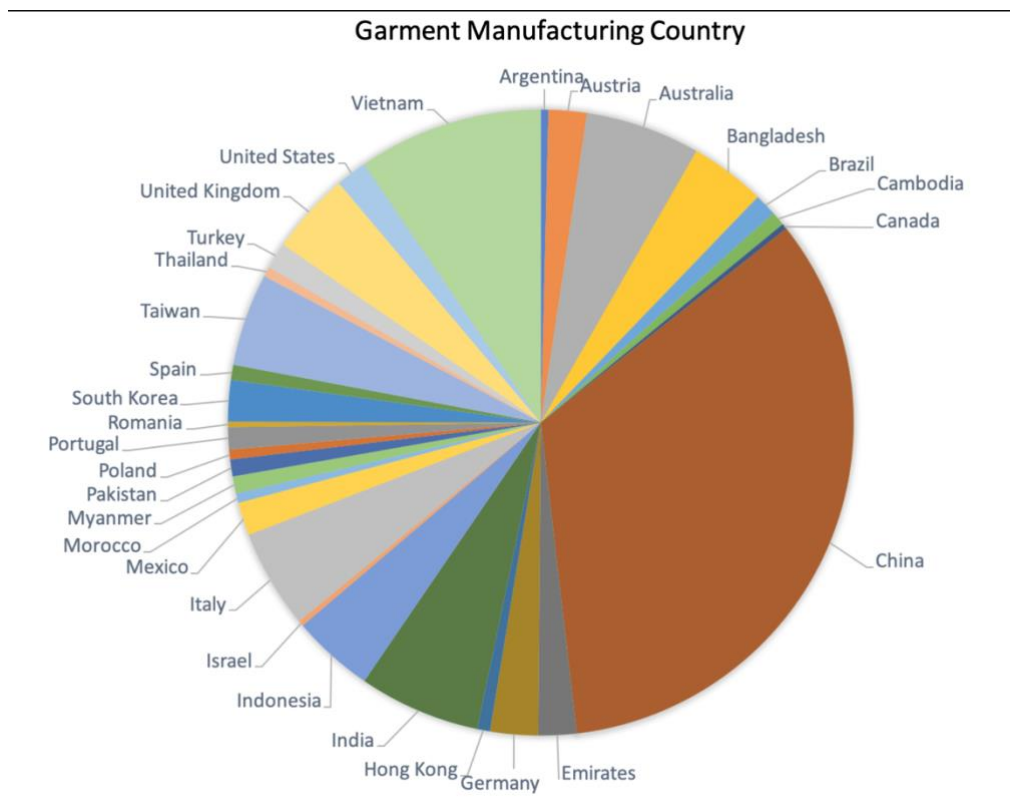


Figure 13. Garment Manufacturing Country

From the information collected in the survey, garment manufacturing countries of the brands are summarised. In the Figure 12, most of the fashion companies mainly locate their manufacturing factories in China, Vietnam and India. Asian countries are usually chosen to set up the garment production stage.

### 5.1.3 Ideas related to Sustainability

To the extent of studying related concepts and meanings about sustainability in the fashion industry, Question 2 of the survey asks respondents to state the meaning of sustainability. Respondents are allowed to fill in their answers without word limitation.



Graph 2. Key Words of the Ideas on Sustainability

In the Graph 2, key words most used for describing sustainability are presented. “Environment”, “resources”, “future”, “species”, “generations” and “consumption” are generally mentioned in the statements collected. By relating the key words mostly used to the responses, the idea of fulfilling this generation’s consumption, quality of life, reducing pollution, living indefinitely and balancing the world development can be observed in general.

### 5.1.4 Current Fashion Industry Environment

In this section, the present conditions in the fashion industry are analysed by studying the major changes needed to approach, obstacles to overcome, and individual contributions to sustainability. Respondents can interpret their answer freely without a word count requirement.

#### 5.1.4.1 Major Change(s) Required to Hold for Sustainability



Graph 3. Key Words of the Major Change(s) Required to Hold for Sustainability

The words that occur frequently while indicating the major reforms required for sustainability are shown in Graph 3, some appear at 3 times more than others among all the responses. “Production”, “management”, “pollution”, “manufacturing”, “trend” and “durability” are some of those words. The reformations in waste pollution, fabric manufacturing, popular trends, customer purchase pattern, product design and frequency of publishing new collections should be carried out in the fashion industry, which are linked to the key words frequently used by the respondents.

#### 5.1.4.2 Main Obstacles to Overcome for Sustainability



Graph 4. Key Words of the Main Obstacles to Overcome for Sustainability

From the Graph 4, “management”, “cost”, “production”, “pollution”, “consumption”, “profits” and “satisfy” are the words used most often when describing the major barriers for sustainability. Analysing the key words used, the derived cost of being eco-friendly, high energy consumption, maintenance for profits, gaining customer satisfaction, continuity of the brand’s attractiveness may be the main difficulties that need to be solved for sustainability in the industry.

#### 5.1.4.3 Individual Contribution in the Fashion Industry



Graph 5. Key Words of the Individual Contribution in the Fashion Industry

Diversely planned personal actions are found to act in the industry for sustainability among the respondents. Words used repeatedly to express their own contributions are presented in the Graph 5. Contributions on eco-conscious brand building, clothing donations, participation in recycling schemes, reductions on introducing new collections, product durability with sustainable manufacturing, marketing of promoting sustainability, product design with recycled garments and sustainable packaging can be found within the respondents, referring to the findings of key words used.

#### 5.1.5 Evaluation of Sustainable Practices

In this section, every sustainable practice in the list of suggested sustainable practices is analysed in terms of its feasibility level with underlying considerations, range of usage, and likeliness of using it in their own business. In order to collect related information, three sub-questions in Question 4 are asked as listed below. Table 5 shows the number of respondents in the questions respectively.

- a) How feasible do you think it is that the fashion industry could adopt this practice in general?
- b) In your opinion, how widely does the fashion industry need to adopt this practice to be more sustainable?

c) How likely are you to use this practice in your own design/production of fashion items?

Sustainable Practice / Number of Respondents	Question	Rating Scale					Mean	Standard Deviation
		1	2	3	4	5		
More clothing exchanges, as an alternative to purchase (i.e. the recirculation and re-use of garments)).	a) (1=Highly Infeasible; 5=Highly Feasible)	6	1	35	9	0	2.92	0.82
	b) (1=A Few Cases; 5=Globally)	3	9	25	6	8	3.14	1.08
	c) (1-Very Unlikely; 5=Very Likely)	3	18	16	8	6	2.92	1.11
More repair and/or alteration of garments to extend their useful life.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	3	17	26	5	3.65	0.74
	b) (1=A Few Cases; 5=Globally)	0	13	13	21	4	3.31	0.95
	c) (1-Very Unlikely; 5=Very Likely)	0	9	19	22	1	3.29	0.78
Products produced for greater durability (i.e. less easily damaged/worn out, and a longer useful life).	a) (1=Highly Infeasible; 5=Highly Feasible)	0	6	1	21	23	4.20	0.96
	b) (1=A Few Cases; 5=Globally)	0	0	7	26	18	4.22	0.67
	c) (1-Very Unlikely; 5=Very Likely)	0	8	6	27	10	3.76	0.95
Production using materials obtained only from ecologically responsible sources (e.g. organic and/or eco-certified sources).	a) (1=Highly Infeasible; 5=Highly Feasible)	0	16	24	9	2	2.94	0.81
	b) (1=A Few Cases; 5=Globally)	0	1	34	14	2	3.33	0.588
	c) (1-Very Unlikely; 5=Very Likely)	6	22	12	9	2	2.59	1.04
Upcycling: the use of clothing waste as components in new designs (i.e. recycling fabrics). Upcycling: the use of clothing waste as components in new designs (i.e. recycling fabrics).	a) (1=Highly Infeasible; 5=Highly Feasible)	0	10	21	18	2	3.24	0.81
	b) (1=A Few Cases; 5=Globally)	0	15	19	15	2	3.08	0.87
	c) (1-Very Unlikely; 5=Very Likely)	3	15	31	12	0	3.02	0.76
In-house and closed-loop production: the reprocessing of the firm's owned garments into new items at the end of their useful life.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	6	31	11	3	3.22	0.73
	b) (1=A Few Cases; 5=Globally)	6	2	27	14	2	3.08	0.98
	c) (1-Very Unlikely; 5=Very Likely)	6	7	34	2	2	2.75	0.87
Clothing rental services offered by PRODUCERS (e.g. fashion labels) as an alternative to purchase.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	24	27	0	0	2.53	0.50
	b) (1=A Few Cases; 5=Globally)	4	29	18	0	0	2.27	0.60
	c) (1-Very Unlikely; 5=Very Likely)	29	8	7	7	0	1.84	1.12
Clothing rental services offered by THIRD PARTIES (e.g. hire agencies) as an alternative to purchase.	a) (1=Highly Infeasible; 5=Highly Feasible)	2	11	37	1	0	2.73	0.56
	b) (1=A Few Cases; 5=Globally)	2	20	29	0	0	2.53	0.58
	c) (1-Very Unlikely; 5=Very Likely)	5	21	17	8	0	2.55	0.88



Promote "slow fashion", involving the lifetime used by consumers of fewer, yet qualitatively better garments.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	7	1	36	7	3.84	0.83
	b) (1=A Few Cases; 5=Globally)	7	0	13	10	21	3.75	1.37
	c) (1-Very Unlikely; 5=Very Likely)	0	1	7	28	15	4.12	0.71
Reduce fashion advertising in general to reduce aggregate demand.	a) (1=Highly Infeasible; 5=Highly Feasible)	21	24	6	0	0	1.71	0.67
	b) (1=A Few Cases; 5=Globally)	22	13	16	0	0	1.88	0.86
	c) (1-Very Unlikely; 5=Very Likely)	27	10	14	0	0	1.75	0.87
Avoid the use of animal-based materials (e.g. leather and fur).	a) (1=Highly Infeasible; 5=Highly Feasible)	0	0	14	6	31	4.33	0.89
	b) (1=A Few Cases; 5=Globally)	0	7	7	9	28	4.14	1.11
	c) (1-Very Unlikely; 5=Very Likely)	0	7	7	12	25	4.08	1.09
Ensure that all production (of materials and garments) takes place under "Fair trade" conditions to promote the safety of workers throughout the supply chain.	a) (1=Highly Infeasible; 5=Highly Feasible)	7	1	39	4	0	2.78	0.78
	b) (1=A Few Cases; 5=Globally)	0	7	19	25	0	3.35	0.72
	c) (1-Very Unlikely; 5=Very Likely)	0	23	19	2	7	2.86	1.02
Ensure that wages for textile workers in developing countries are sufficient to provide a decent living wage.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	0	24	23	4	3.61	0.63
	b) (1=A Few Cases; 5=Globally)	1	2	18	22	2	3.08	1.08
	c) (1-Very Unlikely; 5=Very Likely)	7	1	18	16	9	3.37	1.22
Avoid the use of dyes and other chemicals which are harmful to human health.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	0	12	33	6	3.88	0.59
	b) (1=A Few Cases; 5=Globally)	0	2	10	22	12	3.57	0.97
	c) (1-Very Unlikely; 5=Very Likely)	0	0	38	4	9	3.43	0.78
Avoid the use of dyes and other chemicals which are harmful to the environment.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	0	19	27	5	3.73	0.63
	b) (1=A Few Cases; 5=Globally)	0	7	10	23	11	3.75	0.96
	c) (1-Very Unlikely; 5=Very Likely)	0	0	37	12	2	3.31	0.55
Reduce the amount of energy used in production processes (gaining materials and producing garments).	a) (1=Highly Infeasible; 5=Highly Feasible)	7	7	13	22	2	3.10	1.14
	b) (1=A Few Cases; 5=Globally)	7	7	9	26	2	3.18	1.16
	c) (1-Very Unlikely; 5=Very Likely)	0	1	38	3	9	3.39	0.80
Reduce the amount of energy used in distribution processes (transportation and retail).	a) (1=Highly Infeasible; 5=Highly Feasible)	0	14	3	17	17	3.73	1.20
	b) (1=A Few Cases; 5=Globally)	0	7	9	16	19	3.92	1.06

	c) (1=Very Unlikely; 5=Very Likely)	0	0	20	28	3	3.67	0.59
Measurement of the various environmental and social impacts resulting from business operations.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	6	13	29	3	3.57	0.78
	b) (1=A Few Cases; 5=Globally)	0	0	22	25	4	3.65	0.63
	c) (1=Very Unlikely; 5=Very Likely)	0	0	16	28	7	3.82	0.65
Publish the various environmental and social impacts in a sustainability report to inform consumer and other stakeholders.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	6	9	21	15	3.88	0.97
	b) (1=A Few Cases; 5=Globally)	0	0	18	26	7	3.78	0.67
	c) (1=Very Unlikely; 5=Very Likely)	0	0	9	30	12	4.06	0.65
Provide community outreach to educate consumers on responsible <a href="#">fashion</a> , or contribute to other societal causes.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	6	11	26	8	3.71	0.88
	b) (1=A Few Cases; 5=Globally)	0	6	20	9	16	3.69	1.05
	c) (1=Very Unlikely; 5=Very Likely)	0	0	21	23	7	3.73	0.70
Donate a portion of profits to assist Non-Governmental Organizations (NGOs) working either in fashion or in other fields.	a) (1=Highly Infeasible; 5=Highly Feasible)	0	14	30	7	0	2.86	0.63
	b) (1=A Few Cases; 5=Globally)	0	13	31	7	0	2.88	0.62
	c) (1=Very Unlikely; 5=Very Likely)	3	26	20	2	0	2.41	0.67

Table 5. Feasibility, usage range and likelihood of using each sustainable practice from the suggestion list

In Table 5, the feasibility, usage range and likelihood of each sustainable practice are evaluated by a rating from the respondents. Among the ratings of the feasibility level, “avoid the use of animal-based materials (e.g. leather and fur)” has received 5 points for the practice by over 31 respondents, which equals to 60% of the total responses. The mean scores and the standard deviation is 4.33 and 0.89 respectively. The low value of the standard deviation, centralized stance on its high feasibility level can be reflected as the responses are not dispersed. Hence, “avoid the use of animal-based materials (e.g. leather and fur)” can be considered the most highly feasible. In contrast, “reduce fashion advertising in general to reduce aggregate demand” is rated in 1 point from around 42% of the respondents. None of them rate it as a highly feasible sustainable practice. Also, the mean rate and the standard deviation are 1.71 and 0.67. The responses are rather unified due to the low standard deviation. Thus, the most highly infeasible sustainable practice according to this study is “reduce fashion advertising in general to reduce aggregate demand”.

To study the importance of each sustainable practice's sustainability, the usage range of the practice was asked. Over 28 of the respondents rated 5 points for "avoid the use of animal-based materials (e.g. leather and fur)". Zero responses were received for 1 point. The mean of the rating is nearly to 5 points. Hence, "avoid the use of animal-based materials (e.g. leather and fur)" can be good advice for companies globally, in order to enhance sustainability in the fashion industry. On the other hand, nearly half of the respondents rate "reduce fashion advertising in general to reduce aggregate demand" at 1 point. The average rating is 1.88 which is below 2 points. It may indicate that "reduce fashion advertising in general to reduce aggregate demand" has a lesser effect on being more sustainable in the industry.

To analyse the likelihood of using each practice, the possibility of using the practice in the respondent's business is asked in Question 6(c). 25 respondents tend to want to implement "avoid the use of animal-based materials (e.g. leather and fur)" in their fashion product's design or production. Only 7 respondents would not use this practice in the business, which shares less than 15% of total responses. On the other hand, the average rating of "clothing rental services offered by PRODUCERS (e.g. fashion labels) as an alternative to purchase" is 1.84. Over half of the respondents rate this practice with not more than 2 points, which represents a low likelihood of possible usage. No participant will consider implementing something in their business, where zero response can be found in 5 points rating. Therefore, "avoid the use of animal-based materials (e.g. leather and fur)" and "clothing rental services offered by PRODUCERS (e.g. fashion labels) as an alternative to purchase" are the practices that are most likely and most unlikely to be used in the participants' businesses respectively.

Ranking	Main Consideration										
	Profitability for producers	Wellbeing of workers	Consumer satisfaction	Wellbeing of the wider society	Wellbeing of future generations	Some concept of social equity	Industry norms of behaviour	The power of large corporations	Conservation of resources	Environmental protection	Other (Please state)
1 (Most Important)	0	0	25	0	0	0	7	1	9	9	0
2	7	7	8	0	0	0	0	1	18	11	0
3	3	3	11	0	0	1	0	0	13	18	0
4	30	3	1	3	3	0	0	0	1	10	0
5	5	1	1	2	2	6	2	2	0	2	0
6	5	3	0	11	11	8	2	5	0	1	0
7	1	7	0	9	9	8	0	10	1	0	0
8	0	2	0	6	6	15	7	8	9	0	0
9	0	3	0	9	9	13	11	13	0	0	0
10 (Least Important)	0	1	7	10	10	0	22	11	0	0	0
Mean	4.020	5.589	2.922	5.706	7.451	7.333	7.922	7.922	3.275	2.765	0

Table 8. Main Consideration in the Feasibility of the Sustainable Practices

In the survey, the possible underlying factors considered when evaluating the feasibility of a sustainable practice are listed and rankings asked for from the respondents. The most important factor is ranked as 1, while one is ranked 10 if it is the least important. Referring to the results in Table 8, 25 respondents consider “consumer satisfaction” as the most important factor when assessing the feasibility of a sustainable practice. The least important consideration is “industry norms of behaviour”, which nearly half of the responses rank at last place. It can be explained by the current or future occupation of most of the participants is being designer in the fashion industry. A brand’s or product’s individuality may be crucial for them in general. Hence, the norms of behaviour in the industry may be less effective.

## 5.2 Inferential Statistics

For further studies on the individual variables, feasibility, usage range and likeliness of a certain sustainable practices in the fashion industry, their relationships are investigated with the data collected from the relevant survey questions. Three sub-questions in Question 6 of the survey are asked for this investigation, which are listed below. Hypotheses are tested via asking Question 6.

- a) How feasible do you think it is that the fashion industry could adopt this practice in general?
- b) In your opinion, how widely does the fashion industry need to adopt this practice to be more sustainable?
- c) How likely are you to use this practice in your own design/production of fashion items?

### 5.2.1 Hypothesis 1

H0: There is no possible prediction on the likelihood of using the sustainable practice.

H1: The likelihood of using the sustainable practice can be predicted by its feasibility and usage range.

To study the hypothesis, an independent sample test, the ANOVA test, is used to test the model. Results of the test are shown in the following Table 9, where the estimations are rounded up to five decimal places.

Sustainable Practice	Significance Level (p-value)
More clothing exchanges, as an alternative to purchase (i.e. the recirculation and re-use of garments)).	<0.00001
More repair and/or alteration of garments to extend their useful life.	0.00065
Products produced for greater durability (i.e. less easily damaged/worn out, and a longer useful life).	<0.00001
Production using materials obtained only from ecologically responsible sources (e.g. organic and/or eco-certified sources).	0.00021
Upcycling: the use of clothing waste as components in new designs (i.e. recycling fabrics).	0.01809
In-house and closed-loop production: the reprocessing of the firm's owned garments into new items at the end of their useful life.	<0.00001

Clothing rental services offered by PRODUCERS (e.g. fashion labels) as an alternative to purchase.	<0.00001
Clothing rental services offered by THIRD PARTIES (e.g. hire agencies) as an alternative to purchase.	0.7199
Promote "slow fashion", involving the lifetime used by consumers of fewer, yet qualitatively better garments.	0.8743
Reduce fashion advertising in general to reduce aggregate demand.	0.00003
Avoid the use of animal-based materials (e.g. leather and fur).	<0.00001
Ensure that all production (of materials and garments) takes place under "Fair trade" conditions to promote the safety of workers throughout the supply chain.	<0.00001
Ensure that wages for textile workers in developing countries are sufficient to provide a decent living wage.	<0.00001
Avoid the use of dyes and other chemicals which are harmful to human health.	0.00053
Avoid the use of dyes and other chemicals which are harmful to the environment.	0.01515
Reduce the amount of energy used in production processes (gaining materials and producing garments).	0.00281
Reduce the amount of energy used in distribution processes (transportation and retail).	<0.00001
Measurement of the various environmental and social impacts resulting from business operations.	0.00332
Publish the various environmental and social impacts in a sustainability report to inform consumer and other stakeholders.	0.00016
Provide community outreach to educate consumers on responsible fashion, or contribute to other societal causes.	0.00086
Donate a portion of profits to assist Non-Governmental Organisations (NGOs) working either in fashion or in other fields.	0.4706

Table 9. Hypothesis 1: Inferential Statistics – ANOVA Test

Referring to Table 9 and a 5% significance level, the p-value of three sustainable practices, “clothing rental services offered by THIRD PARTIES (e.g. hire agencies) as an alternative to purchase”, “promote "slow fashion", “involving the lifetime used by consumers of fewer, yet qualitatively better garments” and “donate a portion of profits to assist Non-Governmental Organisations (NGOs) working either in fashion or in other fields”, are larger than 0.05. Hypothesis 1 should be rejected for the required three practices. The feasibility and usage range cannot be used to predict the likelihood of using . In contrast, the remaining sustainable practices have p-values, which are smaller than 0.05. Hence, Hypothesis 1 should be accepted for them. The likelihood of using those practices can be forecasted by their feasibility and usage range.

### 5.2.2 Hypothesis 2

H0: No difference for the likelihood of the sustainable practice on the feasibility of the listed sustainable practices.

H1: The higher the feasibility the higher the likelihood of the listed sustainable practices.

Based on the analysis of Hypothesis 1, “clothing rental services offered by THIRD PARTIES (e.g. hire agencies) as an alternative to purchase”, “promote “slow fashion”, “involving the lifetime used by consumers of fewer, yet qualitatively better garments” and “donate a portion of profits to assist Non-Governmental Organisations (NGOs) working either in fashion or in other fields ” are excluded for the analysis of Hypothesis 2. The multiple regression test is run on the remaining sustainable practices for Hypothesis 2. The test result is presented in Table 10, in which the values are rounded up to five decimal places.

Sustainable Practice	Significance Level	
	(p-value)	
More clothing exchanges, as an alternative to purchase (i.e. the recirculation and re-use of garments)).	Feasibility	0.00017
	Usage Range	0.11244
	Intercept	<0.00001
More repair and/or alteration of garments to extend their useful life.	Feasibility	0.03718
	Usage Range	0.2386
	Intercept	0.00668
Products produced for greater durability (i.e. less easily damaged/worn out, and a longer useful life).	Feasibility	<0.00001
	Usage Range	0.5691
	Intercept	0.0739
Production using materials obtained only from ecologically responsible sources (e.g. organic and/or eco-certified sources).	Feasibility	0.00025
	Usage Range	0.48674
	Intercept	0.86363
Upcycling: the use of clothing waste as components in new designs (i.e. recycling fabrics).	Feasibility	0.8050
	Usage Range	0.0177
	Intercept	0.00003
In-house and closed-loop production: the reprocessing of the firm's owned garments into new items at the end of their useful life.	Feasibility	0.00013
	Usage Range	0.00193
	Intercept	0.49651



Clothing rental services offered by PRODUCERS (e.g. fashion labels) as an alternative to purchase.	Feasibility	0.00568
	Usage Range	0.00046
	Intercept	<0.00001
Reduce fashion advertising in general to reduce aggregate demand.	Feasibility	0.0575
	Usage Range	<0.00001
	Intercept	<0.00001
Avoid the use of animal-based materials (e.g. leather and fur).	Feasibility	0.0408
	Usage Range	0.00006
	Intercept	0.9079
Ensure that all production (of materials and garments) takes place under "Fair trade" conditions to promote the safety of workers throughout the supply chain.	Feasibility	0.0633
	Usage Range	<0.00001
	Intercept	<0.00001
Ensure that wages for textile workers in developing countries are sufficient to provide a decent living wage.	Feasibility	0.0411
	Usage Range	<0.00001
	Intercept	0.00647
Avoid the use of dyes and other chemicals which are harmful to human health.	Feasibility	0.0786
	Usage Range	0.0451
	Intercept	<0.00001
Avoid the use of dyes and other chemicals which are harmful to the environment.	Feasibility	0.11982
	Usage Range	0.00498

	Intercept	<0.00001
Reduce the amount of energy used in production processes (gaining materials and producing garments).	Feasibility	0.655
	Usage Range	0.108
	Intercept	<0.00001
Reduce the amount of energy used in distribution processes (transportation and retail).	Feasibility	0.0007
	Usage Range	0.0468
	Intercept	<0.00001
Measurement of the various environmental and social impacts resulting from business operations.	Feasibility	0.01673
	Usage Range	0.24830
	Intercept	0.000209
Publish the various environmental and social impacts in a sustainability report to inform consumer and other stakeholders.	Feasibility	0.0396
	Usage Range	0.0379
	Intercept	0.00002
Provide community outreach to educate consumers on responsible fashion, or contribute to other societal causes.	Feasibility	0.00057
	Usage Range	0.29759
	Intercept	<0.00001

Table 10. Hypothesis 2: Inferential Statistics – Multiple Regression Test

In Table 10, the p-value of four sustainable practices, “products produced for greater durability (i.e. less easily damaged/worn out, and a longer useful life)”, “production using materials obtained only from ecologically responsible sources (e.g. organic and/or eco-certified sources)”, “in-house and closed-loop production: the reprocessing of the firm's owned garments into new items at the end of their useful

life”, and “avoid the use of animal-based materials (e.g. leather and fur)” are over 0.05. Thus, they are excluded from the model of hypothesis 2 as insignificant intercepts are found. On the other hand, the feasibility of the sustainable practice shows a p-value that exceeds 0.05 in “upcycling: the use of clothing waste as components in new designs (i.e. recycling fabrics)”, “ensure that all production (of materials and garments) takes place under “fair trade” conditions to promote the safety of workers throughout the supply chain”, “avoid the use of dyes and other chemicals which are harmful to human health”, “avoid the use of dyes and other chemicals which are harmful to the environment” and “reduce the amount of energy used in production processes (gaining materials and producing garments)”. Hypothesis 2 should be rejected in these five practices among those remaining in the model. For the others, hypothesis 2 should be accepted because the feasibility of the practice shows a significant p-value.

## 6 Discussion

After the presentation of the survey’s results in the previous section, the feasible sustainable practices, major obstacles to overcome and changes required implement sustainability in the fashion industry will be further discussed. Moreover, the effects of the feasibility, usage range and likelihood of using the practice will assessed. Based on the findings of the primary research, observations of the literature review may be used to support the results.

The international fashion retail supply chain model (Fernie, & Grant 2015; De Brito et al., 2008) supports the primary research’s findings. From the primary data collected, the garment manufacturing of a fashion company is currently or planned to take place in different countries. Most fashion brands cooperate with manufacturers that are mainly located in Asian countries, for example, China, Vietnam and India. The cooperation between foreign manufacturers and fashion retail companies can be shown, with the data findings. Besides this, the target markets of the brands are focused in different regions from different continents. With these target markets, stores are mainly operated in hybrid form, that run both brick-and-mortar and online stores. A fashion brand’s markets can be worldwide. With the discoveries, a general international fashion retail supply chain model and a growing globalized apparel

market can be supported (Fernie, & Grant, 2015; De Brito et al., 2008; O'Connell, 2019).

Secondly, regarding the concept of sustainability described by the United Nations (n.d.), similar ideas about its meanings can be found in the survey's data. In the survey, statements express satisfying the current generations' consumption without weakening the ability of meeting needs can be observed from respondents. For instance,

*"Balance the consumption level and the supply of resources",*

*"The environment and resources quantity can support generations" and*

*"Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs".*

To add to this, the objectives of pollution reduction, co-existence of humans and other species are indicated when considering sustainability for fashion retail. Overall, the general concept of sustainability in the fashion industry is consistent with the description from the United Nations.

At a personal level, the stakeholders among the fashion industry can contribute to the sustainability individually. The suggestions on personal sustainable actions can be relevant in different aspects. Being a designer of a fashion brand, expressing an eco-conscious concept, reducing the times of releasing new collections annually, designing durable products, inputting recycled garments in manufacturing and using sustainable packaging are commonly suggested sustainable behaviours. Additionally, as the final consumer, donating unwanted clothes and joining a fashion retailer's recycling program are suggested as personal contributions to sustainability.

By observing examples of present sustainable practices in the fashion industry, the list of sustainable practices is generated as shown in the hypothesis section. As the purpose of this research is to identify the one with a higher feasibility level, each suggested sustainable business application is graded with a 5 point range. Based on the survey results, avoiding the use of animal-based materials, such as leather and fur is considered as the most feasible sustainable practice. It is compatible with the rising

amount of animal-free fashion brands, as stated in a FashionUnited article (Hughes, 2020). In addition, producing more durable fashion products and saving energy in the logistics stage are viewed as the second and third highly feasible sustainable practices. It supports the potential sustainability ability of durable fashion apparel and the description of the green supply chain management practices (Saha, & LeHew, 2018; Akter et al., 2020). Adversely, the reduction of fashion advertising for decreasing relevant aggregate demand is evaluated the most highly infeasible practice of the list. It may be because customer purchases are the core source of gaining income for a fashion brand. Fashion retailers who would reduce their advertising budget are hard to find in the market.

When differentiating the feasibility level of a sustainable practice, various underlying criteria are considered. Based on the primary findings, the top three important factors that must be considered are consumer satisfaction, resource conservation and environmental protection. It can be explained by the impact of the satisfaction level on profitability, high consumption in resources via the global supply chain of fashion retail. Besides this, a low consideration of the norms of behaviour in the fashion industry and the influence of large corporations on the respondents can be concluded. Perhaps due to the demand for resonating the consumer's personality, forming a strong outstanding brand identity is the key concern for a fashion company, suggested by Luciana Zegheanu (the Evolution of Fashion, 2017).

Furthermore, with the continuous growth in the global apparel market, the fashion industry's environmental footprint will also increase (Pulse of the Fashion Industry, 2017). Thus, the future intention of implementing sustainable practices in the fashion retail business may be concerned. Based on the data collected from the survey, the avoidance of using animal-based materials and the public release of a sustainability report on environmental and social impacts derived are concluded as the two most likely to be used in their own business. On the contrary, reducing the frequency of fashion advertising and donating profits to assist NGO projects and operations are the sustainable practices that are unlikely to be implemented.

Overall, high ratings for the sustainable practice, "avoid the use of animal-based materials (e.g. leather and fur)", supports high awareness of animal's rights in society (DuFault, 2013). It may also explain the effect that came after revealing the cruel

operations in raw material factories, for example, those producing fur and leather. Apart from that, observations on the relatively low ratings of “reduce fashion advertising in general to reduce aggregate demand” in the variables can be explained by a positive effect of environmental advertising that encourage more consumption of green products (Baldwin, 1993; Chekima et al., 2015).

Lastly, the potential relationships between the feasibility level, usage range and the likelihood of holding the practices are further analysed with Hypothesis 1 and Hypothesis 2. Hypothesis 1 is designed to discover the practicability on predicting the likelihood of using a sustainable practice by the feasibility and usage range. Hypothesis 2 is designed to investigate the possible positive relationship between feasibility, usage range and the likelihood of sustainable practice. Based on the findings from testing the hypotheses, nine of the listed sustainable practices contain a positive relationship between the three variables. Especially, “more clothing exchanges, as an alternative to purchase (i.e. the recirculation and re-use of garments)”, “clothing rental services offered by PRODUCERS (e.g. fashion labels) as an alternative to purchase”, “reduce fashion advertising in general to reduce aggregate demand”, “reduce the amount of energy used in distribution processes (transportation and retail)” and “provide community outreach to educate consumers on responsible fashion, or contribute to other societal causes” show stronger positive relationship among the variables. The higher the ratings in the feasibility level and the usage range, the higher the possibility of using the specific sustainable practice.

## **7 Conclusion**

The purpose of this research was to identify the difference in the feasibility, usage range and the likelihood of using the sustainable practices listed in the fashion industry. Moreover, to discover professional insights of sustainability in the industry.

Previous relevant research and information about the sustainability and the fashion business environment were reviewed. A backsliding of the Earth’s biocapacity has resulted since the global ecological footprint has grown, derived from the globalization phenomenon (Global Footprint Network, 2019). Sustainability will become a popular issue to be discussed in the fashion business, along with

overconsumption, in the international fashion supply chain model, that was introduced in the literature review. Various problems that affect the social and environmental sustainability are concerned. From an environmental perspective, the close-loop supply chain may improve sustainability in the industry (Oh, & Jeong, 2014). With the suggested model, sustainable practices for the product's manufacturing and distribution are raised. Apart from that, participating in the rental business and "slow fashion" movement are also brought up as the related actions in the fashion industry. Green campaigns, a publication of a corporate sustainability report, prevention of using animal-based materials' and financial assistance towards NGOs' are several possible sustainable practices, belonging to the social perspective of the fashion industry.

After revealing examples of real-life sustainable practices, the list of suggested sustainable practices in the fashion industry was formed and further studied by conducting primary research. According to the primary data collected from the survey, most of the practices on the list were viewed as feasible and should be widely used for being sustainable in the fashion industry. In particular, the high possibility of holding "more clothing exchanges, as an alternative to purchase (i.e. the recirculation and re-use of garments)", "clothing rental services offered by PRODUCERS (e.g. fashion labels) as an alternative to purchase", "reduce fashion advertising in general to reduce aggregate demand", "reduce the amount of energy used in distribution processes (transportation and retail)" and "provide community outreach to educate consumers on responsible fashion, or contribute to other societal causes" are explained through their high level in the feasibility and usage range. Additionally, the description of sustainability from stakeholders in the fashion industry were very similar to the general definition of sustainability described by the United Nations. Supplementary related sustainable concepts were further introduced by the respondents of the survey. Yet, respondents of the survey stated that customer purchase behaviour and product design are examples of the main changes required to be sustainable in the industry. Costs derived from sustainable practices and maintenance of a brand's attractiveness are indicated as two of the main obstacles to overcome in the fashion industry.

In the survey of this research, the feasibility level, usage range and likelihood of using each sustainable practice were clarified. Additional relationships between the three variables was also tested and presented. However, the sample size of the survey conducted was very small. A limited number of respondents participated in this research. In order to enhance the reliability of the research's findings, relevant research should be performed with a larger sample size. As well as this, people who work in related professions in the fashion industry can propose further possible improvements in the application of the listed sustainable practices. A more sustainable fashion industry can be formed by using improved sustainable practices accordingly. Apart from that, the suggested list of sustainable practices should be further expanded with new introduced practices. Because of continuous technological development, new advanced sustainable practices may be introduced in the future. Hence, the three variables on those practices will also be interesting to do further research on, with regard to the fashion retail environment.

In conclusion, not only for humans but all other species, a liveable environment will be the key to survival. With the large negative impacts on the environment and society caused by fashion retail, the world may become unpleasant and unsustainable for living. In order to improve sustainability environmentally and socially, the fashion industry should make effort be more sustainable. With the findings of this research, effective sustainable practices may be applied to improve the sustainability of the industry. Animals can live without the threat of extinction with further improvements in operating a more sustainable fashion business .



## 8 Bibliography

Akter, S., Ji, X., Sarker, M. M., Cai, L., Shao, Y., Hasan, M. K., Abir, S. A., Quan, V. (2020). Clean manufacturing and green practices in the apparel supply chain. *Open Journal of Business and Management*, 8(1). <https://doi.org/10.4236/ojbm.2020.81007>

Amed, I., Balchandani, A., Beltrami, M., Berg, A., Hedrich, S., & Roelkens, F. (2018). The state of fashion 2019. McKinsey & Company. Retrieved from <https://www.mckinsey.com/~media/McKinsey/Industries/Retail/Our%20Insights/The%20influence%20of%20woke%20consumers%20on%20fashion/The-State-of-Fashion-2019.ashx>

Andriopoulos, C., Durou, E., & Parvez, A. (2019). Outsourcing and shared services 2019-2023. Monitor Deloitte. Retrieved from [http://outsourcing-outlook.com/assets/pdf/Deloitte-DOC-Whitepaper\\_outsourcing-and-shared-services2019-2023.pdf](http://outsourcing-outlook.com/assets/pdf/Deloitte-DOC-Whitepaper_outsourcing-and-shared-services2019-2023.pdf)

Anthesis. (2015). Final report: clothing durability report. Wrap. Retrieved from <http://www.wrap.org.uk/sites/files/wrap/Clothing-Durability-Report-final.pdf>

Archroma. (2018, May 28). Archroma breaks new ground with new aniline-free indigo for denim. Retrieved from <https://www.archroma.com/press/releases/archroma-breaks-new-ground-with-new-aniline-free-indigo-for-denim>

Archroma. (2019, September 4). Advance denim to become first Chinese denim mill to launch a collection made with aniline-free indigo by Archroma. Retrieved from <https://www.archroma.com/press/releases/advance-denim-to-become-first-chinese-denim-mill-to-launch-a-collection-made-with-aniline-free-indigo-by-archroma>

Armstrong, T. (2008). *The human odyssey: navigating the twelve stages of life*. US: Sterling Publishing Company.

Atasu, A., Toktay, B. L., Van Wassenhove, L. N. V. (2013). How collection cost structure drives a manufacturer's reverse channel choice. *Production and Operations Management*, 22(5), 1089-1102. <https://doi.org/10.1111/j.1937-5956.2012.01426.x>

Balan, D. S. L., & Monteiro, R. T. R. (2001). Decolorization of textile indigo dye by ligninolytic fungi. *Journal of Biotechnology*, 89(2-3), 141-145. [https://doi.org/10.1016/S0168-1656\(01\)00304-2](https://doi.org/10.1016/S0168-1656(01)00304-2)

Baldwin, P. (1993). Advertising beginning to see green. *The Dallas Morning News*, J1-J11.

Bartels, W. (2012). Sustainable insight water scarcity: a dive into global reporting trends. KPMG The Netherlands. Retrieved on 20.05 20 from <https://www.eco-business.com/research/water-scarcity-a-dive-into-global-reporting-trends/>

Beh, L. S., Ghobadian, A., He, Q., Gallear, D., & O'Regan, N. (2016). Second-life retailing: a reverse supply chain perspective. *Supply Chain Management*, 21(2), 259-272. <https://doi.org/10.1108/SCM-07-2015-0296>

Berg, A., Hedrich, S., Ibanez, P., Kappelmark, S., Magnus, K. H., Seegar, M. (2019). McKinsey apparel CPO survey 2019: fashion's new must-have: sustainable sourcing at scale. McKinsey & Company. Retrieved from <https://www.mckinsey.com/~media/McKinsey/Industries/Retail/Our%20Insights/Fashions%20new%20must%20have%20Sustainable%20sourcing%20at%20scale/Fashions-new-must-have-Sustainable-sourcing-at-scale-vF.pdf>

Better Work. (n.d.). Our Work. Retrieved on 29.06. 20 from <https://betterwork.org/>

Birgelen, M. V., Semeijn, J., & Keicher, M. (2009). Packaging and proenvironmental consumption behaviour: Investigating purchase and disposal decisions for beverages. *Environment and Behavior*, 41, 125-146.

Blanks, T. (2016, January 26). Chanel Goes Eco. *The Business of Fashion*. Retrieved from <https://www.businessoffashion.com/articles/fashion-show-review/chanel-goes-eco>

Brotherton, O. (2020). Bangladesh: textile workers risk infection to fight exploitation. In *Defence of Marxism*. Retrieved from <https://www.marxist.com/bangladesh-textile-workers-risk-infection-to-fight-exploitation.htm>

Brown, T. J., & Dacin, P. A. (1997). The company and the product: corporate associations and consumer product responses. *The Journal of Marketing*, 61, 68-84. <https://doi.org/10.1177/002224299706100106>

Bruce, M., & Daly, L. (2006). Buyer behaviour for fast fashion. *Journal of fashion marketing and management*, 10(3), 329-344. <https://doi.org/10.1108/13612020610679303>

Cachon, G. P., & Swinney, R. (2011). The value of fast fashion: quick response, enhanced design, and strategic consumer behaviour. *Management Science*, 57(4), 778-795. <http://dx.doi.org/10.1287/mnsc.1100.1303>

Caniato, F., Caridi, M., Crippa, L., & Moretto, A. (2012). Environmental sustainability in fashion supply chains: an exploratory case based research. *International Journal of Production Economics*, 135(2), 659-670. <https://doi.org/10.1016/j.ijpe.2011.06.001>

Cernansky, R. (2020, January 6). Fashion has a waste problems. These compnies want to fix it. *Vogue Business*. Retrieved from <https://www.voguebusiness.com/sustainability/fashion-waste-problem-fabrics-deadstock-pashko-burberry-reformation>

Chapman, J. (2005). *Emotional durable design: objects, experiences and empathy*. London, UK: Earthscan

Chekima, B., Chekima, S., Syed Khalid Wafa, S. A. W., Igau, O. @ A., & Sondoh, S. L. (2015). Sustainable consumption: the effects of knowledge, cultural values,

environmental advertising, and demographics. *International Journal of Sustainable Development & World Ecology*, 23(2), 210–220. <http://dx.doi.org/10.1080/13504509.2015.1114043>

Chen, H. L., & Burns, L. D. (2006). Environmental analysis of textile products. *Clothing and Textiles Research Journal*, 24(3), 248-261. <https://doi.org/10.1177%2F0887302X06293065>

Choi, T. M., & Li, Y. (2015). Sustainability in fashion business operations. *Sustainability*, 7(11), 15400-15406. <https://doi.org/10.3390/su71115400>

Clean Clothes Campaign. (2020). Gender: women workers mistreated. Retrieved on 25. 06. 2020 from <https://cleanclothes.org/issues/gender>

Common Objective. (2002). Fibre briefing polyester. Retrieved from <https://www.commonobjective.co/article/fibre-briefing-polyester>

Croft, C. (2018, March 4). Balenciaga unveils merchandise supporting the WFP at PFW show. *Vogue*. Retrieved from <https://www.vogue.co.uk/article/balenciaga-world-food-programme-2018>

Crofton, S., & Dopico L. G. (2007). Zara-inditex and the growth of fast fashion. *Essays in Economic & Business History*, 25, 41-51. Retrieved from <http://www.ebhsoc.org/journal/index.php/journal/article/view/216/218>

De Brito, M. P., Carbone, V., & Blanquart, C. M. (2008). Towards a sustainable fashion retail supply chain in Europe: Organisation and performance. *International Journal of Production Economics*, 114(2), 534–553. <https://doi.org/10.1016/j.ijpe.2007.06.012>

Delikate Rayne. (n.d.). Company Overview. Retrieved on 29. 06. 2020 from <https://www.delikaterayne.com/pages/memoir>

Déri, E. (2013). Challenges of environmental and social responsibility in the fashion industry (Master’s thesis, Uppsala University, Uppsala, Sweden). Retrieved from [http://www.diva-portal.org/smash/record.jsf?dswid=3834&pid=diva2%3A630384&c=1&searchType=SIMPLE&language=en&query=Challenges+of+Environmental+and+Social+Responsibility+in+the+Fashion+Industry&af=%5B%5D&aq=%5B%5B%5D%5D&aq2=%5B%5B%5D%5D&aqe=%5B%5D&noOfRows=50&sortOrder=author\\_sort\\_asc&sortOrder2=title\\_sort\\_asc&onlyFullText=false&sf=all](http://www.diva-portal.org/smash/record.jsf?dswid=3834&pid=diva2%3A630384&c=1&searchType=SIMPLE&language=en&query=Challenges+of+Environmental+and+Social+Responsibility+in+the+Fashion+Industry&af=%5B%5D&aq=%5B%5B%5D%5D&aq2=%5B%5B%5D%5D&aqe=%5B%5D&noOfRows=50&sortOrder=author_sort_asc&sortOrder2=title_sort_asc&onlyFullText=false&sf=all)

Déri, E. (2013). Challenges of environmental and social responsibility in the fashion industry (Master’s thesis, Uppsala University, Uppsala, Sweden). Retrieved from [http://www.diva-portal.org/smash/record.jsf?dswid=3834&pid=diva2%3A630384&c=1&searchType=SIMPLE&language=en&query=Challenges+of+Environmental+and+Social+Responsibility+in+the+Fashion+Industry&af=%5B%5D&aq=%5B%5B%5D%5D&aq2=%5B%5B%5D%5D&aqe=%5B%5D&noOfRows=50&sortOrder=author\\_sort\\_asc&sortOrder2=title\\_sort\\_asc&onlyFullText=false&sf=all](http://www.diva-portal.org/smash/record.jsf?dswid=3834&pid=diva2%3A630384&c=1&searchType=SIMPLE&language=en&query=Challenges+of+Environmental+and+Social+Responsibility+in+the+Fashion+Industry&af=%5B%5D&aq=%5B%5B%5D%5D&aq2=%5B%5B%5D%5D&aqe=%5B%5D&noOfRows=50&sortOrder=author_sort_asc&sortOrder2=title_sort_asc&onlyFullText=false&sf=all)

Dickson, M. A., Loker, S., & Eckman, M. (2009). *Social responsibility in the global apparel industry*. New York, NY: Fairchild Books.

Dinda, S. (2006). Globalization and environment: can pollution haven hypothesis alone explain the impact of globalization on environment?. Munich Personal RePEc Archive. Retrieved from <https://mpra.ub.uni-muenchen.de/id/eprint/50590>

D'Souza, C., Taghian, M., & Lamb, P. (2006). An empirical study on the influence of environmental labels on consumers. *Corporate Communications: An International Journal*, 11(2), 162-173. <https://doi.org/10.1108/13563280610661697>

DuFault, A. (2013, December 18). Fashion: do we care more about animal rights than the environment?. *The Guardian*. Retrieved from <https://www.theguardian.com/sustainable-business/sustainable-fashion-blog/fashion-animal-rights-care-environment>

Edwards, R., Hunt, T., LeBaron, G. (2019). Corporate commitments to living wages in the garment industry. SPERI & University of Sheffield. Retrieved from <http://speri.dept.shef.ac.uk/wp-content/uploads/2019/05/Corporate-Commitments-to-Living-Wages-in-the-Garment-Industry-SPERI-report.pdf>

Eastern Daylight Time. (2016). Global retail industry worth USD 28 trillion by 2019-analysis, technologies & forecasts report 2016-2019-reasearch and markets. Retrieved from <https://www.businesswire.com/news/home/20160630005551/en/Global-Retail-Industry-Worth-USD-28-Trillion>

Earth Overshoot Day. (2019). Past earth overshoot days. Retrieved from <https://www.overshootday.org/newsroom/past-earth-overshoot-days/>

Environmental Justice Foundation. (2007). The deadly chemicals in cotton, London: Environmental Justice Foundation. Retrieved from [https://ejfoundation.org/resources/downloads/the\\_deadly\\_chemicals\\_in\\_cotton.pdf](https://ejfoundation.org/resources/downloads/the_deadly_chemicals_in_cotton.pdf)

Fast Retailing. (2020). Fast Retailing sustainability report 2020. Retrieved from [https://www.fastretailing.com/eng/sustainability/report/pdf/sustainability2020\\_en\\_print.pdf](https://www.fastretailing.com/eng/sustainability/report/pdf/sustainability2020_en_print.pdf)

Fernie, J., & Grant, D. B. (2015). *Fashion logistic: insights into the fashion retail supply chain*. Kogan Page Publishers.

Fernie, J., & Perry, P. (2011). The international fashion retail supply chain. *Fallstudien Zum Internationalen Management*, 271-290. [https://doi.org/10.1007/978-3-8349-6793-0\\_16](https://doi.org/10.1007/978-3-8349-6793-0_16)

Fernie, J., & Sparks, L. (1998). *Logistics and retail management, insights into current practice and trends from leading experts*. Long, UK: Kogan Page.

Firth, L. (2010, February 5). It's bamboo for the Paris premiere!. Retrieved from <https://www.vogue.co.uk/article/livia-firth-to-wear-linda-loudermilk-in-paris>

Fletcher, K. (2017). Exploring demand reduction through design, durability and “usership” of fashion clothes. *Philosophical Transactions of the Royal Society A: Mathematical, Physical, and Engineering Sciences*, 375(2095). <https://doi.org/10.1098/rsta.2016.0366>

Global Footprint Network. (2019). Country Trend. Retrieved from [http://data.footprintnetwork.org/?\\_ga=2.96508761.775029432.1575695178-1536573662.1541667465#/countryTrends?cn=5001&type=BCtot,EFctot](http://data.footprintnetwork.org/?_ga=2.96508761.775029432.1575695178-1536573662.1541667465#/countryTrends?cn=5001&type=BCtot,EFctot)

Guttal, S. (2007). Globalisation. *Development in Practice*, 17(4/5), 523-531. Retrieved from [www.jstor.org/stable/25548249](http://www.jstor.org/stable/25548249)

Georgiadis, G., & Rajaram, K. (2013). The retail planning problem under demand uncertainty. *Production Operations Management*, 22(5), 1200-1213.

Global Labor Justice. (2019). End gender-based violence and harassment: pillar 1: gender justice on garment global supply chains: an agenda to transform fast-fashion. Retrieved from [https://www.globallaborjustice.org/wp-content/uploads/2019/06/End-GBVH\\_GLJ\\_AFWA-2019.pdf](https://www.globallaborjustice.org/wp-content/uploads/2019/06/End-GBVH_GLJ_AFWA-2019.pdf)

Global Reporting Initiative. (2013). 2013 global conference sustainability and reporting: conference in review. Retrieved from <https://www.globalreporting.org/resourcelibrary/2013-GRI-Global-Conference-in-Review.pdf>

Harms, E. (2014). The psychology of clothes. *American Journal of Sociology*, 44(2), 230-250.

Harris, F., Robby, H., & Dibb, S. (2015). Sustainable clothing: challenges, barriers and interventions for encouraging more sustainable consumer behaviour. *International Journal of Consumer Studies*, 40(3), 309-318. <https://doi.org/10.1111/ijcs.12257>

Hatch, K. L. (1984). Chemicals and textiles: part I: dermatological problems related to fiber content and dyes. *Textile Research Journal: Publication of Textile Research Institute, Inc. and the Textile Foundation*, 54 (10), 664-682. <https://doi.org/10.1177/004051758405401005>

Hempy's. (2020). About us. Retrieved on 25. 06. 20 from <https://hempys.com/about-hempys/>

Hennes & Mauritz. (2019). H&M group: sustainability performance report 2019. Retrieved on 26. 06. 20 from <https://sustainabilityreport.hmgroup.com/fair-and-equal/#map>

Hennes & Mauritz. (2020a). H&M group sustainability performance report 2019. Retrieved from <https://hmgroup.com/media/news/financial-reports/2020/4/3621956.html>

Hennes & Mauritz. (2020b). Sustainability performance report 2019. Retrieved from <https://hmgroup.com/content/dam/hmgroup/groupsite/documents/masterlanguage>

e/CSR/reports/2019\_Sustainability\_report/H%26M%20Group%20Sustainability%20P  
erformance%20Report%202019.pdf

Hewa Kuruppuge, R., & Prasanna, I. (2014). Living wage in Asia. Clean Clothes Campaign. [https:// doi.org/10.13140/RG.2.1.1835.5924](https://doi.org/10.13140/RG.2.1.1835.5924)

Hines, T., & Bruce, M. (2001). Fashion marketing: contemporary issues. Oxford, UK: Butterworth-Heinemann.

Holbrook, A. L., Green, M. C., & Krosnick, J. A. (2003). Telephone versus face-to-face interviewing of national probability samples with long questionnaires: comparisons of respondent satisficing and social desirability response bias. *Public Opinion Quarterly*, 67, 79-125. <https://doi.org/10.1086/346010>

Horn, M. J., & Gurel, L. M. (1981). *The second skin* (3rd ed.). Boston, MA: Houghton Mifflin.

Hughes, H. (2020). Vegan fashion continues to gain momentum. FashionUnited. Retrieved from <https://fashionunited.uk/news/fashion/vegan-fashion-continues-to-gain-momentum/2020030247758>

Huntsman. (n.d.). AVITERA® SE: sustainability step-change in cotton dyeing. Retrieved on 25. 06. 20 from [https://www.huntsman.com/textile\\_effects/a/Products/Avitera](https://www.huntsman.com/textile_effects/a/Products/Avitera)

Huynh, P. (2015). Employment, wages and working conditions in Asia's garment sector: finding new drivers of competitiveness. International Labour Organisation. Retrieved from [https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms\\_426563.pdf](https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_426563.pdf)

International Labor Organisation. (2019). Sexual harassment at work: insights from the global garment industry. Retrieved from [https://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/publication/wcms\\_732095.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_732095.pdf)

Iqbal, S. (2017). Online clothing rental market by end-users (women, men, and kids) and clothing style (ethnic, western, and others) – global opportunity analysis and industry forecast, 2017-2023. Allied Market Research. Retrieved on 24. 06. 2020 from <https://www.alliedmarketresearch.com/online-clothing-rental-market>

Jeurissen, R. (2000). Cannibals with forks: the triple bottom line of 21st century business by John Elkington. *Journal of Business Ethics*, 23(2), 229-231. <https://doi.org/10.1023/A:1006129603978>

Johnson, D. L., Ambrose, S.H., Bassett, T. J., Bowen, M. L., Crummey, D.E., Issacson, J. S., Johnson, P., Lamb, M. S., & Winter-Nelson, A. E. (1997). Meanings of environmental terms. *Journal of Environment Quality*, 26(3), 581-589. <http://doi.org/10.2134/jeq1997.00472425002600030002x>

Jones, R. (2002). *The apparel industry*. Oxford, UK: Wiley-Blackwell.

Jung, S., & Jin, B. (2014). A theoretical investigation of slow fashion: sustainable future of the apparel industry. *International Journal of Consumer Studies*, 38(5), 510-519. <https://doi.org/10.1111/ijcs.12127>

Kashyap, A. (2019, November 26). Why aren't global clothing brands responding to #MeToo?. *Eco-Business*. Retrieved from <https://www.eco-business.com/opinion/why-arent-global-clothing-brands-responding-to-metoo/>

Khurana, K., & Ricchetti, M. (2016). Two decades of sustainable supply chain management in the fashion business: an appraisal. *Journal of Fashion Marketing and Management*, 20(1), 89-104. <https://doi.org/10.1108/JFMM-05-2015-0040>

Kishi, M. (2002). Acutely toxic pesticides. IFCS Workgroup. Retrieved from <http://www.bio-nica.info/biblioteca/Kishi2002AcutelyToxicPesticides.pdf>

Kitroeff, N. (2019). Fashion nova's secret: underpaid workers in Los Angeles factories. *The New York Times*. Retrieved from <https://www.nytimes.com/2019/12/16/business/fashion-nova-underpaid-workers.html>

Kolk, A. (2003). Trends in sustainability reporting by the Fortune Global 250. *Business Strategy and the Environment*, 12(5), 279-291. <https://doi.org/10.1002/bse.370>

Kothari, C. R., Garg, G. Reja, U., Manfreda, K. L., Hlebec, V., Vehovar, V. (2003). Open-ended vs. close-ended questions in web questionnaires. *Advances in Methodology and statistics*, 19, 150-177.

Kozlowski, A., Searcy, C., & Bardecki, M. (2015). Corporate sustainability reporting in the apparel industry: an analysis of indicators disclosed. *International Journal of Productivity and Performance Management*, 64(3), 337-397. <https://doi.org/10.1108/IJPPM-10-2014-0152>

Labor Behind the Label. (2020). The women who make your clothes. Retrieved from <https://labourbehindthelabel.org/the-women-who-make-your-clothes/>

Lee, M. (2014). The effects of production information on consumer attitudes and purchase intentions of fashion products made of fur, leather, and wool (Doctoral dissertation). Retrieved from <https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=4847&context=etd>

Levi's. (2016). Open source: water innovation. Retrieved from <https://www.levistrauss.com/wp-content/uploads/2016/03/Open-Source-Water-Innovations.pdf>

Lee, N., Choi, Y. J., Youn, C., & Lee, Y. (2012). Does green fashion retailing make consumers more eco-friendly? The influence of green fashion products and campaigns on green consciousness and behaviour. *Clothing and Textiles Research Journal*, 30(1), 67-82. <https://doi.org/10.1177%2F0887302X12446065>

Levi's (2018, March 22). How we make jeans with less water. Retrieved from [https://www.levi.com/US/en\\_US/blog/article/how-we-make-jeans-with-less-water/](https://www.levi.com/US/en_US/blog/article/how-we-make-jeans-with-less-water/)

Little, J. (2019, July 29). Hire calling: why rental fashion is taking off. *The Guardian*. Retrieved from <https://www.theguardian.com/fashion/2019/jul/29/hire-calling-why-rental-fashion-is-taking-off#maincontent>

Lomas, M. (2008). Textile wet processing and the environment. *Journal of the Society of Dyers and Colourists*, 109(1), 10-12. <https://doi.org/10.1111/j.1478-4408.1993.tb01493.x>

Marcano Belisario, J. S., Jamsek, J., Huckvale, K., O'Donoghue, J., Morrison, C. P., & Car, J. (2015). Comparison of self-administered survey questionnaire responses collected using mobile apps versus other methods. *Cochrane Database of Systematic Reviews*, (7), MR000042. <https://doi.org/10.1002/14651858.MR000042.pub2>

Mintel. (2007). *Clothing retailing*. London, UK: Mintel Intelligence

Misopoulos, F., Michaelides, R. Salehuddin, M. A., Manthou, V. & Micaelides, Z. (2018). Addressing organisational pressures as drivers towards sustainability in manufacturing projects and project management methodologies. *Sustainability*, 10(6). <https://doi.org/10.3390/su10062098>

Moisander, J., & Pesonen, S. (2002). Narratives of sustainable ways of living: constructing the self and the other as a green consumer. *Management Decision*, 40(4), 329-342. <https://doi.org/10.1108/00251740210426321>

Moore, B. (2011). *Style over substance, why ethics are not in fashion for designer labels*. Manchester: Ethical Consumer Research Association Ltd. Retrieved on 20 .05 .20 from <http://www.ethicalconsumer.org/linkclick.aspx?fileticket=Tv5KfbTByNA%3D&tabid=1612>

Moore, K. (2019, May 21). Urban Outfitters announces new clothing rental service alongside record first-quarter sales. *Forbes*. Retrieved from <https://www.forbes.com/sites/kaleighmoore/2019/05/21/urban-outfitters-announces-new-clothing-rental-service-alongside-record-first-quarter-sales/#1863acf31951>

Moore, K. (2019, August 8). With Nuuly's launch, the clothing rental service market continues to heat up. *Forbes*. Retrieved from <https://www.forbes.com/sites/kaleighmoore/2019/08/08/with-nuulys-launch-the-clothing-rental-service-market-continues-to-heat-up/#125ec3414777>

Morgan, L. R., & Birtwistle, G. (2009). An investigation of young fashion consumers' disposal habits. *International Journal of Consumer Studies*, 33(2), 190-198. <https://doi.org/10.1111/j.1470-6431.2009.00756.x>

Moth, D. (2015, January 6). *Storytelling brands: Zady's sustainable fashion label*. Ecoconsultancy. Retrieved from <https://econsultancy.com/storytelling-brands-zady-s-sustainable-fashion-label/>

My Wardrobe HQ. (2020). *Who are we?.* Retrieved on 24. 06. 2020 from <https://www.mywardrobehq.com/about-us>



New Jersey Department of Health and Senior Services. (2001). Hazardous substance fact sheet. Retrieved from <https://www.nj.gov/health/eoh/rtkweb/documents/fs/0031.pdf>

Ni, J., & Srinivasan, K. (2015). Matching in the sourcing market: a structural analysis of the upstream channel. *Marketing Science*, 34(5), 722-738.

Nike. (n.d.). Collaborations. Retrieved on 29. 06. 2020 from <https://purpose.nike.com/partnerships-collaborations>

O'Connell, L. (2019). Global apparel market growth 2012-2020. Statista. Retrieved from <https://www.statista.com/statistics/727541/apparel-market-growth-global/>

Oh, J., & Jeong, B. (2014). Profit analysis and supply chain planning model for closed-loop supply chain in fashion industry. *Sustainability* 2014, 6(12), 9027-9056. <https://doi.org/10.3390/su6129027>

Opperskalski, S., Siew, S. Y., Tan, E., & Truscott, L. (2019). Preferred Fiber & Materials: market report 2019. Textile Exchange. Retrieved from [https://store.textileexchange.org/wp-content/uploads/woocommerce\\_uploads/2019/11/Textile-Exchange\\_PREFERRED-Fiber-Material-Market-Report\\_2019.pdf](https://store.textileexchange.org/wp-content/uploads/woocommerce_uploads/2019/11/Textile-Exchange_PREFERRED-Fiber-Material-Market-Report_2019.pdf)

Park, H. & Rees, K. (2008). Motivators of fair labor management and the role of top management in the US clothing/footwear industry. *Journal of Fashion Marketing and Management*, 12(4), 487-501. <https://doi.org/10.1108/13612020810906146>

Patagonia. (2020). Hemp. Retrieved on 24. 06. 2020 from <https://www.patagonia.com/our-footprint/hemp.html>

Paton, E. (2020, March 1). After factory disaster, Bangladesh made big safety strides. Are the Bad Days Coming Back?. *The New York Times*. Retrieved from <https://www.nytimes.com/2020/03/01/world/asia/rana-plaza-bangladesh-garment-industry.html>

Paul, R. (2015). Denim and jeans. *Denim*, 1-11. <https://doi.org/10.1016/B978-0-85709-843-6.00001-9>

Portney, L. G., & Watkins, M. P. (2009). *Foundations of clinical research: application to practice* (3<sup>rd</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.

Pulse of the Fashion Industry. (2017). *Pulse of the Fashion Industry 2017*. Copenhagen, Denmark: Global Fashion Agenda & The Boston Consulting Group. Retrieved from [https://globalfashionagenda.com/wp-content/uploads/2017/05/Pulse-of-the-Fashion-Industry\\_2017.pdf](https://globalfashionagenda.com/wp-content/uploads/2017/05/Pulse-of-the-Fashion-Industry_2017.pdf)

Peta. (2013, November 19). *The Truth Behind Angora Fur* [Video file]. Retrieved from [https://www.youtube.com/watch?v=PtAFHyXS31M&has\\_verified=1](https://www.youtube.com/watch?v=PtAFHyXS31M&has_verified=1)

Ralph Lauren Corporation. (2017). *Ralph Lauren: Corporate responsibility report fiscal 2017*. Retrieved from [https://tic-casabaplus-ralphlauren.oss-cn-shanghai.aliyuncs.com/pdf/Fiscal2017\\_CorporateResponsibilityReport%20\(1\).pdf](https://tic-casabaplus-ralphlauren.oss-cn-shanghai.aliyuncs.com/pdf/Fiscal2017_CorporateResponsibilityReport%20(1).pdf)

Poddi, L., & Vergalli, L. (2009). Does corporate social responsibility affect the performance of firms? (Report No. 52.2009). Fondazione Eni Enrico Mattei (FEEM). <http://dx.doi.org/10.22004/ag.econ.52531>

Pookulangara, S., & Shephard, A. (2013). Slow fashion movement: understanding consumer perceptions – an exploratory study. *Journal of Retailing and Consumer Services*, 20(2), 200-206. <https://doi.org/10.1016/j.jretconser.2012.12.002>

Priest, A. (2005). Uniformity and differentiation in fashion. *International Journal of Clothing Science and Technology*, 17(3/4), 253-263. <https://doi.org/10.1108/09556220510590957>

Ralph Lauren Corporation. (2019). Design the change: 2019 global citizenship & sustainability report. Retrieved from [https://corporate.ralphlauren.com/on/demandware.static/-/Sites-RalphLauren\\_Corporate-Library/default/dw815a01df/documents/FY19%20Global%20Citizenship%20Sustainability%20Report.pdf](https://corporate.ralphlauren.com/on/demandware.static/-/Sites-RalphLauren_Corporate-Library/default/dw815a01df/documents/FY19%20Global%20Citizenship%20Sustainability%20Report.pdf)

Ramadan, R., Saad, G., Awwad, E., Khatib, H., Mabsout, M. (2017). Short-term durability of hemp fibers. *Procedia Engineering*, 200, 120-127. <https://doi.org/10.1016/j.proeng.2017.07.018>

Rent the Runway. (2020). Our product. Retrieved on 24. 06. 2020 from <https://www.renttherunway.com/about-us/product>

Rissanen, T. (2005). From 15% to 0: investigating the creation of fashion without the creation of fabric waste. *Creativity: Designer Meets Technology Europe*. Retrieved from [https://s3.amazonaws.com/academia.edu.documents/31431126/2005CreativityPaper.pdf?response-content-disposition=inline%3B%20filename%3DFrom\\_15\\_to\\_0\\_Investigating\\_the\\_creation.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20191214%2Fus-east-1%2Fs3%2Faws4\\_request&X-Amz-Date=20191214T093021Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=6b900e1884bd37413a219188cc82cff166de1d8734f62a143cc0dc421c6390ed](https://s3.amazonaws.com/academia.edu.documents/31431126/2005CreativityPaper.pdf?response-content-disposition=inline%3B%20filename%3DFrom_15_to_0_Investigating_the_creation.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20191214%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20191214T093021Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=6b900e1884bd37413a219188cc82cff166de1d8734f62a143cc0dc421c6390ed)

Rogers, D. S., & Tibben-Lembke, R. S. (1999). Going backwards: reverse logistics trends and practices. *Reverse Logistics Executive Council*. Retrieved from [https://pdfs.semanticscholar.org/ca71/c573ab3d8e77b8ce8bd5eb211f5eaf1234aa.pdf?\\_ga=2.199516846.1804095555.1592383651-2013906864.1592383651](https://pdfs.semanticscholar.org/ca71/c573ab3d8e77b8ce8bd5eb211f5eaf1234aa.pdf?_ga=2.199516846.1804095555.1592383651-2013906864.1592383651)

Ross, R. (2008). *Clothing: a global history*. Maldon, MA: Policy Press.

Saha, K., Lehw, M. L. A. (2018). Durable fashion apparel: a potential sustainability solution?. *Kansas State University*. Retrieved from [https://www.researchgate.net/profile/Kowshik\\_Saha2/publication/328517777\\_Dur](https://www.researchgate.net/profile/Kowshik_Saha2/publication/328517777_Dur)

able\_Fashion\_Apparel\_A\_Potential\_Sustainability\_Solution/links/5c103b404585157ac1bba3ea/Durable-Fashion-Apparel-A-Potential-Sustainability-Solution.pdf

Šajn, N. (2019). Environmental impact of the textile and clothing industry. European Parliamentary Research Service. Retrieved from [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633143/EPRS\\_BRI\(2019\)633143\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633143/EPRS_BRI(2019)633143_EN.pdf)

Sasawashi. (2020). About sasawashi. Retrieved 25. 06. 2020 from <https://sasawashi.com/en/about/>

Saxena, S., Raja, A. S. M., & Arputharaj, A. (2016). Challenges in sustainable wet processing of textiles. *Textiles and Clothing Sustainability*, 43-49. [https://doi.org/10.1007/978-981-10-2185-5\\_2](https://doi.org/10.1007/978-981-10-2185-5_2)

Schwartz, B. (2000). Reverse logistics strengthens supply chain. *Transportation and Distribution*, 41(5), 95-100.

Shen, B. (2014). Sustainable fashion supply chain: lessons from H&M. *Sustainability*, 6(9), 6236-6249. <https://doi.org/10.3390/su6096236>

Shenkar, O., Luo, Y., & Chi, T. (2014). *International Business* (3rd ed.). New York, NY: Routledge.

Spindler E. (2013) The History of Sustainability The Origins and Effects of a Popular Concept. In: Jenkins I., Schröder R. (eds) *Sustainability in Tourism*. Springer Gabler, Wiesbaden

Statista. (2020). Apparel - worldwide. Retrieved from <https://www.statista.com/outlook/90050000/100/apparel/worldwide>

Steuer, R., & Konrad, A. (2009). Business-society relations in central-eastern and western europe: How those who lead in sustainability reporting bridge the gap in corporate (social) responsibility. *Scandinavian Journal of Management*, 25(1), 23-26. <https://doi.org/10.1016/j.scaman.2008.11.001>

Stone, E. (2008). *The dynamics of fashion* (3<sup>rd</sup> ed). New York, USA: Fairchild. Sustainable Apparel Coalition. (n.d.). Our members: brands & retailers. Retrieved on 29. 06. 20 from <https://apparelcoalition.org/brands-retailers/>

Taplin, I. M. (1999). Continuity and change in the US apparel industry: a statistical profile. *Journal of Fashion Marketing and Management*, 3(4), 360-368. <https://doi.org/10.1108/eb022572>

The Evolution of Fashion. (2017). Fashion trends' impact on society. Retrieved on 21. 08. 2020 from <https://melwangsanthology.wordpress.com/2017/04/21/blog-post-title-3/>

The World Bank. (2019, September 23). How much do our wardrobes cost to the environment?. Retrieved from <https://www.worldbank.org/en/news/feature/2019/09/23/costo-moda-medio-ambiente>

Strähle, J., & Müller, V. (2016). Key Aspects of Sustainability in Fashion Retail. *Green Fashion Retail*, 7–26. [https://doi.org/10.1007/978-981-10-2440-5\\_2](https://doi.org/10.1007/978-981-10-2440-5_2)

United Nations Academic Impact. (n.d.). Sustainability. Retrieved on 10. 11. 2019 from <https://academicimpact.un.org/content/sustainability>

United Nations Environment Programme. (2018, November 12). Putting the brakes on fast fashion. Retrieved from <https://www.unenvironment.org/news-and-stories/story/putting-brakes-fast-fashion>

United Nations World Commission on Environment and Development. (1987). Report of the world commission on environment and development: our common future. Oxford, UK: Oxford University Press.

Watts, J. (2018, July 23). Earth’s resources consumed in ever greater destructive volumes. Retrieved from <https://www.theguardian.com/environment/2018/jul/23/earths-resources-consumed-in-ever-greater-destructive-volumes>

Wen, X., Choi, T. M., & Chung, S. H. (2018). Fashion retail supply chain management: a review of operational models. *International Journal of Production Economics*, 207, 34-55. <https://doi.org/10.1016/j.ijpe.2018.10.012>

Weibel, C. A. (1952). Two thousands years of textiles. New York, USA: Pantheon Books.

Wilcox, R. T. (1951). The mode in furs. New York, USA: Charles Scribner’s Sons.

Williams, M. (1993). International trade and the environment: issues, perspectives and challenges. *Environmental Politics*, 2(4), 80-97. <https://doi.org/10.1080/09644019308414103>

Winkle, T. L., Edeleanu, J., Ann Prosser, E., & Walker, C. A. (1978). Cotton versus polyester: surprising facts on energy requirements for the production and maintenance of clothing made of these two kinds of fibers suggest priorities for the utilisation of energy and land. *American Scientist*, 66(3), 280-290.

Wood, Z. (2020, January 31). Vegan fashion to come under new “100% animal-free” guidelines. *The Guardian*. Retrieved from <https://www.theguardian.com/business/2020/jan/31/vegan-fashion-to-come-under-new-100-per-cent-cruelty-free-guidelines>

Worker Rights Consortium. (2013). Global wage trends for apparel workers, 2001-2011. Center for American Progress. Retrieved from <https://cdn.americanprogress.org/wp-content/uploads/2013/07/RealWageStudy-3.pdf>

World Business Council for Sustainable Development. (2002). Sustainable development reporting: striking the balance. Retrieved from <https://www.wbcsd.org/Programs/Redefining-Value/External-Disclosure/Reporting-matters/Resources/Sustainable-Development-Reporting-Striking-the-balance>

Zamani, B., Sandin, G., & Peters, G. M. (2017). Life cycle assessment of clothing libraries: can collaborative consumption reduce the environmental impact of fast fashion?. *Journal of Cleaner Production*, 162, 1368-1375. <https://doi.org/10.1016/j.jclepro.2017.06.128>

## 9 Appendices

### 9.1 Appendix 1 - Global levels of biocapacity, ecological footprint and ecological reserve (Global Footprint Network, 2019)

Year	Global biocapacity (gha)	Global ecological footprint (gha)	Global ecological reserve (gha)
1961	9628985823	7051336451	2577649373
1962	9688628688	7285145521	2403483167
1963	9685557041	7568398195	2117158846
1964	9735957105	7886045992	1849911113
1965	9759252373	8175837401	1583414972
1966	9858780031	8529251714	1329528317
1967	9909440605	8767474779	1141965825
1968	9943568815	9110829263	832739551.7
1969	9955634168	9501685353	453948815.1
1970	10016193932	10073811315	-57617383.56
1971	10097481463	10418619348	-321137885.1
1972	10052298842	10693362952	-641064110.6
1973	10161748161	11260982623	-1099234462
1974	10112484747	11154358636	-1041873889
1975	10118685604	11078555528	-959869924.3
1976	10205611278	11637923791	-1432312514
1977	10208526179	11863115087	-1654588908
1978	10362705052	12193279597	-1830574545
1979	10331290960	12500623242	-2169332282
1980	10333196111	12276736677	-1943540566
1981	10431644606	12121274025	-1689629418
1982	10541049017	12083927949	-1542878932
1983	10481481887	12050460239	-1568978353
1984	10667466194	12560740015	-1893273821
1985	10711857121	12734394487	-2022537365
1986	10757794755	12978494453	-2220699698
1987	10776465936	13317245432	-2540779495
1988	10709737970	13607122146	-2897384176
1989	10868963148	13970281107	-3101317959
1990	11027172900	14190306661	-3163133761
1991	10943102909	14138474523	-3195371614
1992	11123488259	14245761155	-3122272896
1993	11072376700	14203569249	-3131192549
1994	11155446400	14406534010	-3251087610
1995	11102933332	14651409981	-3548476649
1996	11284877201	15013057002	-3728179801
1997	11326416369	15244360885	-3917944516
1998	11401415415	15316147764	-3914732350
1999	11438338804	15379702330	-3941363526
2000	11425133794	15715547823	-4290414029
2001	11487146905	15879139818	-4391992913
2002	11468643455	16033300070	-4564656615
2003	11444706680	16614753874	-5170047194
2004	11695881333	17522953217	-5827071884
2005	11607225698	17928992553	-6321766855
2006	11635966626	18402666030	-6766699404

<b>2007</b>	11678116391	18915824757	-7237708366
<b>2008</b>	11862381425	19157285022	-7294903598
<b>2009</b>	11813746161	18817185753	-7003439592
<b>2010</b>	11834441869	19770153004	-7935711134
<b>2011</b>	11918370545	20189345116	-8270974571
<b>2012</b>	11878752565	20117249579	-8238497013
<b>2013</b>	12077792310	20571289466	-8493497155
<b>2014</b>	12159264095	20611944995	-8452680899
<b>2015</b>	12148348648	20504244731	-8355896084
<b>2016</b>	12169283366	20509032352	-8339748986

## 9.2 Appendix 2 - Questionnaire

New survey 0
1.

**1 Survey Background and Consent Form**

With the rise of globalization, many actors in the fashion industry have developed supply chains spanning different continents to promote efficiency and reduce costs. Meanwhile, consumers are encouraged to increase their consumption, resulting in a trend of fast fashion. These developments are often associated with various environmental and social problems. Hence, different practices to promote social and environmental sustainability are increasingly applied in the fashion industry.

This survey is designed to collect the opinions and attitudes of people currently working in the fashion industry and fashion students regarding socially and environmentally sustainable fashion retailing. The goal is to determine which practices are regarded as most feasible for adoption by fashion retailers to improve the sustainable issues in their businesses.

Participation is voluntary and takes approximately 7 minutes. It is free for withdrawal from participating at any time. No personal identification information is collected in the survey. All data will be stored in secured electronic format with password for 3 years. In order to protect your anonymity, no personally identifying questions and information will be collected. The results of this study will be used for non-commercial, research purposes. An overview at aggregate level will be shared with fashion retailers who have participated in this survey.

Your participation is greatly appreciated!  
If you have any questions about this study, please contact Janet Mak via 1721504@modul.ac.at.

Electronic Consent. Please choose your choice below.

To click on 'Agree' button, it indicates that:  
- you agree to participate voluntarily  
- you have read the above information  
To click on 'Disagree' button, it indicates that:  
- you do not wish and decline to participate in this survey

Agree  
 Disagree

Next

---

0%
Powered by SurveyLab

New survey 0
2. Untitled Page

**2 What does sustainability mean to you in general? \***

Enter answer

←
Next

---

0%
Powered by SurveyLab

New survey 0
3. Untitled Page

**3 In your opinion, what are the major thing(s) that the fashion industry needs to change in order to become more sustainable? Please state. \***

Enter answer

**4 From your perspective, what are the major barriers preventing the fashion industry from becoming more sustainable? Please state. \***

Enter answer

**5 What can you do to personally contribute to this cause in your current (or future) role in the industry? Please state. \***

Enter answer

←
Next

---

0%
Powered by SurveyLab



New survey 0  
4. For each of the practices listed below, which could be implemented within the fashion industry, please indicate:  
a) How feasible it would be for the fashion industry to adopt this practice in general?  
b) How important you think this practice is

6 \*

	How feasible do you think it is that the fashion industry could adopt this practice in general?	In your opinion, how widely does the fashion industry need to adopt this practice to be more sustainable?	How likely are you to use this practice in your own design/production of fashion items?
More clothing exchanges, as an alternative to purchase (i.e. the recirculation and re-use of garments!)	Select answer... ▾	Select answer... ▾	Select answer... ▾
More repair and/or alteration of garments to extend their useful life.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Products produced for greater durability (i.e. less easily damaged/worn out, and a longer useful life).	Select answer... ▾	Select answer... ▾	Select answer... ▾
Production using materials obtained only from ecologically responsible sources (e.g. organic and/or eco-certified sources.)	Select answer... ▾	Select answer... ▾	Select answer... ▾
Upcycling: the use of clothing waste as components in new designs (i.e. recycling fabrics).	Select answer... ▾	Select answer... ▾	Select answer... ▾
In-house and closed-loop production: the reprocessing of the firm's owned garments into new items at the end of their useful life.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Clothing rental services offered by PRODUCERS (e.g. fashion labels) as an alternative to purchase.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Clothing rental services offered by THIRD PARTIES (e.g. hire agencies) as an alternative to purchase.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Promote "slow fashion", involving the lifetime used by consumers of fewer, yet qualitatively better garments.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Reduce fashion advertising in general to reduce aggregate demand.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Avoid the use of animal-based materials (e.g. leather and fur).	Select answer... ▾	Select answer... ▾	Select answer... ▾
Ensure that all production (of materials and garments) takes place under "Fair trade" conditions to promote the safety of workers throughout the supply chain.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Ensure that wages for textile workers in developing countries are sufficient to provide a decent living wage.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Avoid the use of dyes and other chemicals which are harmful to human health.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Avoid the use of dyes and other chemicals which are harmful to the environment.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Reduce the amount of energy used in production processes (gaining materials and producing garments).	Select answer... ▾	Select answer... ▾	Select answer... ▾
Reduce the amount of energy used in distribution processes (transportation and retail)	Select answer... ▾	Select answer... ▾	Select answer... ▾
Measurement of the various environmental and social impacts resulting from business operations.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Publish the various environmental and social impacts in a sustainability report to inform consumer and other stakeholders.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Provide community outreach to educate consumers on responsible fashion, or contribute to other societal causes.	Select answer... ▾	Select answer... ▾	Select answer... ▾
Donate a portion of profits to assist Non-Governmental Organisations (NGOs) working either in fashion or in other fields.	Select answer... ▾	Select answer... ▾	Select answer... ▾

<<

>>

24%

Powered by SurveyLab

New survey 0  
5. Untitled Page

7 What were your main considerations when judging the "feasibility" of the practices listed in the table above? Please rank the following list of considerations from 1-10, in terms of importance. (1="Most Important"; 10="Least Important")

	1	2	3	4	5	6	7	8	9	10
Profitability for producers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wellbeing of workers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consumer satisfaction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wellbeing of the wider society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wellbeing of future generations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some concept of social equity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industry norms of behaviour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The power of large corporations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conservation of resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please state the consideration in the below comment box)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment

<<

>>

43%

Powered by SurveyLab

New survey 0  
6. Untitled Page

8 Are you currently a fashion student? \*

Yes (please state the ROLE you plan to work AND WHERE do you study in the below comment box)

No

Comment

<< >>



New survey 0  
7. Untitled Page

9 Are you currently work or previously worked in the fashion industry? \*

Yes (please state the role of your work in the below comment box)

No

Comment

<< >>



New survey 0  
8. Please describe the brand you work for (or plan to work for if you are a current fashion student)

10 What is the vision of the fashion brand? \*

Enter answer

11 What is the age range of the brand's target customer? \*

Enter answer

12 Which gender(s) does the brand focus on? \*

Male

Female

13 Which continent(s) does the brand target on? \*

Enter answer

14 What is the price range of the brand's product items? \*

Enter answer

15 Which type(s) of stores are operating? \*

Online

Offline

Hybrid

16 Where are the garments manufactured? \*

Enter answer

The name of the country:

<< >>



