THE RELATIONSHIP BETWEEN CIRCULAR FASHION AND SOCIAL DESIRABILITY BIAS IN MARKETING COMMUNICATION: AN ANALYSIS ON BRAND MESSAGES

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ETHICAL DECLARATION

I hereby declare that I am the sole author of this thesis and that I have conducted my work in accordance with academic rules and ethical behaviour at every stage from the planning of the thesis to its defence. I confirm that I have cited all ideas, information and findings that are not specific to my study, as required by the code of ethical behaviour, and that all statements not cited are my own.

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ABSTRACT

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This research aims to examine the relationship between consumers' social desirability tendency and their attitudes towards circular fashion practices. There is a widespread belief in society that only people of lower social status prefer to engage in circular fashion practices such as second-hand shopping and swapping activities (Çakır and Dedeoğlu, 2020). This situation causes a social risk that they are concerned about how others view their purchasing behaviors. Consumers who are afraid of facing a loss in their social image refrain from participating in these activities (Lang, Seo and Liu, 2019). This behavior is about social desirability bias which is defined as the tendency of people to indicate society-oriented behaviors rather than acting according to their own intention (Chung and Monroe, 2003). Social media messages about circular fashion practices of 6 different global fashion brands were examined and their messages were analyzed via semantic network analysis. In the next phase of the research, the data obtained from the network analysis was used to explore opinions of

44 participants about the different communication messages related to circular fashion with a semi-structured interview form. The social desirability tendency of the participants was measured with the short form of Marlowe-Crowne Social Desirability Scale including demographic questions. The exploratory research concludes with the extraction of four different themes which are clothing performance, emotional brand attachment, greenwashing concerns, and openness to change from both interviews and literature.

Keywords: circular fashion, circular economy, social desirability bias, semantic network analysis, semi-structured interview.

ÖZET

PAZARLAMA İLETİŞİMİNDE DÖNGÜSEL MODA İLE SOSYAL İSTENİRLİK EĞİLİMİ ARASINDAKİ İLİŞKİ: MARKA MESAJLARI ÜZERİNDEN BİR ANALİZ

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Bu araştırma, tüketicilerin sosyal istenirlik eğilimi ve döngüsel moda uygulamalarına ilişkin tutumları arasındaki ilişkinin incelenmesini amaçlamaktadır. Toplumda, sadece daha düşük sosyal statüye sahip kişilerin giyim eşyası kiralama ve takas gibi döngüsel moda faaliyetlerini tercih ettiğine dair yaygın bir kanı mevcuttur (Çakır ve Dedeoğlu, 2020). Bu durum, başkalarının kendi satın alma davranışlarını nasıl gördükleri konusunda endişe duymaları gibi sosyal bir risk oluşturmaktadır. Sosyal imajlarında bir kayıpla karşılaşmaktan korkan tüketiciler, bu faaliyetlere katılmaktan kaçınabilirler (Lang, Seo ve Liu, 2019). Bu davranış, insanların kendi niyetlerine göre hareket etmekten çok topluma yönelik davranışlar gösterme eğilimi olarak tanımlanan sosyal istenirlik yanlılığı olarak tanımlanmaktadır (Chung ve Monroe, 2003). Araştırmada seçilen 6 farklı global moda markasının döngüsel moda uygulamaları hakkındaki sosyal medya mesajları incelenmiş ve bu ifadeler anlamsal ağ analizi yoluyla analiz

edilmiştir. Araştırmanın sonraki adımında ise; ağ analizi sonucu elde edilen verilerden faydalanılarak 44 katılımcının döngüsel moda ile ilgili marka mesajları hakkındaki düşünceleri görüşme yöntemi kullanılarak keşfedilmeye çalışılmıştır. Aynı zamanda katılımcıların sosyal istenirlik düzeyi, Marlowe-Crowne Sosyal Arzu edilebilirlik Ölçeği (MCSAÖ)'nin kısa formu ile demografik sorulara da yer verilerek ölçülmüştür. Keşfedici araştırma, görüşmeler ve literatür taraması sonucunda giyim performansı, duygusal marka bağlılığı, yeşil aklama endişeleri ve yeniliklere açık olma durumu üzere dört farklı temanın oluşması ile sona ermektedir.

Anahtar Kelimeler: döngüsel ekonomi, döngüsel moda, sosyal istenirlik yanlılığı, ağ analizi, yarı yapılandırılmış görüşme.

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CHAPTER 1: INTRODUCTION

Fashion is a USD 1.3 trillion industry which provides employment opportunities to more than 300 million people all over the globe (Gazzola et al., 2020, p. 1). It has complex global supply chain structures including many ties within its value chain and operates in an extremely competitive environment dominated by multinational brands. Total clothing production roughly increased by 50% from 2000 to 2014 (Remy, Speelman, and Swartz, 2016, p. 2). The biggest driving force behind this growth was the rise of new model in the industry commonly known as "fast fashion". This trend emerged in the beginning of the 1990s and then became popular in the mid-2000s. Fast fashion can be described as a business model which provides fashionable garments with lower prices and short lead times to consumers.

Fashion trends which were previously gathered throughout two main fashion seasons (spring-summer and autumn-winter) are now being examined under many micro-seasons with the fast fashion phenomenon. The main priority of fashion retailers has become to respond to these changing trends as quickly as possible by the aim of attracting attention of more consumers. Since short lead times and low labor costs are essential in this model, near shore manufacturing is preferred in the countries as Turkey, Bulgaria, Romania, and Morocco (Caro and Martínezde-Albéniz, 2015, pp. 5-7). Because of its super-fast manufacturing in developing countries where the regulation framework of environment and workers is looser, quality of the clothing has become lower. Due to the shorter life spans of garments, they are discarded instead of being repaired or used again according to fast fashion model (Peters, Li, and Lenzen, 2021, p. 2). These features have been causing various environmental and social impacts on both the consumer and manufacturer countries.

As environmental and social impact of the linear model has been incrementally growing, it was widely acknowledged that sustainable growth based on this pattern is not possible. The model of "slow fashion" which put emphasis on the values of sustainable design, manufacture and consumption as opposed to fast fashion was introduced. This fashion model, which is based on local and smaller manufacturing rather than complex global supply chains targets increasing consumer awareness in terms of purchasing fewer but more qualified garments (Oliveira, Miranda and Dias, 2022, p. 3). The most popular fast fashion brands followed this new trend and focused on eco-friendly marketing campaigns for their collections, such as the "Join Life" of

Zara in 2016 and the "Conscious Collection" of H&M in 2010. Despite these branding activities of the fast fashion companies, their inconvenient retail environment and throwaway culture were the main factors for consumers to start moving away from them. According to the study of Zhang, Zhang, and Zhou (2021 pp. 2-3), one third of consumers prefer to purchase from environmentally and socially conscious brands and almost half of consumers feel better when they shop from these brands. However, Rausch, Baier, and Waning (2021, pp. 1-3) state that even though consumers indicate their positive attitude towards these brands, this attitude does not turn into purchasing behavior due to the relatively higher prices of sustainable products. In addition to economic risk perceived, aesthetic issues affecting buying behavior is that sustainable garments are generally perceived as unfashionable by consumers. These price related and aesthetic concerns as well as attitude-behavior gap of the consumers can be considered as key barriers for transition towards to the sustainable clothing.

Circular economy (CE) which concentrates in reduce, reuse, and recycle in both the manufacture and consumption has been accepted as an alternative model by rejecting the "end-of-life" term (Kirchherr et al., 2018, p. 264). Even though the concept entered to the academic literature at the end of the 1960s, global organizations, policymakers, and companies have been introducing their circular programs especially in the last decade to create better communities with social and economic wellbeing and enhance environmental quality. For instance, while the circular economy package was accepted in Europe with a directive on waste in 2008, China adopted Circular Economy Promotion Law as its national development model in the same year (Suarez-Eiroa et al., 2019, p. 953). In 2013, the importance of circular economy for the future of businesses and our world was recognized by more than 30% of global chief executives (Velenturf and Purnell, 2021, p. 1438). Even though it would not be as easy as one-two-three to achieve circularity in the fashion industry, there is a mounting pressure of individuals, non-governmental bodies, and governments on the fashion companies for transition towards more sustainable production and supply chain management.

1.1.Structure of the Study

This study consists of 5 chapters including an introduction and aim of the paper. After this chapter, the second one contains literature review which provides the previous academic research about the thesis topic. Fast fashion business model, its social and environmental impacts are examined. Through a literature review, circular

economy approach is explained as an alternative to this business model with its applications including recycling, reusing (renting and swapping), and upcycling. The third chapter is methodology involving the research methods of this study. In addition, sampling, data collection, coding procedure and data analyzing techniques are explained. Content analysis, social network analysis and semi-structured interview are also examined in this section. The fourth chapter presents the data analysis and findings. The final one delivers conclusions, limitations, and recommendations of the study for further research.

1.2.Aim of the Study

Circular economy is not a quick win concept but requires continuous efforts to create sustainable development (Kirchherr et al., 2018, p. 269). That's why it is widely embraced that transition to circular fashion model requires collaborative efforts of governments, consumers, and businesses. Although theoretical framework has been defined by global organizations and governmental agencies, business strategies also has been shaped by fashion industry towards circular applications. It is needed for consumers to consider their consumption habits and support more circular future. Cultural acceptance of consumers has an important impact on the transition process to CE applications. Since shifting of these routines takes longer due to the lack of awareness about the CE concept, it is seen as a key barrier regarding the business model (Jesus and Mendonça, 2018, p. 83). Korsunova, Horn, and Vainio (2021, p. 759) agree that existing purchasing decisions and lack of sufficient information of consumers about the circular practices are important impediments to leave linear fashion model.

While some scholars have researched consumer traits and behaviors in terms of collaborative consumption models for other product groups (Edbring, Lehner and Mont, 2016, p. 6), for the circular fashion applications this study has been realized in specific countries including Finland (Korsunova, Horn and Vainio, 2021), Sweden (Borg, Mont and Schoonover, 2020) and Korea (Kim, Hye and Lee, 2021). Given that consumer awareness and eagerness to adopt new consumption habits is a must, effect of social desirability tendency of the consumers on these applications including recycling, reusing e.g., collaborative consumption, and upcycling are not discussed. This study aims to fill this literature gap by addressing this research questions:

1. Is there any relationship between social desirability bias and engaging in circular fashion?

2. How does the social desirability level of individuals affect their tendency to engage in circular fashion?
3. What is the attitude of consumers with lower levels of social desirability scores towards circular fashion?
4. What is the attitude of consumers with higher levels of social desirability scores towards circular fashion?

CHAPTER 2: LITERATURE REVIEW

2.1. Fast Fashion Business Model

A few global macroeconomic events beginning with the economic recession in the 1970s and easing of capital controls through financial globalization became catalyst for commercialization of the fashion sector. In the 2000s, end of the Multi-fibre Agreement which puts limitation on the quantities exported from developing countries and entry of China to the World Trade Organization were the other major improvements for the industry. To keep up with the changing conditions and increasing competition, fashion wear companies had to outsource their manufacturing to the developing world. They either closed or decreased the number of their mills by subcontracting work-intensive parts including sewing and finishing to peripheral regions or local workshops where mostly employ migrants and female day laborers. Thereby, local sweatshops also became a widely used phenomenon for the fashion firms which ask for benefit from the proximity of their manufacturers. One of the main factors that makes sweatshops prevalent was the large number of migrant workers. As they may face various barriers in terms of accessing formal labor, this industry which its barriers to entry to is quite low was suitable. Especially, irregular migrants were forced to accept the conditions of working excessive hours with less payments. Without the existence of these workers, the emergence of a new fashion trend which is based on flexible production and labor force has not been possible.

Another driving legislations formation in the sector was the reduction of state controls on the workplace legislation. With the intention of protecting their local manufacturers in the global competitive environment, governments pursued a policy of loosening safety and health regulations of the factories. Their cost reduction in the production process through the subcontracting method allowed companies to find an opportunity to invest in brand and image building by using various marketing communication tools (Bressán, 2018, pp. 86-90). Target market of fashion marketing was expanded to different demographic groups rather than only upper-income women because of these efforts.

Depending upon the fashion propaganda, demand for fashionable products increased in society. In the 1990s, a new business model “fast fashion” (Moran, Eichelmann, and Buggy, 2021, p. 5), “quick fashion” or “street fashion” (Turker and Altuntas, 2014, p. 838) emerged with proliferation of the marketing activities and

increasing demand of clothing with affordable prices. To respond quickly to changing trends, offering fashionable designs with frequent assortment shifts was a must. For this reason, companies discovered a method of copying the models of premium fashion brands and offering similar designs by using lower quality materials. Retailers started to follow fashion shows of the dominant global brands to prepare their collections. Thus, the time between design and consumption phases has been reduced dramatically.

With the aim of refreshing product ranges, several seasons were proliferated by fashion brands. Frequency of the collections was increased by making them smaller and brands started to shift from product-centered to consumer-centered strategies as a response to increasing competition. Consumers started to become fashion-conscious and push retailers to produce garments seen on the shows as quickly as possible. Their capability to reach more brands and consume more frequently increased as trend cycles sped up around the world (Bhardwaj and Fairhurst, 2010, pp. 165-167). 47% increase in fiber production per person from 2000 to 2015 (Peters, Li, and Lenzen, 2021, p. 2) also explains the increase in the frequency of consumption. According to Pereira et al. (2021, p. 8), customers purchase more than 50% of garments and use them for half time duration compared to fifteen years ago. This impulse purchasing behavior is common among the consumers who are not very informed about the effects of the current fashion trend on people and environment. Currently, the best-known applicant of this trend is Zara, which is one of the biggest global retail brands. Even, in the industry "Zara model" is known for selling small quantities of garments with lower prices and replenishment of each store with new models as quickly as possible. The basic strategy behind this model is highlighting the idea 'if you don't purchase this product now, you will not be able to see it tomorrow'. Despite the high unit costs due to manufacturing in limited quantities, the brand desires to keep its prices affordable and thus pay low fees to the subcontractors (Crofton and Dopico, 2007, pp. 42-46). This situation was described as "democratization of fashion" because garments once were luxurious for many consumers became accessible (Zhang, Zhang and Zhou, 2021 p. 1). The proliferation of this strategy within the industry required the other fashion firms to work with a number of subcontractors which offer cheap labor and short lead times, since it is hard to respond for large manufacturers to these demands.

Fast fashion follows a linear model including three major steps: take, make, and waste. Since this model is based on the idea of short-lasting clothing, it can be explained as "planned obsolescence" (Piippo, Niinimäki and Aakko, 2022, p. 2). As at

"take" stage, companies collect their raw materials to produce new garments, "make" includes clothing manufacturing activities (Brydges, 2021, p. 3). As the last step of process, most of the products which are manufactured from non-renewable materials end up in landfills. Research by Weber, Lynes, and Young (2016, p. 208) differentiates fast fashion from other models with its high rates of landfilling and destroying waste. They also define fast fashion consumers as people who wear their clothes for a very limited period. Palm, Cornell and Häyhä (2021, pp. 662-663) criticize the linear model due to its lack of user phase. According to the authors, take, make, use, waste describe the model better by highlighting the importance of consumption step. The traditional model is not able to explain the power of consumer decisions about purchasing, consumption and landfilling. It cannot be denied that consumers are at the center of the fashion value chain and their decisions play a determining role for the brands. Because they are the key decision makers to purchase garments or to dispose of their waste, to decrease environmental impact of the industry, social factors should be examined.

According to Ellen MacArthur Foundation, an estimated USD 500 billion is lost every year because of landfilling and incineration (2017, p. 3). The British luxury brand Burberry clearly stated in its 2017-2018 Annual Report that the cost of goods the company destroyed in that year was £ 28.6 million to protect its brand image. Then, it was revealed that the total cost of the excess inventory the brand had incinerated over the last five years was about £90 million. According to the House of Commons Environmental Audit Committee (2019, pp. 44-45), Burberry claimed that incineration does not have a negative impact on environment in the beginning, since energy created from the process is captured and utilized in other activities. However, the brand decided to give up its practice and promised to reuse, recycle, or donate its unsold goods after criticism from environmental groups. The other brand which burns its excess inventory in the same intention as Burberry is H&M. Value of the products incinerated as of 2020 is nearly USD 4.4 billion (Ki, Park, and Ha-Brookshire, 2020, p. 1122). Currently dominant fast fashion model, based on overproduction of the garments more than people need, has been fueling the throwaway culture.

To discourage landfill waste at the consumer level, new measures such as a waste disposal fee was introduced in some regions including New Jersey and New Zealand. Instead of paying a fixed amount of taxes for the waste collection, consumers are charged based on the amount they throw. Pay-as-you-throw policies can be quite

impactful for shifting throwaway culture as well as shopping habits of the consumers. Given that the number of garments incinerated increased 800 percent since the 1960s, there is an urgent need to expand these policies which aim to raise awareness and engage consumers. In addition to these responsibilities, governments' roles also include informing society behind the scenes of the fast fashion companies' operations and preventing misleading marketing communication companies about their impacts. In 2013, Israeli government took an action to regulate advertising in the fashion industry with the "Photoshop Law" but for a different aim. According to this law, advertiser has to state clearly whether there is a retouch on the body images. The main objective of this regulation is preventing eating disorder problems in the country (Mizrachi and Tal, 2022, pp. 12-14). Every single actor in society can play a role in terms of minimizing the impacts of fast fashion and searching for more sustainable options. In addition to administrative bodies, governments and companies, consumers are key for the industry's future with their decision-making mechanisms.

2.1.1. Social Impact

The fashion industry is an important source of economic growth and social wellbeing for many countries. It supplies 3% of the value-added products and 6% of the manufacturing jobs in Europe (Koszewska, 2018, p. 338). Nevertheless, since the late 20th century developed countries have been outsourcing their supply chain activities from the ones with low labor and manufacturing costs and weak environmental regulations. Subcontracting is a method extensively used in the fashion industry to have flexibility in manufacturing process. Rather than hiring fixed-term employees, companies have been paying through piecework for each garment produced. This way is quite advantageous, especially for the large companies in terms of managing seasonal demand shifts and reducing their risks. (Montero, 2011, p. 55). It also allows companies to pass especially manual stages of the manufacture such as sewing and finishing to its subcontractors both inside and outside of the country. However, this method is highly criticized because of the exploitative factory conditions, especially in the developing world.

Even though, industrial disasters especially 1911 New York Triangle Shirtwaist Factory fire that caused death of hundreds of employees had become a contributor for improving safety standards of the garment workers. Unfortunately, these improvements stayed limited to the regions of US and Europe and could not be impactful for low- and middle-income countries (Bick, Halsey, and Ekenga, 2018, pp.

1-2). Today, garment workers' wages are still among the lowest compared to other industries. In Argentina, more than half of the workers are living even below the property level. The situation is not different in Greece where Bangladeshi migrants make up majority of the workforce. The sweating system is usually based on daily payments to the migrant workers with no legal documentation protecting their rights in the workplace. Trade unions also are not effective to indicate strong opposition to these conditions, as their main goal became keeping investments within the borders and surviving the pressure of global competition (Bressán, 2018, p.73). In addition, these workers are mostly exposed to unhealthy factory environment and longer working hours in the factories. Lack of transparency in the supply chains and existence of strict regulations (Brandão, Gadekar and Cardoso, 2018, p. 325) is a key reason for widespread prevalence of sweatshops in the developing countries. These countries where ninety percent of the world's total garment is manufactured also report serious illnesses on garment workers including cancer, lung diseases, and musculoskeletal hazards due to the poor and non-ergonomic working conditions (Bick, Halsey and Ekenga, 2018, p. 2). Rana Plaza, Bangladesh in which 1130 garment workers lost their lives and thousands of them got injured during the collapse of the factory in 2013 is one of the major examples indicating the possible results of loosely regulated sweatshop conditions. The walls were damaged the day before the disaster while the building was being expanded illegally. The owner of the factory, Sohel Rana denied the danger and sent all workers to their stations though, none of the employees was inside of the plaza during the collapse. After the incident, 38 people including Sohel Rana were found guilty of murder for hundreds of people.

In fashion supply chains, women and girls are incommensurably affected by forced labor. In 2016, it was revealed that female workers of a contractor for both H&M and C&A in Bengaluru, India were being treated and paid unequally with men. Additionally, their movements were limited by security agents, and they were able to go out from the workplaces only two hours a week (Portway, 2019, pp. 51-56). Additional example takes place in Tamil Nadu, another region from India. Young girls are forced to work within the cotton mills twelve hours a day, for a period of three years. They are not allowed to visit their homes and their wages are paid to the parents. Marriages of these girls are also arranged during this period. This common tradition in the district is known as "sumangali system" according to the House of Commons Environmental Audit Committee (2019, p. 22). These examples indicate the brutal

conditions that especially female garment workers suffer from in today's fashion industry.

Move of garment manufacturing to the developing world where the competitive advantage in labor costs reduced production in the western countries. China is the largest exporter country of the industry; while its total textile exports worth $110 billion USD, clothing exports worth about $158 billion USD each year. Although production activities are generally located in the developing countries, design and marketing centers take place in the headquarters of brands, mostly within the US or EU countries (Niinimäki et al., 2020, pp. 190-191). While fashion brands source from nearby regions thanks to their relatively better production standards, offshore supplying is preferred mostly because of its cost advantage. Challenging monitoring production process to ensure the quality of apparels and high transportation costs are significant factors affecting contractor selection of the brands (Arrigo, 2020, pp. 5-6). In addition to these factors, relocation of supply chain operations to different countries leads to an increase in complexity and decrease in transparency through the overall production processes. Frequently, it is hard to exactly know where raw materials have been sourced from. Turker and Altuntas (2014, p. 847) found in their research that to improve transparency in supply chain operations, fashion companies started to share their suppliers' names. To ensure vertical integration based on the collaboration among all parties, digitalized technologies have been driven in the sector (Bhardwaj and Fairhurst, 2010, p. 170). On the other hand, it is hard for the companies to monitor all the supply chain structures of their contractors, which is quite risky both for the financial situation and brand image. That's why supplier communication is critical to have long-term strategic partnership based on trust.

2.1.2. Environmental Impact

The current fashion industry is built upon accelerating manufacturing, ever-increasing consumption rates, low-quality and short-lived garments, leading to more and more waste and considerable impact on environment. Annual apparel consumption has increased to 62 million tons globally and is estimated to hit 102 million tons by 2030. Consequently, the number of clothing manufactured has almost doubled compared with the pre-fast-fashion period (before 2000s). Given the accelerating volumes of garments produced and wasted, the sector is currently responsible for 8-10% of global carbon dioxide emissions which correspond to approximately 5 billion tons annually. It also consumes 79 trillion liters of water per year, causing nearly 35%

of micro plastic pollution in the marine environment (Eder-Hansen et al., 2017, pp. 4-42). It would not be wrong to argue that today's fashion industry is a large contributor to the global climate crisis according to these numbers.

The fashion industry currently uses three percent of total irrigation water, and 95% of this water is reserved for cotton cultivation only. The other most water-intensive processes in manufacturing are bleaching, dyeing, and finishing. The sector is responsible for seven percent loss in ground and drinking water on earth. Drought in the Aral Sea is one of the most remarkable examples, it is forecasted that cotton consumption in the EU area has caused twenty percent loss of water. Furthermore, more than 15.000 various chemicals used in manufacturing processes of the industry produce wastewater. In Cambodia, more than half of water pollution has been caused by the fashion sector which comprises nearly ninety of overall production of the country (Niinimäki et al., 2020, pp. 191-193). These cases support the finding of Peters, Li, and Lenzen (2021, p. 8) that most of the environmental impacts are observed in the manufacturing countries rather than consumer ones. Another important textile production center Xintang, from the south part of China, produces 300 million pieces of denim annually, which correspond to one third of the global denim manufacturing. The river in the east of the city where is known as "the denim capital of the world" has transformed into a dirty blue color with malodor because of dyeing and bleaching operations of the denim mills. The air of the city also smells of potassium permanganate, a harmful chemical solution used in denim treatments. The river is a drinking source for millions of people living in this area, and they face major skin and lung problems (Radhakrishnan, 2017, p. 91). Wet treatments including dyeing and finishing processes are significant sources of toxic pollution which can cause health problems.

Transportation of products all over the globe is a significant contributor to CO2 emission. Even though container ships are generally preferred for clothing transportation, demand for air freight has been increasing to quickly deliver the products due to the complex supply chains and short lead times. While cotton can be cultivated in Uzbekistan, it can be knitted into a fabric in India, then can be finished as a garment in Turkey and sent to the brand store in the US (Portway, 2019, p. 52). However, using air freight in only one percent of current clothing transportation instead of container boats means 35% increase in carbon emissions (Turker and

Altuntas, 2014, p. 839). Increased distances and time pressure dictated by the fast fashion industry causes this environmental pressure.

According to Waste and Resources Action Programme (WRAP) (2017, pp. 14-16), cotton cultivation is responsible for almost 70 percent of the water footprint of clothing's fiber manufacturing. It also leads to water stress by polluting freshwater due to leaching of fertilizers and pesticides. For this reason, the worlds' major cotton producing countries suffer from water stress such as China, India, Pakistan, and Uzbekistan. In addition to cotton, other cellulose-based fibers like lyocell and viscose consume large quantities of water and chemicals. These fibers are suitable for mechanical recycling thanks to their biodegradable and renewable nature. Animal fibers like wool and plant are also similar for using large amounts of land and water during the production phase. Though, these fibers have a lower footprint during use thanks to their strong and durable structures.

In the last few decades, synthetic fibers, especially polyester have gained domination over the market share of cotton with the rise of fast fashion thanks to its lower costs (Lehmann et al., 2018, pp. 36-37). While in 1975 these fibers accounted for only 30% of global fibre manufacturing, the ratio increased to 68% in 2019. In terms of agricultural land and water usage, synthetics such as polyester, nylon, and acrylic are quite advantageous than the natural ones. However, production of these fibers is the main reason that makes the fashion industry dependent on petroleum since all are made from fossil fuels. It does not only cause air and water pollution but also poses a health risk for living beings. A polyester garment can survive in landfill for about 200 years by leaking its microfibers into nature. Changing Markets Foundation (2021, pp. 8-12) predicts that half a million tons of microfibers from our garments leach into the ocean per year. Also, during the wash and use stages, micro plastics are within the synthetics release hazardous chemicals and affect the health of human beings and even unborn babies.

The unsustainable character of fast fashion has caused a system to operate in a linear way. While the culture of manufacturing high-quality clothing that was built to last began to transform, it has also encouraged disposability (Caro and Martínezde-Albéniz, 2015). Clothes are being manufactured not to last as long as possible but to be destroyed after 10 washes on average. This situation becomes a new standard in the fast fashion (Piippo, Niinimäki and Aakko, 2022, p. 2). The garments which are manufactured from non-renewable materials have been mostly sent to the landfill.

Textile waste has increased substantially in recent years due to the striking increase in fast fashion consumption and disposal volumes. In 2015, 73% of fibers manufactured globally ended up in a landfill instead of recycling or utilizing them for different purposes. In the same year, merely 15% of total post-consumer garment waste was separated; as less than one percent was recycled into similar products, most of them were recycled into lower-quality materials and some were misplaced during the processes. Textile recycling rates differ considerably among countries, such as 75% in Germany and 11% in Italy. And some countries still don't have any textile waste management systems. The solution of developed countries to this problem was exporting their waste to poorer countries. However, this method became unsustainable with the large amounts of waste garments and many low- and middle-income countries prohibited or limited their import (Niinimäki et al., 2020, pp. 194-195). It would be not wrong to argue that the environmental impact of textile waste is not equal for the manufacturer and consumer countries.

It is critical that all stakeholders in the fashion industry take responsibility for its environmental impacts of their activities, including waste management, carbon emission, water, and energy consumption. Although investing in cleaner technologies appears to increase manufacturing costs in the short term, it contributes to cost saving by reducing the number of hazardous chemicals and then improving overall process efficiency. Ultimately, reaching a more stable business model is based on avoiding fast-fashion practices primarily excess of production and consumption, hereby minimizing waste. Since the present fast fashion model does not take into consideration finite resources by pursuing unlimited economic growth. The industry recently has become aware that alternatives for this model through highlighting quality and durability of the garments instead of lower costs and shorter lead times are needed. Adoption of a completely new approach by both consumers and brands is required for a shift in the business model.

2.2. Circular Fashion Business Model

Revolutionary change is necessary in the fashion industry to reduce environmental and social degradation it has caused. 38% of the Pulse of the Fashion Industry Report questionnaire participants stated that they have stopped shopping from their favorite brands due to the irresponsible practices and reported that attitude of the brands will have a critical impact on their future purchase decisions. This research is an important indicator of the shift in the minds of consumers to the sector (Lehmann

et al., 2019, p. 11). Sustainability as a term originates from a French word “soutenir” which means supporting indeed. Then, the word began to be used in the scope of ecology, about relationships with the environment (Pereira et al., 2021, p. 2). In the 1980s its meaning was extended by involving not only environment but also individuals, societies, and organizations and sustainability is defined as ‘the capability of satisfying present needs without sacrificing the next generations’ benefits (Franco, Hussain, and McColl, 2020, p. 55). According to Zhang, Zhang, and Zhou (2021, p. 4), sustainability can also be defined as a “social contract” between the communities and businesses because it represents their complex relationships. It would be beneficial to explore what sustainability means in the fashion industry and consumers’ attitudes towards it before diving deeper into the concepts of “circular economy” and “circular fashion”.

Sustainability is not yet the top-ranking criterion for customers while purchasing a product; it is perceived as prerequisite, not as factors such as quality and design during the decision-making process. Ki and Ha-Brookshire (2021, p. 15) found in their research that consumers are morally accountable for transition into a circular fashion as brands. Their liability stems from linear behaviors such as throwaway and overconsumption which have negative impacts on the globe. For this reason, social and environmental values of customers are reflected in the choice of engaging in circular fashion activities. In contrast, Vehmas et al. (2018, pp. 288-289) believes that decision making process of the consumers is not always in the same direction as their personal values and price is a more effective determinant than sustainability for purchasing decision. Additionally, customers, especially who live in the western countries are more concerned about their own fashion needs while they tend to ignore others’. The reason is their lack of information about the conditions of the developing world where most of the garment manufacturing facilities take place. They generally don’t have sufficient information on how garments are manufactured and what the environmental and social impacts of this production are because of media's inadequate attention. Oliveira, Miranda, and Dias (2022, pp. 1-2) also state that even though the consumers claim that they would purchase from more sustainable fashion brands with higher prices, their purchasing behavior does not support this claim. It is found in the survey research that only four out of forty percent of the consumers who declare to prefer purchasing eco-friendly clothing do. This situation is called as “attitude-behavioral gap” which consumer prefer not to have an action if their intentions and

attitudes conflict (Jung, Choi and Oh, 2020, p. 2). It can stem from personal characteristics and ethical behaviors of consumers. Ethically minded consumers tend to engage in circular consumption which is associated with the experiential wellbeing and happiness (Domingos, Vale and Faria, 2022, p. 2). Due to the gap between the consumer attitudes and behaviors, the adoption process of new fashion models is quite challenging. To make this transition easier and shoppers more aware about both the garment production and sustainable fashion, benefiting from the power of both mass and social media is critical.

In 2014, on the anniversary of the Rana Plaza disaster, consumers worldwide triggered an online movement by posting their garments labels on Instagram and tagging fashion brands with the hashtag "Who made my clothes?". This movement was called as "Fashion Revolution" because these brands replied to the consumers by posting their garment workers with the hashtag "I made your clothes" and enlightened them about the workplace conditions. Thus, a more transparent supply chain resulted in improvements in the workplace conditions of the manufacturing workers (Mizrachi and Tal, 2022, p. 23). Another consumer-led movement is "PayUp" campaign after fashion companies rejected to pay their supplier factories in the developing countries with the Covid-19 pandemic crisis. Since they cancelled previous orders due to the force majeure, almost USD 17 billion cancelled orders ended up with USD 6 billion unpaid garment workers' wages. In this period, only in Bangladesh 2.3 million fashion workers were fired from the factories. The campaign was launched with a petition which aimed to protect the rights of Bangladeshi workers on change.org in March 2020. To remove their names from the list, brands had to guarantee to pay their subcontractors for the cancelled orders. As a result of the campaign, not only "PayUp" hashtag has been used in almost 800.000 times in Instagram but also myriad of fashion brands including Levi's and Gap accepted their responsibilities even though some (Antropologie, Urban Outfitters) have been remaining silent. These examples of "hashtag activism" can be stated as responsibilities of consumer-citizenship in terms of improving the protection of workers' rights in the fashion industry (Khan and Richards, 2021, pp. 433-439). These movements indicate consumer responsibility and capacity for call the fashion brands to act to create completely ethical and transparent supply chain.

It can be reminded to consumers that they are powerful enough to be the part of a solution of a global issue by marketing and media professionals. It is necessary to

have a better understanding of the consumption cycle since most of the consumer research has concentrated on purchasing behavior. In terms of sustainable consumption, waste should be considered as a resource instead of something needed to be destroyed (Ekström and Salomonson, 2014, p. 385). As there are many strategies promoting throwaway culture, marketing and communication specialists can play an important role to make consumers adopt a sustainable fashion approach. Since the mainstream paradigm that consumption determines production has been challenging by the industry, it is understood that brands play a deterministic role on consumption patterns through the marketing tools (Velenturf and Purnell, 2021, pp. 1450-1451). Fashion brands have started to adopt environmental and social responsibility as a part of their core values and innovate their way of business to stay competitive. This innovation is based upon incorporating a quality-based business approach instead of a time-based one (Domingos, Vale and Faria, 2022, pp. 1-2). Offering a superior customer experience which is quite hard to copy by the competitor brands increases awareness about the closed loop applications and sustainable development (Ta, Aarikka-Stenroos and Litovuo, 2022, p. 2). To transform the current model that rejects a one-size-fits-all approach, adopting a responsible system involving fashion brands that deliver compelling customer value is inevitable.

Despite the environmental impact was not their priority for fast-fashion brands in the past, they have been lately focusing on green practices and trying to reduce carbon footprint in their supply chains with increase in consumer attention to sustainable products. Many companies started to follow “green fashion” model which is based on clean production of garments by using eco-friendly materials. To differentiate themselves from others and improve their image, brands have been obtaining green certificates (Yan, Han, and Lee, 2017, p. 3) or eco label certificates (Bielawska and Gręboszc-Krawczyk, 2021, p. 240). Additionally, they have been joining sectorial organizations such as the Sustainable Apparel Coalition (Arrigo, 2020, p. 3). With the 2030 Agenda for Sustainable Development, launched in 2015 by the United Nations, more brands have been urged to offer green fashion products. These objectives involve transition from linear to circular economy which aims elimination of waste by keeping the resources in circulation. This model proposes certain solutions for the current unsustainable socio-economic and environmental practices. It is designed to regenerate itself, use renewable materials which are reused or reentered to the loop without minimum loss of value (Gazzola et al., 2020, pp. 5-6).

Circular economy is the latest approach to integrate an economic model into environmental and social matters in a sustainable way (Milios, 2018, p. 862). To Vecchi (2020, p. 31), implementation of circular model is not only beneficial for environment, but it also enhances competitiveness and innovative solutions, contributes to economic well-being and employment opportunities. Thus, the circular economy approach focuses on resource management rather than only manufacturing process with the aim of creating long-term growth.

Ellen McArthur Foundation is the leading proponent of circular economy and has been publishing major reports within this area. The foundation identifies the business model as "systemic by design", "close-looped", and "restorative" (Norris, 2019, pp. 205-206). The main goal is preventing loss of material value and re-entry of these materials into the value chain. For the fashion industry, the model is based on extending the life cycle of products which are made of recycled or renewable raw materials. The products are made to be made again since any of them is separated as waste. Additionally, protecting the rights and wellbeing of all workers within the sector is given top priority. These are the only conditions for the industry to create sustainable growth and equitable distribution depending on the circular fashion principles (Ellen McArthur Foundation, 2020, p. 2). To realize these ambitions and transform the linear model, collaborative actions involving businesses, governments, consumers, and non-governmental organizations are essential.

In recent years, governments and international organizations have been putting their efforts to accelerate the shift towards a circular fashion. The Fashion Pact, consisting of CEOs of the top global fashion companies, committed to work towards combatting global warming and marine pollution. McKinsey & Company, a global management consulting firm, started to publish the 'State of Fashion' reports annually to provide insights about the industry. The Global Fashion Agenda was launched to put fashion leaders and society into action towards more responsible manufacture and consumption practices. The Fashion Industry Charter for Climate Action was created in 2018 under the UN with the aim of calling the industry towards the action and reaching zero greenhouse emissions by 2050 (Palm, Cornell and Häyhä, 2021, p. 658). In terms of governmental actions, in 2019 unused garments were forbidden from destroying or landfilling by the brands to protect their images in France. According to the country's Circular Economy Roadmap which has been targeting to get rid of product waste, fashion companies must donate their excess inventory. Another

regulation in February 2021, in New York obliged businesses that generate more than ten percent textile waste to send them for recycling. In terms of the workers' rights in the fashion industry, a legislation which prevents fashion brands' exploitation including the payments below the threshold was passed in September 2021 in California. Another recent policy in Europe has had a discouraging impact on the fashion companies that are especially conducting online global trading activities. With this new regulation regarding all the goods imported to the EU area, Value Added Tax (VAT) exemptions were removed in July 2021. Under this law, all the products imported to the European countries are now subject to VAT and unfair taxation systems providing incentives to the global manufacturers have come to an end. With the end of the advantaged situation of non-EU producers, consumers will be more likely to prefer local businesses (Mizrachi and Tal, 2022, pp. 2-11). It is an important development for encouraging local manufacturing and decreasing environmental and social impacts of complex supply chain structures.

The COVID-19 pandemic has served as a catalyst for transformation in the fashion sector with its more emphasis on environmental and social sustainability under the "new normal" conditions". Since fashion brands canceled their pre-pandemic orders, textile factories were closed and millions of workers lost their jobs due to these conditions, consumers had to review their fashion purchasing and consumption habits. They have been able to explore more sustainable options such as sharing activities and could shift towards circular applications. Although the idea of sharing clothes dates to the pre-industrial revolution, especially among family and group members (Henninger et al., 2021, pp. 1-10), it has gained more importance with the emergence of circular fashion models.

From a circular perspective, all materials should be kept circulating in the loop of recycling, reusing, repairing, and remaking. Consumers are supported to keep garments in the loop instead of owning and throwing them away in the circular fashion to prolong the use of garments. "Collaborative consumption" (Zamani et al., 2017, p. 1368), "liquid consumption" (Norris, 2019, p. 207), "commercial sharing", "access-based consumption" (Sandin and Peters, 2018, p. 354) or "product-service system" (Armstrong et al., 2015, pp. 30-31) practices such as renting, swapping, and second-hand purchasing should become widespread according to circular fashion model to prevent overconsumption. Though this consumption style has not been very common within the industry, the number of brands offering different applications started to

expand. They are accountable to adopt circular fashion activities and intermediate between manufacturers and consumers as “ecological gatekeepers” (Rotimi, Topple, and, Hopkins, 2021, p. 2). Surely, responsibility is not limited to the brands; consumer behavior is crucial for interiorizing the closed-looped fashion model because they decide if an old garment will be landfilled or turned into a new one. Consumers make purchasing decisions among the brands according to their sustainable practices, so fashion professionals can view consumers as the only responsible agents for the future of industry. While they can be asked to make sustainable choices and purchase less clothes, it is hard to ask fashion companies to offer less products to their customers (Moorhouse, 2020, p. 19). However instead of only brands or customers, collective responsibility of all stakeholders is needed for the sector to be regulated. Collective effort and responsibility of all stakeholders is required for transiting to circular fashion model.

2.2.1. Recycling

Recycling is a process of decomposing textile waste into its raw materials and reconstituting a new product or material. Sandvik and Stubbs (2019, p. 371) state that if the current amount of textile waste is recovered instead of being landfilled or incinerated, it would contribute € 4 billion to the world economy by 2030. Chemical recycling protects fibers while mechanical recycling lowers quality of textile waste during the process by turning them into shorter fibers. These materials are used in the lower valued products such as filling materials and blankets; this operation is called “downcycling” (Niinimäki et al., 2020 p. 197). Most commonly, recycling of textile products is carried out through downcycling (Sandin and Peters, 2018, p. 355). When the dominance of lower-quality products is considered, there is a potential in the fashion industry to improve new recycling technologies for manufacturing more value-added products.

Establishing waste management systems for textile waste including both post-consumer waste which is used garments of customers and pre-consumer waste which is the materials not appropriate for sale is key for enabling recycling. The reconstruction process requires eliminating obsolete materials or adding new ones to the original apparel to acquire the higher quality product (Bigliardi et al., 2020, p. 2). Fiber recycling is not an easy task since currently most of the fabrics are made of a variety of textile fibers. They need to be separated, which is very challenging with the lack of up-scaled efficiency in today’s recycling technologies (Franco, 2017, p. 835).

Brands prefer using blended fibers to improve performance of fabrics, such as including two percent elastane in cotton denim to increase its flexibility. The other reason is associated with the prices of fabrics; a polyester-cotton blended t-shirt is usually cheaper than a 100% cotton one.

Removal of chemicals and accessories such as buttons, labels, and zippers is needed before the recycling process. Separation of the trims is another complex since this practice is currently done manually by companies. As the companies employ subcontractors and even these subcontractors work with their own subcontractors, it is hard to be sure of the impeccable implementation of the manual system (Radhakrishnan, 2017, pp. 97-114). All agents of the multi-layered supply chain are required to cooperate around the circular principles. The design department forms one of the most significant parts of this chain, because usage of mono or blended materials and type of textile accessories is determined during this phase. Sandvik and Stubbs (2019, p. 372-375) state that at least 80% of the economic and environmental cost of the products is designated by their designers. “Cradle to cradle approach” which suggests that the lifespan of materials must be focused on instead of just protecting natural resources agrees this claim and supports that recycling should already be taken into consideration in design process (Aakko and Koskennurmi-Sivonen, 2013, p. 15). It is a challenging process for designers to integrate powerful design and optimal recycling process. Their decisions affect all the subsequent factors about the products including its overall performance and decision of raw materials (Koszewska, 2018, p. 342). Niinimäki (2020, p. 197) defines this logic as proactive because waste can be prevented or minimized during the design phase. However, product disposal is the reactive way which is classified as the least sustainable option. It is always preferred to interfere with the system before the surplus clothing is not produced.

Recycled garments may be perceived as unhygienic (Wagner and Heinzel, 2020, pp. 3-4) or low-qualified (Harmsen, Scheffer and Bos, 2021, p. 14) by the consumers. There are various factors affecting the consumer attitude and purchasing decision towards these products including media coverage and influential trends. Communicating advantages of recycling and its positive impact on environment could contribute to the consumer perception. Levi Strauss & Co and Evrnu collaborated to design the world’s first recycled cotton jean in 2016. 98% less water was consumed during manufacturing by using post-consumer waste instead of virgin cotton. Another global denim brand G-Star Raw launched the world’s first jeans collection made from

recycled ocean plastic in 2014. This project was called “G Star Raw for the Oceans” and accomplished in partnership with the sustainable textile company Bionic Yarn in which Pharrell Williams, an American celebrity, has been working as a creative director (Moorhouse and Moorhouse, 2017, p. 1952). Emotional value that people feel when they purchase or experience a product is significant for the brand image. From this viewpoint, Kim, Hye, and Lee (2021, p. 5) classify having more eco-friendly choices as “hedonic consumption” that makes consumers feel valued. Bielawska and Grębosz-Krawczyk (2021, p. 249) also state that there is a positive correlation between emotional value and buying intention of sustainable fashion pieces. It will be more meaningful for consumers to purchase from the brands that address the most critical global issues and strive to be the part of change.

Mostly, consumers are aware that clothes in good condition should be sent to the vintage stores or donated to the non-profit organizations to be revalued again. Nevertheless, it may be harder to notice the value of worn-out garments for the recycling sector. So, many consumers can destroy or throw away their old garments and these fibers go down the drain rather than being utilized in manufacturing other garments. The decision to demolish or give their clothes to be recycled belongs to customers (Weber, Lynes, and Young, 2016, p. 208). For this reason, collecting their used garments from customers is key for enabling post-consumer waste recycling. Consumer involvement and return of the old garments to the stores can be encouraged by some incentives such as discount vouchers or freebies. H&M offers 10 percent discount to its customers who donate their unwanted clothes, and they don’t have to be purchased from H&M stores. The brand also gives another 10% discount coupon for giving their cosmetic packages back. Madewell introduced its “Blue Jeans Go Green” recycling program in 2014. The company started to give USD 20 off for a new product purchase if consumers return their old jeans. However, the aim of the brand was not manufacturing recycled jeans with these post-consumer waste but turning them into insulation for people in need of a home (Radhakrishnan, 2017, pp. 97-103). These collaborations between brands and consumers to collect old garments for the reason of recycling would contribute to creation of circular fashion model and new business opportunities. However, Rotimi, Topple, and Hopkins (2021, p. 14) argue that the ultimate aim of the brands to offer discount vouchers is encouraging more consumption and boosting sales rather than reducing the amount of post-consumer waste. Because consumers will purchase new products from these brands by using

these coupons, resulting in new textile waste at the end of their life cycles. Additionally, if there is a mismatch between statements and behaviors of a brand, consumers consider it hypocrisy. Even though H&M claims to believe in circularity and promotes recycling campaigns, consumers may perceive its statements discrepant from the activities. Since it is known as a retailer brand which destroys millions' worth of unwanted stock every year (Ki, Park, and Ha-Brookshire, 2020, p. 1123). A different case is encouraging activities of the global brands Marks & Spencer and Nike to make their subcontractors invest in circular applications. However, these activities have not involved any financial support nor any improvement in garment prices paid to the suppliers (Jensen and Whitfield, 2022, pp. 5-6). Even though the brands desire to indicate that their aim is to upgrade environmental and supply chain standards, they don't pay attention to suppliers' conditions.

According to the research findings of Zhang, Zhang, and Zhou (2021, p. 18), since consumers are over-confident about the background information of these retailers' sustainable efforts, they may be vulnerable to be easily convinced by untruthful campaigns. As a result of analyzing 50 major fashion companies, it was revealed that almost 60% of their claims about sustainability conflict with their actions. They misguide consumers by claiming their garments are recyclable even though recycling is not possible or giving missing information about the contents used in their garments (Mizrachi and Tal, 2022, p. 14). These situations create uncertainty in the minds of consumers and prevent to feel themselves secure about these brands. Thus, it would not be wrong to argue that informed consumers are vital for improvement (Pereira et al., 2021, pp. 9-27). It is noteworthy for the consumers to be conscious to not be deceived by greenwashing when the brands promote its circular fashion activities as their differentiation points.

2.2.2. Reusing

The reuse of garments has considerable environmental advantages compared to new clothing manufacturing; while reusing fashion products requires 24% less raw material consumption, it also produces 16% less greenhouse gasses in the supply chain (Manshoven et al., 2019, p. 40). This positive impact can be provided by constructing a mechanism that collects used clothes from consumers and returns them to the consumption circle. In this system, collection mechanism can be a governmental agency, non-profit organization, private company, or individual. Next step after collection is sorting that used garments are separated according to their materials. Then

categorized products are reprocessed such as repairing and washing. Finally, renewed garments can be resold to consumers to be worn again or to other organizations to utilize in other ways (Hedegård, Gustafsson, and Paras, 2020, pp. 315-316).

In the past, used garments were mostly collected to donate to nonprofit organizations. Because fashion waste has not been usually regarded as harmful as electronic devices or batteries by the governmental agencies. They overlooked the hazardous chemicals used in garment manufacturing and how they can be dangerous for the environment and living beings. That's why, many municipalities transferred its collection to charities (Weber, Lynes and Young, 2016, p. 208). However, take-back programs have been implemented by the retailer brands lately by offering some incentives to the consumers to encourage the return of the used clothes. These garments can be reused through collaborative-consumption practices such as renting, trading, or second-hand shopping in addition to recycling options. Reuse extends the life span of a clothing by repairing and renewing, at the same time protecting its materials' main characteristics. Reused garments are transferred to new users with little modifications which require lower energy compared to recycling. The goal is decreasing the level of consumption by switching out new garments to the used ones. Most commonly, fashion products are not used until the end of their life. Decreasing interest and emotional attributes to clothes, especially due to shifting fashion trends, is an important reason for destroying them before losing their functions (Keßler, Matlin, and Kümmerer, 2021, p. 6). Since using low-quality materials in fast fashion manufacturing is negatively affecting product performance, utilizing durable materials is required to reuse the garments for a long time.

2.2.2.1.Second-hand Clothing

Second-hand clothing, which highlights individuality rather than following mainstream trends is the opposite concept of fast fashion. It is called "vintage clothing" in the fashion industry since unique nostalgic pieces are also offered to the consumers (Ferraro, Sands, and Brace-Govan, 2016, p. 264). Second-hand clothes have been recently preferred by consumers against the imposition of standardized fashion products because these garments bring plenty of experience from their pre-owners. Consumers selling and purchasing used garments can be defined as "prosumers" (both producer and consumer) who apply measures to increase longevity of garments (Yrjölä, Hokkanen, and Saarijärvi, 2021, pp. 765-766; Korsunova, Horn, and Vainio,

2021, p. 761). These consumers support brands by taking place in their innovation cycles.

Affordable prices of second-hand garments allow consumers who cannot afford the new ones with higher costs to purchase their used versions. In addition, many consumers prefer purchasing used clothes due to their environmental concerns (Moorhouse, 2020, pp. 17-18). Because second-hand clothing provides environmental advantages by saving resources, water, and landfill areas necessary for manufacturing. To Hur (2020, p. 1), purchasing hundreds of second-hand garments means reducing purchasing between sixty and eighty-five new pieces approximately. Consumers can reflect their concerns about the waste culture on their consumption habits and this behavior is called as "eco-movement" by Ferraro, Sands, and Brace-Govan (2016, p. 263). They shop from vintage stores against fast fashion brands which are established on the base of wasteful overconsumption.

According to the behavioral studies on consumers in various countries, shopping from the second-hand stores means lower social status especially due to the concerns of being worn and unhygienic. However, the growing interest of influencers and famous people is an important factor for affecting consumer mindset positively on the second-hand clothes. The role of media channels in the shift of consumer habits cannot be deniable since many global fashion magazines, mainly Elle, Bazaar, Harper's include sophisticated vintage garments in their fashion outfits and highlight their clean and good conditions. Sharing photos of celebrities with these pieces is also another strategy for presenting them as if they were new garments. Some vintage shops prefer to use the adjectives of "almost new" or "preloved fashion" for the same goal (Valor, Ronda, and April, 2022, pp. 78-83). In addition, many consumers find these stores distinct from conventional retailers since they feel themselves as a part of a community based on their unique store experience and social interactions between other shoppers and owners. The Tales of Things and Electronic Memory Project of The Oxfam Curiosity Shop in London allowed their consumers to discover life stories of the products' pre-owners (Ferraro, Sands and Brace-Govan, 2016, p. 267). That's why, for consumers purchasing from the Curiosity Shop means finding the saved stories behind these items. According to Kim, Woo, and Ramkumar (2021, p. 3), these consumers feel a deeper experience towards the second-hand retailer brands because incorporating storytelling in their product's appeals emotions of the customers. Storytelling based on the narrative competence theory is a powerful technique for

brand marketers to transfer their messages and emotions to the consumers. Learning about the history of clothing and its previous user through a narrative increase consumers' trust by reducing uncertainty.

Steffen (2017, pp. 193-203) associates second-hand purchasing with fun and treasure hunting by looking for the pieces which are not commonly available in the market. It is an important hedonic motivation to make consumers prefer used clothes. Given those second-hand consumers predominantly purchase from brick-and-mortar stores to be sure that garment is in a good condition and feel the nostalgic atmosphere. The other reason that these consumers prefer physical stores is the existence of second-hand apparel in limited numbers and variations in online channels (Hur, 2020, p. 11). However, online platforms have also became popular for used apparels especially in the last years with the changing consumer habits. This trend can be observed by the 69 percent growth in online second-hand channels during the COVID-19 pandemic period while growth in brick-and-mortar shops is only 2 percent by 2021 (Kim, Woo and Ramkumar, 2021, p. 2). Research findings of Guiot and Roux (2010, p. 396) have revealed that some consumers collect information about the clothes from conventional retailers however purchase from vintage stores. Motivations behind this behavior include financial and environmental reasons, and rejection of standardized fast fashion products.

Interest in second-hand clothing would be fueled by the brands throughout the multiple touch points. For the other retailer brands, they can contribute to an increase in consumption rates of used garments by adopting elements of second-hand business. Patagonia is one of the brands which establishes an online platform to allow its customers to sell their worn Patagonia clothes in collaboration with eBay. Urban Outfitters is another retailer that has been giving place its second-hand products in the stores (Yrjölä, Hokkanen and Saarijärvi, 2021, p. 781). Establishing new marketplaces and bringing together used garments with consumers in addition to virgin ones help these brands to improve their image and indicate their efforts towards circularity. These improvements would contribute to reducing the sharp distinction between second-hand and new garments in the consumer mindsets.

2.2.2.2.Renting and Swapping

Renting can be described as an action in which an object is given to another party for a limited period and in return for a fixed amount of money. In this transaction process, the use of items is highlighted since the ownership does not change. Renting

has existed for ages, for special occasions or designer clothes. In recent years, more brands have started to rent their garments by maintaining their ownership of them with the extension of business model. Thus, fashion consumers are satisfied with using more clothes without the responsibility of ownership (Lang and Armstrong, 2018, pp. 38-39). According to Jain et al. (2022, pp. 1525-1527), the online fashion rental market grows 10.76% annually and it is forecasted to reach USD 2 billion nearly by 2023. Enabling access to luxury brands at reasonable prices and encouraging sustainable consumption by extending the life cycle of the garments are among the key reasons behind this growth. It is also seen as an efficient way of reducing over-consumption in the fashion industry.

"Frugality" is a term about preventing waste of money and other resources. Frugal consumers tend to prefer renting because of its economic advantage compared to purchasing new clothes and contribution to sustainable fashion. Fashion-conscious consumers benefit from the renting platforms which have various business models, mainly short-term and subscription-based renting. For instance, while Albright provides high-end garments to its customers as a physical fashion library, Rent the Runway operates as an online platform that offers luxurious clothes and accessories (Lang, 2018, pp. 5-7). Rent the Runway has integrated machine learning to have detailed information about purchasing preferences of their consumers. It is critical for these platforms to deliver overall unique shopping experience to their consumers who are concerned about sustainability and fashion (Lee and Huang, 2020, pp. 12-13). In contrast with the peer-to-peer, these platforms follow business-to-consumer fashion rental model and need to develop 360-degree communication strategy with the aim of establishing long-term relationships with all stakeholders (Arrigo, 2022, p. 5). Especially, utilizing integrated marketing communications mainly social media tools is substantial to raise awareness about product shared systems by creating electronic word-of-mouth.

Renting is perceived as a psychological experience by consumers since it means more than merely buying a product. Enjoyment plays a significant role in terms of motivating them to be part of this experience. Letting consumers reach a variety of garments is another advantage of this amusing access-based activity (Lang, Seo and Liu, 2019, p. 522). They focus on not only the results of which the garments are rented but also the playable process itself. This is because consumers find the activity very similar to treasure-hunting, which offers very valuable products at the lower costs

(Baek and Oh, 2021, p. 171). That's why it is beneficial for companies to follow the "taste consumption" tactic which focuses on the highest value of products at the best rates available. This approach is particularly meaningful for customer segments who glorify experience rather than ownership (Lee, Jung and Lee, 2021, p. 16). Rental companies can communicate with these consumers by highlighting hedonic feelings of the renting experience.

Swapping as different from renting is transferring the ownership of a product to another party permanently. In addition to just swapping products among the family and relatives, there are increasing number of brands organizing events to let consumers exchange their unwanted garments with each other. These social events reflect a way of life where like-minded people come together to exchange not only their underused garments but also opinions (Lang and Armstrong, 2018, p. 39). Even the sense of community is created since transferring the ownership of garments which are the private belonging to other parties makes them establish a close tie among them. In addition to the friendship-building feature, these events contribute to the creativity skills and personal growth of participants. Participants find an opportunity to have a try and combine completely new pieces that they had never bought before. Moreover, the life span of the clothes extend otherwise they stay in closets unused by their pre-owners (Karpova et al., 2022, pp. 4-7). Thus, consumers feel accomplished when their underutilized apparels find a new life with someone else (Lang and Zhang, 2019, pp. 158-159). Under favor of these characteristics, swapping is perceived as a fun activity for consumers like renting.

Another feature of swapping, which is its usage as a tool of anti-globalization movement by some communities is pointed out. For instance, during the economic crisis in Argentina in the beginning of 21st century, people preferred swapping instead of purchasing new garments to tackle the crisis conditions and then they integrated this activity in their lives not only as an economic but also a cultural practice (Camacho-Otero, Pettersen and Boks, 2019, pp. 280-281). Thanks to swapping, consumers who are not able to purchase various fashion garments due to the economic conditions can have new pieces in their wardrobes. Given the quickly changing trends, it provides many clothing alternatives to consumers without driving overconsumption in the fashion industry (Lang and Zhang, 2019, p. 157). Preventing waste of money by providing free garments to consumers is called as practical (Karpova et al., 2022, p. 4) or economic advantage (Lang, 2018, p. 7) of swapping.

As participants are both suppliers and customers at once in swapping, this feature contributes to making them feel responsible for their fashion consumption choices. Participants are aware of their ownership of the products supplied in the swap event and consider their environmental and social impacts. However, in terms of consumer perspective, the ambiguous nature of this product-service system practice is the main problem according to the research findings of Henninger, Bürklin and Niinimäki (2019, pp. 339-340). Because quality, type, size of the garments supplied to the events cannot exactly be foreseen. The qualitative work of Karpova et al. (2022, p. 9) also supports this opinion and states that it may be quite challenging for consumers to match with a person with the same size and taste. That's why, preferring standard-size clothes or accessories including scarves and bags in these events is more advantageous for these consumers.

There is a common idea in society that only people with lower social status engage in second-hand shopping and swapping activities (Çakır and Dedeoğlu, 2020, p. 70). This situation causes a social risk that they are concerned about how others view their purchasing behaviors and whether participating in these events are negatively evaluated. Consumers who are afraid of facing a loss in their social image refrain from participating in these activities (Lang, Seo and Liu, 2019, pp. 523-531). This behavior is about "social desirability" which is used as a term for an act of individuals in a socially desirable way. "Social desirability bias" is defined as the tendency of people to indicate society-oriented behaviors rather than acting according to their own intention (Chung and Monroe, 2003, pp. 291-296). Since the specified circular fashion business model applications can be associated with the lower socioeconomic status for individuals, they are inclined to underestimate their engagement in these activities. Another risk correlated with renting and swapping is quality concern if the performance of a garment satisfies expectations of the consumers. Additionally, since most of the times people swap their used clothes and rent the same item to different consumers, hygiene is an important issue affecting consumers' behavior toward these activities. The research of Lang and Zhang (2019, p. 158) affirms that sanitation is a significant factor as consumers need to be sure that the garments are cleaned well by their pre-owners. Especially, the outbreak of the COVID19 pandemic has raised hygiene-related concerns of the consumers about all shared consumption applications (Baek and Oh, 2021, p. 165). It is hard to experience the enjoyment feeling of these events for the participants who hesitate to prefer renting

and swapping due to the contagion reasons. Providing more detailed information about the garments' care and cleaning instructions by the organizers can be beneficial for decreasing concerns of the participants.

2.2.3. Upcycling

Upcycling has indeed been a longstanding human activity while products are used until the end of their life spans. Then with the rise of consumerism and throw-away culture, production trends become reversed (Singh et al., 2019, p. 1). Upcycling term is defined as a process where product materials are transformed into a completely new item with equal or higher quality. Upcycle is a word evolved from "upgrade" and "recycle" since it re-creates valuable pieces from product waste instead of just recycling them. Natural resources consumed at an ever-increasing rate and growing quantities of waste are the main motivations behind the revival of this trend again. It has recently been distinguished by the fashion industry and fashion-conscious consumers because of its ability to produce and consume in a sustainable way. Upcycled garments with high commercial value are becoming widespread globally especially with the rise of circular fashion idea (Yoo, Jung and Oh, 2021, pp. 2-3). Designers utilize waste which would be thrown away or incinerated and create mostly one-of-a-kind fashion apparels. Then, valuable, and innovative garments are produced by using fashion waste as raw materials by the individual designers and companies which aim to meet their consumers' desires (Koca and Koç, 2020, pp. 892-896). With the increasing attention to the upcycling trend, some of the best-known brands started to produce their own fashion collections. Adidas launched its limited-edition sneakers in line with the brand's green marketing strategy in 2017 (Yu and Lee, 2019, p. 3). Some of the other world's largest apparel retailers and designer brands have been working on their collaborative collections. In 2021, iconic denim brand Levi's and luxury brand Miu Miu together launched their upcycled collection to contribute sustainable fashion. The number of these brands utilizing upcycling applications to gain a greener image has been increasing.

The extent of the upcycling process can alter according to the various factors, primarily desires of customers, cost-related issues, and limitations with the apparels. For example, a simple decorative patch can be added to renew a cloth, or an utterly different product could be recreated such as an upcycled jacket from jean pant production leftovers. That's why, myriad of product types can be formed depending upon the expertise of the design and production teams. Even though availability of low

cost, various forms of raw materials is the main advantage, its time-consuming and labor-intensive nature becomes an important drawback (Janigo, Wu and DeLong, 2017, pp. 257-276). As producing an upcycled item individually is quite a time-consuming activity, its price tag is generally higher than ordinary products. This situation can have a negative impact on consumer attitude in addition to their low availability rates in the market. Suspicion of consumers through the garments obtained from used materials due to the quality and hygiene reasons can be another barrier.

It is challenging for the upcycling brands to forecast the exact number of materials with similar quality. It cannot be possible to supply a flow of used garments which can be utilized again at any time. (Singh et al., 2019, pp. 3-12). In addition, lack of systematic reporting for textile waste and second-quality garments is another important barrier for upcycling. This information is not generally available to design teams, this situation makes producing these clothes in large quantities a challenging task. For the successful application, collaboration of the textile waste material-based design with the manufacture process is essential (Aus et al., 2021, pp. 4-16). Textile waste is utilized by spending fewer natural resources with upcycling compared to recycling as they find a new life in other clothes without breaking down into its raw materials. That's why encouraging upcycling implications among the apparel companies will be vital in terms of becoming circular fashion more prevalent.

Upcycling depends on availability and systematic use of waste materials; a multi-tiered process is needed to achieve it on a large scale. It begins with a complex design which requires classifying and suiting all the leftover materials available for production. Designers should also have extensive knowledge of manufacturing process and system thinking skills. (Aus et al., 2021, pp. 3-4). With the convenient process and capabilities of the designer, every single piece can be turned into a valuable fashion product. This method is distinctive thanks to its ability to combine both pre- and post-consumer fashion waste and put a new complexion on designers and companies to be more flexible when they give new life to leftovers. The reason why this trend is called "the transhionable fashion movement" recently is about its transition role between past and present. As upcycling does not use any chemical process and transforms leftover by preserving its value of original materials, new value-added fashion pieces still have traces from the past (Koca and Koç, 2020, pp. 892-909). These emotional benefits of upcycling could be an important driver for consumers to shift from their previous shopping habits. Yu and Lee (2019, pp. 4-15)

also agree that the old stories behind these products can trigger emotions and they influence buying decision of consumers. To communicate with the consumers with storytelling method by telling engaging stories about the reused garments in the final product would be an effective way for the marketers. Moreover, “green value” is highlighted as the other aspect which has a great impact on shopping decision towards upcycled clothing. It is described as consumers’ satisfaction level of upcycled garments’ environmental performance. Fashion companies that utilize used garments and leftovers instead of using virgin raw materials in their production and also avoid greenwashing activities would create greater emotional and green value for the consumers.

Increasing awareness of consumers about reusing each piece of clothing and positive change in their attitudes is critical for transformation towards circularity by minimizing fashion waste and creating alternative raw material in the industry. To go towards a more circular fashion, it is also critical to raise awareness about upcycling implementations among the sector in addition to consumers by embracing the significance of waste and its usage as a key resource. Collective effort of stakeholders including fashion brands, government bodies, conscious consumers, related NGOs, and academics is required for awareness raising. Positive consumer attitude towards upcycled garments would provide not only environmental but also social advantages; it can create jobs in design and manufacturing areas (Singh et al., 2019, p. 13). Sung, Cooper and Kettley (2019, p. 19) state that benefiting from marketing communications tools and organizing community events would have a positive impact on behaviors of consumers. In addition to inspiring activities of fashion companies, states and other institutions can encourage upcycling clothing brands and designers with tax-incentive policies, giving financial and moral support to these projects. Collaborative efforts of all agents are essential for scaling up upcycling activities.

CHAPTER 3: METHODOLOGY

3.1. Introduction

This study has two-stage design in which semantic network analysis and semi-structured interviews were conducted respectively. In the first step, semantic network analysis was used to analyze the Instagram posts about circular fashion of 6 global companies (Zara, H&M, C&A, Levi's, G-Star Raw and Patagonia) in 2022. Theoretical framework of the method realized for the study is presented in this section. Content analysis method is used to analyze the semantic social network in the research. That's why content analysis and semantic network analysis are described. Also, the Pajek program used for the analysis and visualization of the Instagram posts network is explained. In the second part of the study, data extracted from the network analysis was included in the questions of semi-structured interviews. Design of these interviews, sample selection and the study process are also identified. All the stages of the research to answer the research questions are described in this chapter.

3.2. Application and Structure of the Semantic Network Analysis

3.2.1. Content Analysis

Content analysis is described as a research methodology which analyses the content of communication messages in social sciences. It focuses on extracting the concepts in the network and understanding the relationships between them. According to this research tool, a single message is meaningful only as a part of set of symbols in other words in the context of its use. The reason behind this understanding is the ability of the communication agents to interpret messages distinctly. That's why content analysis aims to make inference meanings of the messages related to the social context. (Atteveldt, 2008, pp. 3-16). Content analysis is a method preferred for the analysis of semantic networks frequently.

3.2.2. Semantic Network Analysis

Semantic network is formed depending on the content analysis of texts or responses of a network member. Semantic network analysis enables analyzing and visualizing the relationships between textual statements. It aims to discover how different structures such as individuals, corporations and cities in the network affect each other by investigating their relationships (Schnegg and Bernard, 1996, p. 7). Since the meaning of textual statements is extracted according to relationships, even though two of the texts can involve similar concepts, it is possible that their meanings are

distinct from each other (Doerfel, 1993, p. 17). This method determines the meanings of various written statements, images, video, and audio data. Examining statements in an interconnected network rather than alone provides analytical insights about the related context. In addition, graph drawing feature of the research method is advantageous in terms of offering visualization of complex networks (Drieger, 2013, pp. 4-5).

The semantic network analysis in the study was conducted via Pajek which is a software program that is implemented for analyzing and visualizing networks. For noncommercial purposes, it can be freely downloaded (Batagelj and Mrvar, 2004, pp. 77-103). Nevertheless, Pajek was developed more than twenty years ago, it has been developing constantly with new versions. Since it is able to extract huge data networks, the software is widely used by various global corporations and the top educational institutions (Mrvar and Batagelj, 2016, pp. 1-2).

A total of 167 Instagram posts belonging to 6 global fashion brands were selected for the research. The selection criterion of these posts is sharing messages about circular economy concept and applications in the fashion industry. Selecting the brands which have various perspectives and applications towards the circular fashion is also another consideration with the aim of evaluating different types of communication styles. Three brands, which are Zara, H&M and C&A are especially well-known for their fast-fashion applications even though they started recently to implement some collaborative consumption models. The other two, Levi's and G-star which had been also categorized as fast-fashion brands, became pioneers of circular fashion applications including recycling and upcycling among the denim brands. The last one is Patagonia; the brand is globally acknowledged as one of the leaders in the circular fashion.

The first fashion brand selected for the research study is Zara. Since the brand is widely accepted as the pioneer of fast fashion concept due to its business model known as Zara model. Since, this is based on working with their suppliers with very short lead times and paying low prices sometimes even below the cost of production (Crofton and Dopico, 2007, pp. 42-46). Due to this low-cost policy, the company selects its subcontractors from the developing world even though it opens the stores in the prime locations. The business strategy of the company is based on rapidly changing high-fashion collections. The brand image is projected on the idea of scarcity of the high-fashion products which are available in limited stocks. That's why the company

puts the pressure on consumers for purchasing the products immediately and encourages more and more consumption. In addition, the brand is positioned as lower priced compared with the competitors. Since high-quality materials are not preferred in the production, the garments are described to be worn 10 times on average (Ghemawat and Nueno, 2006, pp. 12-13). Despite these applications, with the rise of sustainability and circular economy models all over the world, the brand started to keep pace with evolving business trend and launched its "Join Life" collection under the eco-friendly collection. (Zhang, Zhang, and Zhou, 2021, pp. 2-3). Since it is a brand commonly accepted as the founder of the fast fashion model by the industry, it is a must in this research to examine its communication messages about circular fashion.

H&M which is the other fashion brand selected for the network analysis is well-known with its unfair conditions for its suppliers, such as treating female garment workers unequally with men and burning its excess inventory (Radhakrishnan, 2017, pp. 97-103). In similar to retail model of Zara, the company focuses on the purchasing experience in physical stores and has a target of increasing number of the stores by ten to fifteen percent every year. Even though the company is widely known as one of the pioneers of fast fashion, it introduced the "Conscious Collection" and give-back campaigns in succeeding years. With this initiative, the company started to use organic and recycled fabrics in its production process. In 2011, H&M initiated an incentive program in terms of managing employee relationship and rebuilding brand image (Arrigo, 2018, pp. 128-130). Due to the fact that there is a growing consumer trend in fashion industry towards sustainability, these fast fashion brands tend to prefer eco-friendly materials and shape their marketing strategy accordingly. However, their brutal working environment, forced labor and unequal conditions between female and male workers in the subcontractors, unfair conditions for its suppliers and incineration of leftovers contradict with the marketing strategies. Consumers perceive their business model as completely opposite of circular fashion (Kim and Kyung, 2020, pp. 3-4). For this reason, it is critical to examine social media messages of H&M about sustainability and circular fashion as one of these fast fashion brands.

The other brand in the study is C&A in the same route with H&M who's its business strategy had been based on the fast fashion With the transition period of the brand, it started to share Instagram posts about its environmentally and socially conscious activities. Despite these commitments in social media, its suppliers'

working conditions including discrimination against women revealed (Portway, 2019, pp. 51-56). Its operations are mostly based on the culture of promoting consumerism and linear model of production. The company began to share its global sustainability reports since 2015 that is quite a late date compared with its competitors. It is remarkable that the retailer brand has been fostering its circular fashion activities regarding the cradle-to-cradle approach (Beyer and Arnold, 2022, pp. 30-33) and shaping its communication messages accordingly especially with its "Wear the Change" campaign (Mandaric, Hunjet and Vukovic, 2022, p. 10). In addition, participating at the Accord and the Alliance for Bangladesh Worker Safety is can be viewed as another step for reconstructing the brand image towards a more circular brand and glossing over the media coverage about its unfair working environment and labor practices (Yoon, Lee and Choo, 2020, p. 2). For this reason, C&A is using social media as a significant tool to get consumer attention for the sustainable strategies.

Levi's is accepted as the brand developing standard denim trousers in 1870. Thanks to its durable feature, denim was acknowledged as workwear. After the mid-1990s, denim began to being preferred as not only a workwear piece, but also a causal outfit (Brooks, 2015, p. 37). Previously preferred due to its high-quality and endurance features, the brand started to subcontract its operations to other countries including China and then lower its quality performance in the competitive global fashion environment of 1990s. However, this low-cost policy of the brand did not go on for ages because of the inferiority perception by consumers and brand revitalization strategy was adopted in 2010. Sustainability was embraced as the keystone of the rebranding strategy with this cultural shift in the corporation (Doyran, 2020, pp. 281-284). The company joined the Better Cotton Initiative (BCI) to support the sustainable applications in the cotton industry in 2010 and adopted "Water<Less" policy to use less water in its denim production in 2011. The other improvement was the launch of "Care Tag for Our Planet" platform aiming to raise awareness among consumers to reduce their impact on the planet (Jolue, 2011, pp. 17-20). The brand is also credited with its support to the Fashion Revolution for improving the protection of fashion workers' rights (Khan and Richards, 2021, pp. 433-439) and pioneering for circular fashion model applications such as upcycling projects. By reflecting all of these exercises in the social media, the brand aims to engage with the consumers and inform them about the brand identity. That's why examining the Instagram account of the iconic denim brand Levi's in the study is significant.

The other denim brand G-Star Raw is chosen for the research, since it has become prominent thanks to its collaborative consumption and recycling applications in the industry recently implemented such as "G Star Raw for the Oceans" (Moorhouse and Moorhouse, 2017, p. 1952). This project is based on the idea of cleaning the oceans and turning plastic collected into new denim products. The other designment is development of a cleaner dyeing technique enabling reuse of 98% of the water in the process. G-star has adopted a vision of creating sustainable life cycle of its garments (Brown, Bocken and Balkenende, 2018, pp. 183-184) especially after the Greenpeace report published in 2012 about the fashion brands which use toxic chemicals in their production. In this report, G-star was mentioned among the brands that commit zero discharge but don't apply their commitments. Due to pressure of non-governmental organization and negative media coverage, the company promised to eliminate these chemicals from the manufacturing process by the year of 2020 (Brennan and Merkl-Davies, 2014, p. 628). Especially with this period, the brand began to focus on its zero discharge commitment and sustainable supply chain operations in the social media messages. The case is meaningful for enforcement of a non-governmental organization on a fashion brand for transforming its applications by creating negative publicity.

Patagonia is the sixth fashion brand used in the research. The brand differentiates from the other ones as it is widely accepted as the leader and role model in the fashion industry for adopting circular economy as a main principle. Even, mission of the company is stated according to this basis which is about generating solutions for the environmental crisis while producing high-quality garments. In the same direction with its mission, core values of the brands are 'quality', 'integrity', 'environmentalism' and 'not bound by convention'. It is also critical to note that the company donates one percent of its annual sales to the organizations working with the aim of environmental protection and combat with climate crisis (Rattalino, 2018, p. 749). This behavior indicates that business objective of contributing to environmental sustainability rather than profit maximization. The company has wide range of circular fashion practices particularly online and brick and mortar secondhand stores and repairing services (Yrjölä, Hokkanen, and Saarijärvi, 2021, p. 781). Patagonia positions itself as a brand challenging the fast fashion. The brand has been communicating these applications with 'Worn Wear' message. "Don't buy this jacket" campaign also became influential to increase consumer loyalty by promoting purchase

of high-quality, long-lasting garments and reuse them via repairing instead of buying new (Dezi et al., 2022, p. 8). Examining social media messages of the pioneer fashion brand in terms of accepting circularity as its main principle is vital for this study.

3.2.3. Data Collection and Coding Procedure Related to Semantic Network Analysis

Data collection and semantic network analysis was conducted between the dates of May 1st and June 1st, 2023. In the first phase of the research, 6 global fashion brands which are Zara, H&M, C&A, Levi's, G-Star Raw and Patagonia were selected to examine their social media messages reflecting their circular economy approach. Instagram was preferred as a social media network for this aim since it is the most suitable channel to analyze both visual and written messages of these 6 brands. Instagram is significant as a social media channel in this research since fashion brands share posts on a regular basis and update their followers about their activities. It is a highly popular platform that provides insights about different circular economy applications for the fashion industry.

In the first step of the study, for data collection, official global Instagram accounts of the six companies were visited and their all posts about the circular economy concept in 2022 were listed. Even though Instagram is a visual based platform, it is proven that captions and hashtags belonging to the visuals represent their content (Czaplicki, et al., 2020, p.3). Each post on Instagram consists of two components. All the posts which are images, videos, and carousels (visual components) were included in this list and they were downloaded with their captions (textual components). In addition to the captions and hashtags which are the words used to signify a specific issue, theme, place etc., and updated by Instagram users (Kostygina, et al., 2021, pp. 2-3), scripts of all 167 posts within the contents were textualized. Relevant Instagram posts of each fashion brand were coded after the data collection step. Two independent coders manually coded, evaluated, and compromised for the values in the six Instagram accounts. The related values were converted into the chosen codes which are the sentences which express the main idea of the values.

3.3. Research Design

3.3.1. Exploratory Research

In this study, exploratory research method is used to discover attitudes of the interview participants towards the circular fashion messages. Since aim of exploratory research is to discover substantial, relevant topics about the research subject. All

exploratory research may not result in new and interesting points, deep diving into the research is required to reach innovative results. This research method is mostly conducted in two reasons: first one is to discover about a topic which has been researched and the other one is to extract new ideas about an existing topic in the literature (Swedberg, 2020, pp. 17-18). In social sciences, exploratory research is commonly opted for understanding opinions of humans in various subjects. Key point to reach wider insight is asking right questions to the participants (Jain, 2021, p. 543). For hypothesis testing, exploratory study focuses on "Why?" question by searching for the reasons. Since these questions vary according to each researcher, this study is correlated with discovery, creativity, and serendipity. In addition, this study method allows further and more extensive research to benefit from the insight extracted from the existing study (Casula, Rangarajan and Shields, 2020, pp. 1703-1707).

In this research, the second form of the exploratory research which is to extract new ideas from the interview participants about circular fashion messages of the brands was utilized. To grasp perceptions about circular fashion and purchasing attitudes towards the brands engaging in circular fashion, detailed questions about the Instagram posts of the six fashion brands chosen for this research were asked to the participants. These posts were selected according to the results of the first research stage and six of them having the maximum number of repeats in the network analysis were used. Name and logo of these brands were not shared with the participants not to influence their perception. According to their answers, the reasons behind their opinions about the subject were tried to be explored with further questions. These questions were shaped based on the explanation of each participant to understand the causes better. Since extracting themes for the research topic from these answers is only possible with having a solid grasp about the core reasons behind these responses. Semi-structured interview model serving for this purpose was chosen in this study.

3.3.2. Semi-Structured Interview

Semi-structured interview aims to get subjective responses from the participants related to a specific situation or concept. There are two types of questions in the structure which begins with the predetermined primary questions and the other following sub questions. Since the predetermined ones are the same questions and asked in the same order, the basic idea is comparing answers of the participants. Sub questions are open-ended and shaped according to each participant and form the construction of the interview. To generate discussion about the topic and scrutinize

answers to get more detailed information, researcher has the flexibility to deviate from the systematic order. In this way, richer data is tried to be reached by elaborating beyond the initial answers. To be able to direct the interview flow, researcher has to be knowledgeable about the research topic as much as possible. This factor is crucial to ask questions to the point and have extensive information about the relevant issue.

Participation in the interview was voluntary as clearly expressed in the volunteer consent form. They were able to refuse to participate or end the interview without giving any reason. The fundamental ethical principles were preserved in the interview questions. Data confidentiality and protection has been considered within the scope of the research. Brand names and logos were not included in the questions directed to the participants; brands have been evaluated only through their social media messages. Each participant was informed before the interview about the aim, structure, and timing of the study. It was stated in the informing letter that all answers will be kept confidential, and information obtained from the participants will be analyzed as collective themes and used in scientific publications. Contact information was shared with the participants whether they ask to learn findings of the study.

To ensure to collect adequate data, minimum advised number of participants is 30 (McIntosh and Morse, 2015, pp. 1-8). Semi-structured interviews in this study were conducted online via Google Meet with 44 participants to have meaningful analysis. The reason why online platform was preferred is its ability to reach more participants in a short period of time. It enables to interview with individuals who live geographically far away. In addition to İzmir, participants from the other cities was able to join the research. User-friendly feature of Google Meet software also enabled participants to join interviews not only via computers but also mobile phones.

Each interview lasted between 15 and 25 mins. Individuals must be at least 18 years old to participate in the study. Participants in the interview were determined by considering various demographic factors such as age, gender, education level. It is believed that these factors are sufficient to represent the population thanks to the exploratory scope of the study. For this reason, in the first part of the interview demographic information were asked to the participants. In different from the other part of the interview, this information were collected via closed-ended questions. For ethical concerns, it is recommended to take place minimum, but enough number of demographic questions should be asked to be sure that sample is representative. Too many questions about their personal information may put the participants under stress

(Adeoye-Olatunde and Olenik, 2021, p. 1363). Eight demographic questions (as seen in Table 1) were asked with the aim of collecting needed data for this research. After this part, a short questionnaire which includes 7 questions, and 6-point Likert scale which were explained in detail in the next section was conducted to measure social desirability bias of the participants.

Following this stage, audio of the participants was started to be recorded to transcript the data. Rather than setting down the answers into writing during the interview, recording was preferred for the researcher to focus on the current conversation. During the interview, additional questions rather than three main questions were asked to dig deeper into participants' emotions and thoughts about the topic (McIntosh and Morse, 2015, p. 9). The data obtained from the network analysis was used to explore opinions of 44 participants about the different communication messages related to circular fashion. These six brand messages selected based on the maximum number of repeats in the analysis were "We believe in buying better and wearing longer.", "Fashion industry needs to change.", "It is responsibility.", "We move towards circularity.", "Collection is produced with organic cotton." and "We produce garments that are built to last.". In the interview, three different questions were asked to the participants after the anonymous display of each message including both the visual and text. These questions aimed to learn the participants attitudes towards these messages, purchase intention from the brands sharing these messages and the attitudes of the participants towards the other people who prefer the brands sharing these messages via third party technique. Plutchik's wheel of emotions containing eight emotions which are expect, joy, trust, fear, surprise, and sadness (Zeng, X. et al., 2021, p.5) was utilized in the first question to discover attitudes towards the brand messages. The reason for using this model is that this culturally independent wheel includes all the basic emotions opposites of each other (Tromp and Pechenizkiy, 2014, p.2). It directs participants to reflect their feelings towards the messages easily.

Thereafter the interviews were completed; audio recordings were transcribed with the exact words of the participants. Each transcript was given a number respectively and accuracy of the content was checked. By reading answers of the all participants to the same question was examined, significant points and repeated statements were highlighted. Similar points in each response were determined to extract the common themes (Mishra and Dey, 2022, pp. 187-189). These themes were

explored and classified in relation to the social desirability scores of the participants to compare attitudes and behaviors of them.

Table 1. Demographics of Sample (N=44)

	Category	Frequency	Percent
Sex	Female	24	54.54
	Male	20	45.46
	Prefer not to answer	0	0.0
Age (Years)	18-25	5	11.36
	26-35	12	27.27
	36-45	12	27.27
	46-55	6	13.64
	56-65	5	11.36
	66 and over	4	9.10
Marital Status	Single	23	52.27
	Married	21	47.73
Education Level	No diploma	0	0.0
	Elementary school	0	0.0
	Junior high school	1	2.27
	Highschool diploma	10	22.73
	Bachelor’s degree	21	47.73
	Master’s degree and over	12	27.27
Occupation	Housewife	3	6.81
	Retired	4	9.10
	Student	3	6.81
	Worker	4	9.10
	Civil servant	3	6.81
	Executive	10	22.73
	Senior executive	3	6.81
	Faculty member	0	0.0
	Businessman	4	9.10
	Other	10	22.73

Table 1 (Continued). Demographics of Sample (N=44)

Employment Status	Employed	32	72.73
	Unemployed	12	27.27
Monthly Personal Income	0–9000 TL	5	11.36
	9001–15000 TL	9	20.45
	15001–21000 TL	12	27.27
	21001–27000 TL	5	11.36
	27001–33000 TL	5	11.36
	33001 TL and over	8	18.20
Monthly Household income	0–18000 TL	5	11.36
	18001–30000 TL	8	18.20
	30001–42000 TL	10	22.73
	42001–54000 TL	7	15.91
	54001–66000 TL	7	15.91
	66001 TL and over	7	15.91
Socioeconomic Status	Lower income	5	11.36
	Lower middle income	5	11.36
	Middle income	27	61.37
	Upper middle income	7	15.91
	Upper income	0	0.00

3.3.3. Social Desirability Scale

In the first part of the interview following the demographic questions, social desirability bias of the participants were measured with a short questionnaire which includes demographic questions. In 1960, the Marlowe-Crowne Social Desirability Scale (MCSAS) was developed based on 33 questions and 2 answer options as True(Y) and False(Y) (Crowne and Marlowe, 1960, p.351). In this questionnaire, the short form of the Marlowe-Crowne Social Desirability Scale (MCSAS) developed by Ural and Özbiricikli in 2006 was benefited from to measure the social desirability bias. Other different short versions of the Marlowe-Crowne Social Desirability Scale was prepared for various studies previously based on cultural context. For instance, Italian version which includes 9 questions with seven different options was developed by Rattazzi, Canova and Marcorin in 2000 (Caputo, 2017, p. 5). In this study, a short form

was developed with 7 questions and translated to Turkish language as presented in Appendix A. This short form includes a 6-points Likert Scale from 1 to 6 ranging from strongly disagree (1) to strongly agree (6) as distinct from MCSAS which comprises of true and false options (Ural and Özbiricikli, 2006, pp. 394-402). Since the questions contain certain expressions such as always and never, presenting 6 answer choices let the participants indicate their attitudes rather than asking for preferring between just two options. Additionally, the Likert scale does not have a neutral choice which is the easiest way for the participants to answer before considering their actual behavior (Chomeya, 2010, p. 402). Each answer makes them decide and reflect their position, either positive or negative side.

Participants were classified according to their social desirability scores based on the short form of MCSDS. The total social desirability score of each accountant consists of a sum of 7-scale statements. Participants are split into two groups according to their scores; if participants have a higher score than mean they are assumed as having high social desirability tendency and vice versa. Based on the formula 5/6=0,83, in a rating that is evaluated out of 6 and has 5 intervals, 1 to 1,83 strongly disagree; 1,84 to 2,67 disagree; 2,68 to 3,51 slightly disagree; 3,52 to 4,35 slightly agree; 4.36 to 5,19 agree, 5.20 and above can be interpreted as strongly agree. Within the framework of these determined score ranges, the lower limit of the "slightly agree" option was determined as the threshold value of 3,52. This value was considered as the lower limit of social desirability bias.

CHAPTER 4: FINDINGS

In the study of Dunn and Shome (2009, p. 537), it is stated that more education and employment level is positively related to social desirability bias. Additionally, research findings of Nolte, Elsworth and Osborne (2013, p. 2) and Chung and Monroe (2003, p. 298), demographic data is also associated with social desirability bias. These researchers claim that social desirability tendency of women is higher than men. Even though this research has exploratory nature and sample size may not be enough for generalizing findings, no significant relation between gender and social desirability has been found. Since, 58% of the participants with high social desirability score are women while 42% of them are men. In addition to gender factor, the research of Heerwig and McCabe (2009, p. 674) examining the relationship between social desirability and education level stated that there is a negative correlation between social desirability level and educational attainment. In contrast to this statement, in this study just 17 percent of the participants with high social desirability score have high school or lower educational degree. 83% of these participants have bachelor or higher degree meaning that level of education and social desirability has positive correlation in this research.

Interview findings do not agree with the tendency of lower social status individuals to engage in circular fashion practices (Çakır and Dedeoğlu, 2020, p.70) because of the social risk that individuals who are afraid of facing a loss in their social image refrain from participating in these activities (Lang, Seo and Liu, 2019). Most of the research participants who have high social desirability and then more optimistic about this model have personal income between 15.000 TL and 27.000 TL and this scale is not considered as lower income group in this research. That's why, it can be claimed that the relationship between social desirability and engaging in circular fashion applications are not dependent on economic wellbeing. In addition to demographics, other considerations including personal traits and attitudes are discovered and four different themes are extracted as a result of the second part of the interview.

4.1.Findings of the Semi-Structured Interviews

4.1.1. Clothing Performance

Clothing performance is evaluated based on the different attributes of quality such as raw materials and fabric used, its comfort, durability, pattern, and fitting.

Consumers evaluate these attributes by choosing the most significant one for them and compare the other alternatives according to the lexicographic decision rule (Du Preez et al., 2018, pp. 36-38). Based on the interviews, it can be claimed that clothing performance is the most significant factor for the participants who have low social desirability bias. They consider shopping from the brands that offer high-quality and durable pieces. Most of them are brand loyal consumers who trust the specific brands whether their clothes can be worn for a long time. Shopping from these brands provides economic benefit in the long term especially for the family budget. One of the participants stated that "I would consider purchasing the garment in the post since it looks suitable to be worn under different weather conditions for a long time". Even though economic and environmental factors were mentioned, durability becomes the prominent criterion for the shopping decision. For instance, it is needed to be sure that color of trousers will not fade in the tumble dryer before making the decision. High quality garments can be used for long periods of time and then contribute to reduced waste, but environmental benefit is perceived as nice to have property of these products.

While the sustainability approach of a brand alone is not a shopping motivation for the majority of the participants with low social desirability score, performance is the main criteria. These participants tend to buy hand-made garments for the quality perception of these products rather than society related concerns. Examining the post indicating the background of denim production process, one of the participants stated, "Riveting process is critical in this photo since it indicates longevity and durability of this jean". Preferring durable clothes contributes to decrease purchasing frequency. In addition to using high quality components including fabric, Using ecological raw material in garment production is significant for the majority because these chemical-free fibers are better for their skin. They pointed out that they choose organic cotton since it does not cause harm to skin and provide comfort. Having less impact on the environment is not a unique selling point.

4.1.2. Emotional Brand Attachment

For the group of participants who have higher social desirability bias, confirming a brand or product depends on the other factors rather than the performance criteria. It would not be wrong to claim that they expect brands to offer emotional benefits in addition to their functions. Not only offering their performance attributes but how they communicate these benefits is also critical for these participants. They

tend to be loyal to the brands that can create emotional attachment with their consumers. Emotional brand attachment is a key concept since it shapes consumer attitudes towards the brand and reflects the bond strength between the brand and consumer (Ghorbanzadeh and Rahehagh, 2020, pp. 18-19). It may be possible to explain the attitude of participants who have a high social desirability score with their trust expectation to obtain from their social relations. The study in which social desirability bias and trust in the institution and the manager are related exemplifies this situation (Ostrem, 2006, p. 123).

While majority of the participants who have a low social tendency score highlight the features of durability and longevity of a jean shared in the posts, one of them with a high score mention about how wearing and smelling freshly washed jean make her feel safe. One of the other participants stated, “This post evoked a sense of happiness for me.” These findings are also supported by the study of Caputo (2017, p. 6-8) that highlights the strong positive association between high level of social desirability and greater happiness and gratitude of individuals. This association is related to altruistic tendency of these individuals to behave in a culturally agreeable way. Individuals with higher tendency indicate more affiliative behavior and are inclined to have lower levels of depression and anxiety. It is also required to highlight that these individuals with higher social desirability scores have more ability for empathy. This claim is consistent with the finding that most of the participants with higher social desirability believe the necessity of shaping shopping decision according to the benefits of others. Since they believe that all of us are socially responsible to other individuals, we need to put ourselves in the shoes of others rather than making our purchasing decisions just with individuals concerns. That’s why purchasing garments based on short term trends is a selfish behavior in terms of future of the planet and humanity.

In their study, Havan and Kohút (2019, p. 47) found that people who have high social desirability tends to be more extroverted and sociable. Individuals with higher energy level related to their extraversion behave in more socially desirable way. In line with this finding and Caputo’s (2017, p. 7) work claiming that higher social desirability is negatively related to loneliness, feelings of togetherness and sociability in the brand messages became influential to boost the moods of participants with higher social desirability scores. They pointed out that brand messages giving place various styles together in harmony provides the feeling of joy. The sense of happiness and joy

becomes helpful for establishing an emotional bond with the brands. In addition, rather than sharing stereotypes of the fashion industry, taking place fashion models with different sizes, body shapes, eye and hair colors reflect change. Most of them are optimistic about the transformation of the fashion industry towards a more inclusive model which is based on producing more tailor-based garments rather than replicating catwalk trends. Throughout the transformation of the industry, a more global approach depending on manufacturing timeless garments suitable for different segments of people would be adopted. In addition to physical features, positive gestures and mimics of these fashion models are also associated with the feeling of joy by the participants. Awakening joy and happiness is an important criterion for having an emotional bond and purchasing from a specific brand. For this reason, emotional attachment with a fashion brand of this group with higher social desirability scores increases their loyalty to this brand.

To reduce the gap between the real and desired moral personal identity, individuals become more supportive with giving and engaging in volunteer activities. These individuals perceive themselves as more kind, philanthropist, and kind. Hence, they tend to behave in a more socially desirable way by maximizing the utility of giving (Lee and Sargeant, 2011, p. 714). This giving behavior may be associated with individuals engaging in circular fashion practices. Rather than landfilling or throwing away, these individuals who have higher social desirability can prefer to donate their garments to other people or stores utilizing them for reusing purposes. In addition to people, socially responsible brands give back to the community and environment. One of the participants stated that "I consider shopping from the brands with purpose of having social and environmental benefits. For instance, by purchasing a piece from World Wildlife Fund (WWF), I feel as a part of volunteer activity and act of kindness. Since, return of my payment is not only a garment but also contribution to save animals facing extinction." As participants with high social desirability score have inclination for joining to giving activities, their expectation from a fashion brand is in the same route. If a brand succeeds to satisfy these expectations, emotional connection with the consumers would be stronger.

4.1.3. Greenwashing Concerns

Greenwashing is described as a way of positive communication of companies about environmental issues even though they adopt practices which have negative impact on environment. Since differentiating between eco-friendly activities and false

claims of the brands is not easy for consumers, skepticism towards the sustainability claims has been increasing (De Freitas Netto et al., 2020, p. 1). Skepticism towards the brand messages is the common point among the participants with lower level of social desirability bias. One of them stated about the post including organic cotton usage that "I have more cautious approach towards these messages, in addition to fabric I also wonder which dye and yarn types are used in the production process". Some participants reflected their feelings about the message 'anger' from Plutchik's wheel of emotions. The majority of this group of participants believe that green claims are misleading, and they are mostly used as a marketing strategy by the fashion industry. Their attitude towards shopping from these brands are also negative since it is expressed that promises of the brands about circular fashion are not enough to consider purchasing their products. Another participant highlighted the background of production process belonging to the brands sharing messages about the circular fashion implementations. It is also stated that current fast fashion brands such as H&M is claiming to care for people and environment and have sustainable manufacturing. However, working environment of its subcontractors in Bangladesh are different than communication messages of the company. Cultural context is perceived as another important barrier to apply circular fashion practices. Even though fashion brands can be successful for implementing this business model in other countries, developing world such as Bangladesh and Turkey has a long way to go.

Participants with a high level of social desirability are more optimistic towards the sustainability claims of the brands. Instead of being skeptical about these brands, their attitudes are more supportive and believe that both consumers and brands have social responsibility to change the current consumption habits. They also tend to shop from the brands with circular fashion claims at least to discover whether the message and products of these brands are consistent. It is also common point among the participants with higher social desirability scores to be inclined to have trust in the fashion brands communicating change in their messages as they believe that these brands aim to reach better. This optimistic approach can be supported with the finding of Ones, Viswesvaran and Reiss (1996, p. 665) that social desirability and agreeableness are positively associated. Acting for the better is not only for themselves but also for the environment, planet, and society. Reducing overconsumption and waste cannot be classified as a personal benefit, it is about the collective wellbeing. Individuals describe themselves in line with the values of society in collectivism. In

contrast to this mindset, individualistic culture highlights independence from the society (Dunn and Shome, 2009, p. 536). The collectivist mindset of the participants with high social desirability scores again can be associated with the high level of extraversion which is widely accepted as one of the big five personality traits (Havan and Kohút, 2019, pp. 37-38). The research of Jan Benedict et al. (2010, p. 217) supports this view by expressing the idea that belonging to a group and society is desired in collectivist societies which have social desirability tendency by attaching importance to position themselves in a favorable way.

As mentioned in the literature review, avoiding greenwashing activities is critical for the fashion brands having claims about circular economy to create green value for their consumers. In the interview, participants with high social desirability scores have inclination to find these messages more authentic. Considerable number of participants are aware that existing linear fashion model harms to both nature and human. They take smaller steps to tackle with this global problem such as preferring fabric shopper bags instead of single-used plastics, bringing their unused clothes back into the stores for reusing, shopping from the responsible brands that support circularity. Together with these issues, this group of participants have expectations from these fashion brands to act for the scarcity of natural resources, carbon and water footprint and poor working conditions. If these expectations are considered to be met by and brands are able to implement circular product life cycle applications including reusing and upcycling, having environmentally and socially responsible production system, managing waste, the participants lean towards shopping from these brands.

4.1.4. Openness to Change

All participants agree with the idea that the current fashion system is problematic, however their attitudes towards the need for change is not identical. Although the group of the participants with the lower social desirability scores are more suspicious towards the green claims, they also have concerns against the change of the fashion industry. According to their statements in the interview, it is hard to be sure whether the change is good or bad. This group of participants is more wary towards marginal fashion styles since most of them believe that choosing classic styles is less risky. They may not consider purchasing upcycled or craft clothes as mass produced ones look more usual than these types of garments. Another factor making the participants with lower social desirability level reluctant to change of the fashion industry is price concern. If a garment is not mass produced and manufactured

according to circular fashion practices, recycled, or upcycled, it is perceived as more expensive. In different from this opinion, recycled or reused clothes are comprehended cheaper to the other group who has high social desirability. The logic behind this opinion is that in the production process of circular fashion model, fashion waste is utilized, or existing product is repaired and transformed into a new one rather than purchasing new raw materials.

The perception of the second group with higher social desirability level about the change is the opposite towards transformation of fashion industry. During the interviews with this group, since the needs and expectations evolve over time, the necessity to adopt the change was heavily focused on. The feeling of excitement and enthusiasm change will create was mentioned. This finding conforms with the research of Jan Benedict et al. (2010, p. 206) that examines social desirability bias in two categories as communal and egoistic. To the results of the study, openness to change is positively associated with the individual focused form of social desirability tendency. Openness to change is related to the independence tendency which is about following their own routes in unpredictable situations. The opposite attitude is desire to preserve the existing conditions by seeking for conformity and security. A large part of the participants who have a high social desirability level have higher expectations from the brands communicating about the need for change. As the change message of the brands is arousing curiosity for them, they tend to purchase the garments from these brands. According to this group, transformation of the current fashion industry towards a circularity is essential to put more emphasis on environmental and social sustainability. Almost all belonging to this participant group finds the brand message "Fashion industry needs to change" positive and select anticipation and trust from the Plutchik's Wheel of Emotions. One of them expressed that the current system is based on short-term fashion trends but not long-term usage of clothing. This business model is not sustainable since the ultimate aim of the fast fashion brands is boosting sales. Even though change does not happen suddenly and takes time, radical transformation of the industry to vital for the next generations.

4.2.Findings Related to Semantic Network Analysis

In a semantic network analysis, there are nodes or vertices which represent the structures and edges or links which indicate the relationship between two of them (Drieger, 2013, pp. 9-10). Table 2 indicates the basic findings of the Instagram posts network of 6 global fashion brands. There are 339 vertices which symbolize total of

core values in the network. 339 vertices establish a total of 2403 lines and 1471 of these lines have value 1 while 932 of them have value more than 1. Density measures number of relationships between the vertices in the network (Jeon and Kim, 2020, pp. 71-72). In this study, density of Instagram posts network is 0.02 meaning that 2% of the possible directed lines is available. Thus, it can be described as a sparse network which shows diversity of the post messages. More diverse messages enrich the content of this research. The average degree, which is 14 in this network indicates the average number of linkages. In average, an Instagram post ties other ones 14 times.

Table 2. Semantic Network Analysis Metrics of Instagram Posts Network

Instagram Posts Network	
Number of vertices	339
Number of lines with value 1	1471
Number of lines that have different value than 1	932
Total number of lines	2403
Density of the network	0.02097188
Average degree	14.17699115

4.2.1. Valued Core Analysis

The total number of lines in the research is 2403 and valued core analysis demonstrates the units linked to each other with a certain number of lines. The lowest value is 0 and the highest one is 12 when valued core levels of Instagram posts network are examined. In this research, Instagram posts are linked to each other with at least with 0 and at most with 6 lines.

Table 3. All Max Valued Core Values

Instagram Posts Network	
Dimension	339
The lowest value	0
The highest value	12

In directed networks, each vertex has both incoming and outgoing links which are called input and output degrees respectively. That's why connections between the vertices don't have to be symmetric in these networks (Williams and Del Genio, 2014, p. 1). Since Instagram posts network is directed, input and output degrees are examined

separately. The number of incoming and outgoing lines from a vertex is not equal and their direction is significant in this research.

According to the frequency distribution of input cluster values table, 64 of 339 values are linked with value 0; 102 of them are linked with value 1, 110 of them are linked with value 2, 23 of them are linked with value 3, 9 of them is linked with value 4, 12 of them are linked with value 5, 11 of them is linked with value 6, 5 of them is linked with value 7, 1 of them is linked with value 9 and 2 of 339 values are linked with value 12. In Table 5, the Instagram posts with most input valued core values which are tied with more than value 6 are shown as “We reduce our fiber impact.”, “We explore the possibilities presented by innovations.” and “We make better clothes.”. There is not a significant structure between the other values which are linked with value equal to and less than 6.

Table 4. Frequency Distribution of Input Cluster Values

Cluster	Freq	Freq %	CumFreq	CumFreq%	Representative
0	64	188.791	64	188.791	Redesign is a project by the foundation.
1	102	300.885	166	489.676	Sustainability Innovation Hub supports partners to scale up their initiatives.
2	110	324.484	276	814.159	It's a durable piece.
3	23	67.847	299	882.006	Wear longer.
4	9	26.549	308	908.555	We move towards circularity.
5	12	35.398	320	943.953	Wear it.
6	11	32.448	331	976.401	We adopt new practices including reducing carbon emissions.
7	5	14.749	336	991.150	We make better clothes.
9	1	0.2950	337	99. 4100	We explore the possibilities presented by innovations.

Table 4 (Continued). Frequency Distribution of Input Cluster Values

12	2	0.5900	339	1.000.000	We reduce our fiber impact.
Sum	339	1.000.000			

Table 5. Instagram Posts with Most Input Valued Core Values

Representative	Freq.
We reduce our fiber impact.	12
We explore the possibilities presented by innovations.	9
We make better clothes.	7

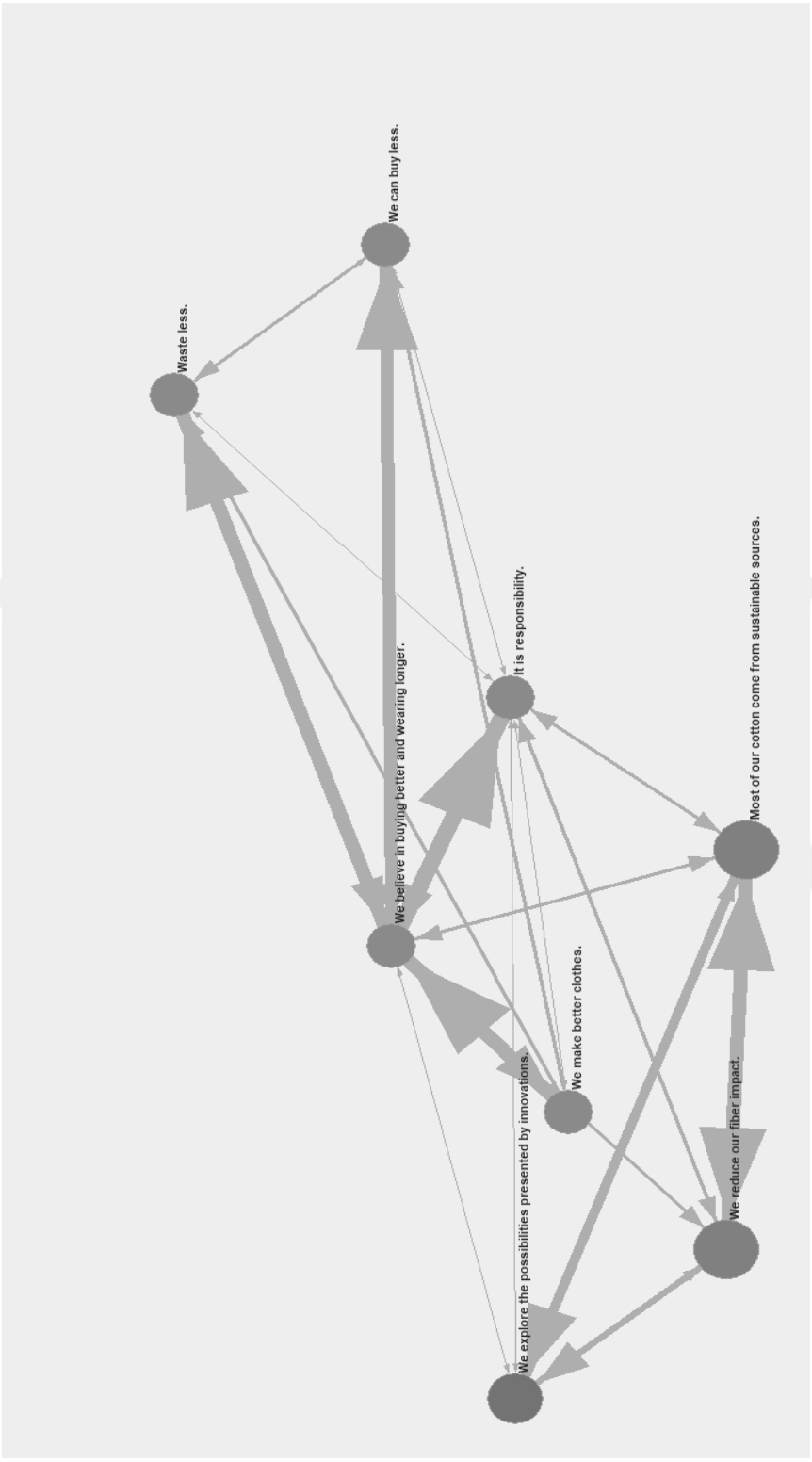

Figure 1. Input Valued Core Network

According to the frequency distribution of output cluster values table, 57 of 339 values are linked with value 0, 68 of them are linked with value 1, 126 of them are linked with value 2, 30 of them are linked with value 3, 17 of them is linked with value 4, 16 of them are linked with value 5, 16 of them is linked with value 6, 7 of them is linked with value 7 and 2 of them is linked with value 12. In Table 7, the Instagram posts with most output valued core values which are tied with more than value 6 are indicated as “We reduce our fiber impact.” and “It is our climate commitment.” It can be stated that there is not a significant structure between the other values which are linked with value equal to and less than 6.

Table 6. Frequency Distribution of Output Cluster Values

Cluster	Freq	Freq %	CumFreq	CumFreq%	Representative
0	57	16.8142	57	16.8142	Redesign is a project by the foundation.
1	68	20.0590	125	36.8732	Old garments are on someone else.
2	126	37.1681	251	74.0413	It's a durable piece.
3	30	8.8496	281	82.8909	Wear it.
4	17	5.0147	298	87.9056	Uncovered actions that businesses can take on a corporate level to change the planet.
5	16	4.7198	314	92.6254	We move towards circularity.
6	16	4.7198	330	97.3451	We produce garments that are built to last.
7	7	2.0649	337	99.4100	It is our climate commitment.
12	2	0.5900	339	100.0000	We reduce our fiber impact.
Sum	339	100.0000			

Table 7. 2 Instagram Posts with Most Output Valued Core Values

Representative	Freq.
We reduce our fiber impact.	12
It is our climate commitment.	7

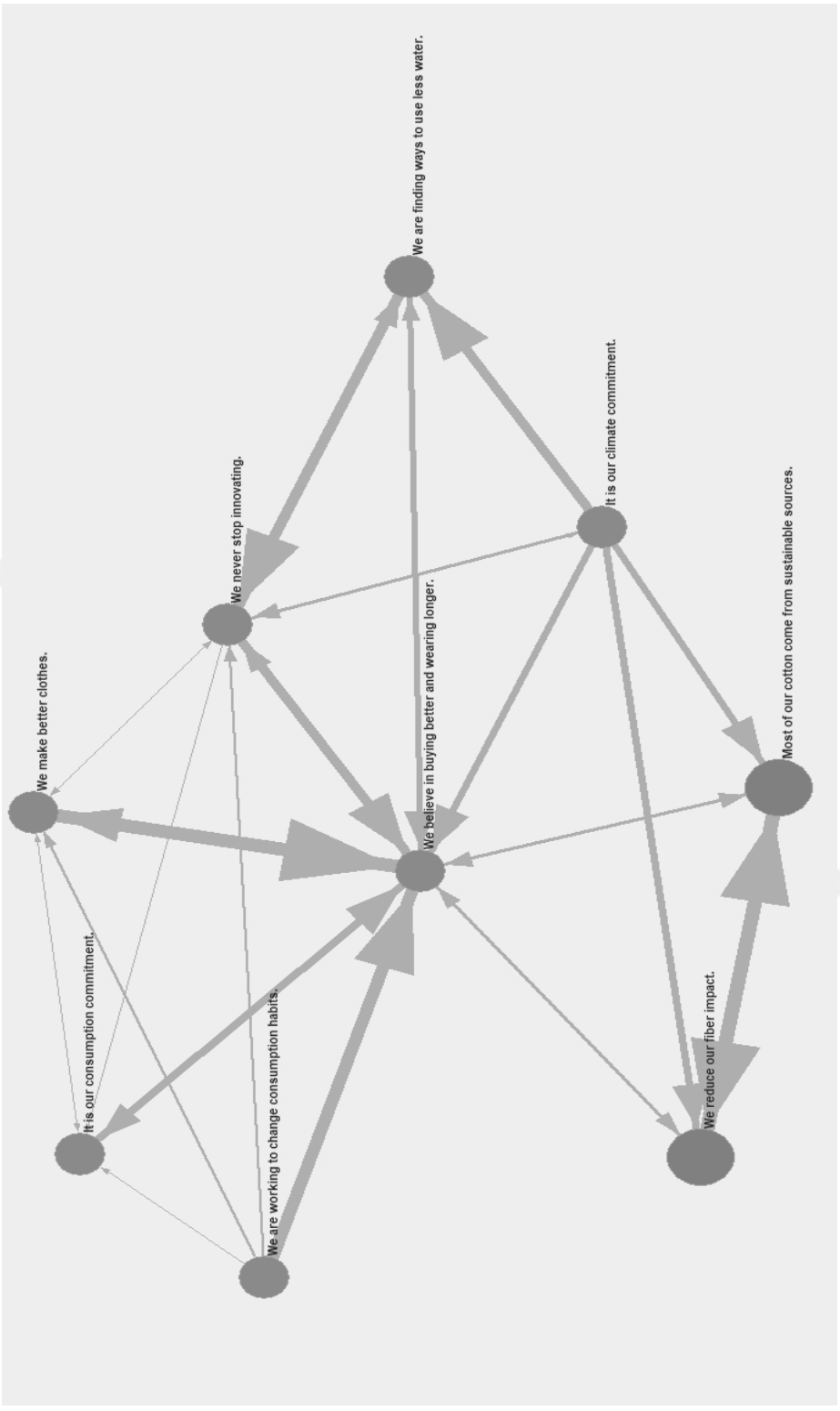

Figure 2. Output Valued Core Network

4.2.2. Input Degree Analysis

Centrality is used to measure the place of a vertex in a network. “Degree centrality,” closeness centrality” and “betweenness centrality” are the three measurements for analyzing centrality (Jeon and Kim, 2020, p. 72). Degree centrality analysis measures the connectivity level of a vertex. In a word, it represents sum of the total links of a vertex with the other ones (Kostygina, et al., 2021, pp. 3-4). In the Instagram posts network, the most popular value which gets the highest number of inputs is “Fashion industry needs to change.” Even though, number of connections outgoing from “It is cradletocradle certified.” is not high, this value ranks in the fourth place in terms of number of connections it receives.

Table 8. Input Degrees in Instagram Posts

Rank	Vertex	Value	Id
1	126	1.0000	Fashion industry needs to change.
2	75	0.5979	We believe in buying better and wearing longer.
3	212	0.4742	It is responsibility.
4	182	0.4124	It is cradletocradle certified.
5	7	0.3814	It is an innovation.
6	1	0.3299	We move towards circularity.
7	280	0.3299	You are credited to buy something.
8	127	0.2990	Collection is produced with organic cotton.
9	164	0.2887	Wear worn.
10	193	0.2680	It is fully recyclable.
11	102	0.2577	Get involved.
12	301	0.2577	It is better for the soil.
13	124	0.2371	Sustainability is essential.
14	237	0.2371	It is circularity.
15	26	0.2371	We produce garments that are built to last.
16	136	0.2371	We use renewable energy.
17	122	0.2165	We believe in circular fashion.
18	188	0.2165	Our partnerships are focused on climate.
19	90	0.2165	When you no longer need it, trade in.
20	207	0.2062	We can buy less.
21	74	0.2062	Pass it on to someone who will use it.

Table 8 (Continued). Input Degrees in Instagram Posts

22	285	0.2062	Safe dyes and chemicals are used.

4.2.3. Output Degree Analysis

Since “Fashion industry needs to change.” and “We believe in buying better and wearing longer.” are the two top values in both input and output degrees analysis, it can be claimed that they have the highest number of incoming and outgoing lines to other values. “We make the fashion industry more circular.” is not present among the top input degree values. However, it has the third highest value in terms of the number of outgoing connections.

Table 9. Output Degrees in Instagram Posts

Rank	Vertex	Value	Id
1	126	1.0000	Fashion industry needs to change.
2	75	0.5979	We believe in buying better and wearing longer.
3	40	0.4742	We make the fashion industry more circular.
4	212	0.4124	It is responsibility.
5	26	0.3814	We produce garments that are built to last.
6	35	0.3299	We take your garment back when you no longer need it.
7	127	0.3299	Collection is produced with organic cotton.
8	1	0.2990	We move towards circularity.
9	67	0.2887	It is our climate commitment.
10	162	0.2680	It eliminates the concept of waste.
11	63	0.2577	We adopt new practices including reducing carbon emissions.
12	50	0.2577	We want our customers to make sustainable choices.
13	36	0.2371	Our goal is to source all of the materials more sustainably.
14	116	0.2371	Circularity is to extend the life of products.
15	108	0.2371	Collection is designed with its whole life cycle and future.
16	99	0.2371	Our collaboration makes each piece unique.
17	77	0.2165	We are working to change consumption habits.
18	124	0.2165	Sustainability is essential.

Table 9 (Continued). Output Degrees in Instagram Posts

19	237	0.2165	It is circularity.
20	37	0.2062	We share our sustainability report.

4.2.4. Input Closeness Analysis

Closeness centrality measures geodesic distances from one node to other ones. This analysis is just valid for the networks that all structured are connected to each other (O'Malley and Marsden, 2008, pp. 260-265). It indicates the sum of the distance between directly and indirectly vertices as distinct from degree centrality (Jeon and Kim, 2020, p. 73). Twenty values with the highest centrality degrees for the Instagram posts network are presented in the Table 10 and 11 below. In terms of closeness, “Fashion industry needs to change.” and “We believe in buying better and wearing longer.” are the most central three values.

Input degrees of the first twenty values in the Instagram posts network are close to each other. “Fashion industry needs to change.”, “We believe in buying better and wearing longer.”, “We move towards circularity.” have the highest input centrality degrees. “We make sustainable clothes.”, and “It is a process to move towards a sustainable future.”, “It is better for the soil.”, “We believe in circular fashion.”, “Safe dyes and chemicals are used.” and “We design for circularity.” are significant only in input closeness analysis.

Table 10. Input Closeness Centrality in Instagram Posts

Rank	Vertex	Value	Id
1	126	10.000	Fashion industry needs to change.
2	75	0.9747	We believe in buying better and wearing longer.
3	1	0.9279	We move towards circularity.
4	212	0.8894	It is responsibility.
5	188	0.8668	Our partnerships are focused on climate.
6	7	0.8629	It is an innovation.
7	124	0.8616	Sustainability is essential.
8	127	0.8591	Collection is produced with organic cotton.
9	182	0.8591	It is cradletocradle certified.
10	237	0.8440	It is circularity.
11	193	0.8440	It is fully recyclable.

Table 10 (Continued). Input Closeness Centrality in Instagram Posts

12	60	0.8367	We make sustainable clothes.
13	240	0.8190	It is a process to move towards a sustainable future.
14	207	0.8132	We can buy less.
15	26	0.8121	We produce garments that are built to last.
16	301	0.8064	It is better for the soil.
17	122	0.8031	We believe in circular fashion.
18	285	0.8031	Safe dyes and chemicals are used.
19	162	0.7997	It eliminates the concept of waste.
20	154	0.7975	We design for circularity.

4.2.5. Output Closeness Analysis

Output closeness indicates the total distance of direct and indirect outgoing lines of a node to others. Table 11 indicates the twenty values with the highest output closeness centrality degrees for the Instagram posts network. “We believe in buying better and wearing longer.”, “Fashion industry needs to change.” and “We take your garment back when you no longer need it.” have the highest output centrality degrees. “We take your garment back when you no longer need it.”, “We make the fashion industry more circular.”, “We want our customers to make sustainable choices.”, “We adopt new practices including reducing carbon emissions.”, “Circularity is to extend the life of products.”, “We are building a sustainable future.”, “Wear it.”, “Recycling is really important.”, “We are finding ways to use less water.” are only significant in the output closeness centrality.

Table 11. Output Closeness Centrality in Instagram Posts

Rank	Vertex	Value	Id
1	75	10.000	We believe in buying better and wearing longer.
2	126	0.9585	Fashion industry needs to change.
3	35	0.9581	We take your garment back when you no longer need it.
4	40	0.9219	We make the fashion industry more circular.
5	26	0.9098	We produce garments that are built to last.

Table 11 (Continued). Output Closeness Centrality in Instagram Posts

6	127	0.9083	Collection is produced with organic cotton.
7	50	0.9054	We want our customers to make sustainable choices.
8	63	0.8995	We adopt new practices including reducing carbon emissions.
9	1	0.8966	We move towards circularity.
10	212	0.8796	It is responsibility.
11	116	0.8699	Circularity is to extend the life of products.
12	162	0.8672	It eliminates the concept of waste.
13	193	0.8605	It is fully recyclable.
14	124	0.8578	Sustainability is essential.
15	188	0.8565	Our partnerships are focused on climate.
16	81	0.8499	We are building a sustainable future.
17	18	0.8447	Wear it.
18	207	0.8396	We can buy less.
19	228	0.8384	Recycling is really important.
20	143	0.8371	We are finding ways to use less water.

4.2.6. Betweenness Analysis

Betweenness centrality states the possible velocity and quality of communication in a network by analyzing the average shortest links between network structures. Betweenness is influenced by both the number of links and presence of structural holes which are related to the non-existence of direct links between the structures. Betweenness centrality and these holes have negative correlation because they cause structures to use more indirect ways to reach other sides of the network (Bloodgood et al., 2017, pp. 532-533). “Fashion industry needs to change.” and “We believe in buying better and wearing longer.” values have the highest betweenness centrality degree as stated in Table 12 and they have a mission of node-to-node data transfer.

Table 12. Betweenness Centrality in Instagram Posts

Rank	Vertex	Value	Id
1	126	1.0000	Fashion industry needs to change.

Table 12 (Continued). Betweenness Centrality in Instagram Posts

2	75	0.7561	We believe in buying better and wearing longer.
3	26	0.3274	We produce garments that are built to last.
4	1	0.3241	We move towards circularity.
5	212	0.2989	It is responsibility.
6	127	0.2140	Collection is produced with organic cotton.
7	7	0.1906	It is an innovation.
8	280	0.1503	You are credited to buy something.
9	39	0.1388	It is upcycled post consumer waste.
10	164	0.1358	Wear worn.
11	33	0.1276	We limit our environmental impact.
12	116	0.1162	Circularity is to extend the life of products.
13	85	0.1099	We have a debt to pay back to the environment.
14	98	0.1097	We are saving our home planet.
15	67	0.1089	It is our climate commitment.
16	228	0.1063	Recycling is really important.
17	92	0.1052	Experts offer free repair.
18	124	0.1032	Sustainability is essential.
19	113	0.1015	It is made with recycled materials.
20	63	0.1001	We adopt new practices including reducing carbon emissions.

4.2.7. Articulation Points Analysis

Articulation point is defined as a number of bridges to which a node belongs and in the absence of these points, a network is separated into independent parts (Nooy, Mrvar and Batagelj, 2018, p. 176). According to Table 13, there are 5 articulation points in the Instagram posts network and all of them have an equal value of 2. If "It is an innovation.", "It is made with recycled materials.", "It is made with natural dyes.", "Discover the cherish waste collection." or "We believe in buying better and wearing longer." values are removed, the network is separated into 2 different sections. These 5 values can be called building blocks and hold the Instagram posts network together.

Table 13. Articulation Points in Instagram Posts

Values	Articulation Points
2	It is an innovation.
2	It is made with recycled materials.
2	It is made with natural dyes.
2	Discover the cherish waste collection.
2	We believe in buying better and wearing longer.

4.2.8. Total Findings of 8 Dimensions

Instagram posts network of 6 global fashion brands is analyzed based on 8 different dimensions which are input degree, output degree, input closeness, input valued core, output valued core, output closeness, betweenness and articulation point. However, there is no value repeated 8 times in the network. “We believe in buying better and wearing longer.” is repeated 6 times which is the maximum number of repeats. The other posts repeated in 5 different dimensions are “Fashion industry needs to change.”, “It is responsibility, “We move towards circularity.”, “Collection is produced with organic cotton.”, “We produce garments that are built to last.” Representation of the network has a positive relationship with the number of repeats in dimensions. These values are significant in terms of characterizing the Instagram posts network. The values at least repeated once are indicated in table 14, remaining ones are not repeated in any dimension. 52 of 339 Instagram posts are repeated at list in one dimension. In other words, these 52 structures take place minimum once in the Instagram posts dimensions table that lists maximum values.

Table 14. Summary of Semantic Network Analysis Findings of Instagram Posts

Instagram Posts	Number of Repeat	Repeated Dimensions
We believe in buying better and wearing longer.	6	Input degree, output degree, input closeness, output closeness, betweenness, articulation point
Fashion industry needs to change.	5	Input degree, output degree, input closeness, output closeness, betweenness

Table 14 (Continued). Summary of Semantic Network Analysis Findings of Instagram Posts

It is responsibility.	5	Input degree, output degree, input closeness, output closeness, betweenness
We move towards circularity.	5	Input degree, output degree, input closeness, output closeness, betweenness
Collection is produced with organic cotton.	5	Input degree, output degree, input closeness, output closeness, betweenness
We produce garments that are built to last.	5	Input degree, output degree, input closeness, output closeness, betweenness
Sustainability is essential.	4	Input degree, output degree, output closeness, betweenness
It is an innovation.	4	Input degree, input closeness, betweenness, articulation point
It is our climate commitment.	3	Output valued core, output degree, betweenness
It is fully recyclable.	3	Input degree, input closeness, output closeness
Our partnerships are focused on climate.	3	Input degree, input closeness, output closeness
We can buy less.	3	Input degree, input closeness, output closeness
It is circularity.	3	Input degree, output degree, input closeness

Table 14 (Continued). Summary of Semantic Network Analysis Findings of Instagram Posts

It eliminates the concept of waste.	3	Output degree, input closeness, output closeness
We adopt new practices including reducing carbon emissions.	3	Output degree, output closeness, betweenness
Circularity is to extend the life of products.	3	Output degree, output closeness, betweenness
It is made with recycled materials.	2	Betweenness, articulation point
We reduce our fiber impact.	2	Input valued core, output valued core
It is cradletocradle certified.	2	Input degree, input closeness
It is better for the soil.	2	Input degree, input closeness
Safe dyes and chemicals are used.	2	Input degree, input closeness
We believe in circular fashion.	2	Input degree, input closeness
You are credited to buy something.	2	Input degree, betweenness
Wear worn.	2	Input degree, betweenness
We make the fashion industry more circular.	2	Output degree, output closeness
We take your garment back when you no longer need it.	2	Output degree, output closeness
We want our customers to make sustainable choices.	2	Output degree, output closeness
Recycling is really important.	2	Output closeness, betweenness

Table 14 (Continued). Summary of Semantic Network Analysis Findings of Instagram Posts

We explore the possibilities presented by innovations.	1	Input valued core
We make better clothes.	1	Input valued core
It is made with natural dyes.	1	Articulation point
Discover the cherish waste collection.	1	Articulation point
We use renewable energy.	1	Input degree
Get involved.	1	Input degree
When you no longer need it, trade in.	1	Input degree
Pass it on to someone who will use it.	1	Input degree
Our goal is to source all of the materials more sustainably.	1	Output degree
Collection is designed with its whole life cycle and future.	1	Output degree
Our collaboration makes each piece unique.	1	Output degree
We are working to change consumption habits.	1	Output degree
We share our sustainability report.	1	Output degree
We make sustainable clothes.	1	Input closeness
It is a process to move towards a sustainable future.	1	Input closeness
We design for circularity.	1	Input closeness
We are building a sustainable future.	1	Output closeness
Wear it.	1	Output closeness
We are finding ways to use less water.	1	Output closeness
It is upcycled post consumer waste.	1	Betweenness
We limit our environmental impact.	1	Betweenness
We have a debt to pay back to the environment.	1	Betweenness

Table 14 (Continued). Summary of Semantic Network Analysis Findings of Instagram Posts

We are saving our home planet.	1	Betweenness
Experts offer free repair.	1	Betweenness

CHAPTER 5: DISCUSSION AND CONCLUSION

A two-step research approach was implemented to identify the relationship between social desirability bias and engaging in circular fashion. Semi-structured interviews which were shaped according to the data extracted from the semantic network analysis were conducted. In this analysis, social media messages about circular fashion practices of 6 different global fashion brands (Zara, H&M, C&A, Levi's, G-Star and Patagonia) were examined and their messages were analyzed via semantic network analysis. In the next phase of the research, the data obtained from the network analysis was used to explore opinions of 44 participants about the different communication messages related to circular fashion with a short interview form. As a result of interviews and literature review, four different themes which are clothing performance, emotional brand attachment and greenwashing concerns and openness to change were explored.

Interview participants were split into two groups according to their level of social desirability. If participants have a higher score than mean which is 3.52, they are assumed as having high social desirability according to the short form of Marlowe-Crown Social Desirability Scale. While 55% of the participants have a high social desirability tendency, 45% of them are classified as having a low social desirability tendency. These two groups have different tendencies for engaging in circular fashion practices. Since there are many studies in the literature that found existing correlation between personal characteristics and social desirability tendency (Havan and Kohút, 2019, p. 39), (Ones, Viswesvaran and Reiss, 1996, p. 665) in this study, these traits were discussed in respect of attitude towards the circular fashion.

Social desirability bias has been a wide research topic in marketing for the duration (Jan Benedict et al., 2010, p. 210). Due to the fact that in marketing literature there are innumerable studies assessing consumer behavior, product and purchasing attitudes, personality traits, social desirability tendency measure has critical role. Using these measures is beneficial for understanding social desirability level of the research participants as the marketing discipline preoccupies self-evaluation measures about these topics (King and Bruner, 2000, pp. 84-85).

According to the findings of the first part of the interview structure including demographic questions and the short form of Marlowe-Crown Social Desirability Scale, it can be discussed that there is no significant relationship between economic

status and social desirability level. Participants which are optimistic about the circular fashion and have high social desirability are distributed levelly in terms of their personal incomes. Nevertheless, most of these individuals have bachelor or higher degree meaning that level of education and social desirability is positively correlated. In addition to demographics, other considerations including personal traits and attitudes are discovered in the following section. Research results underline the different attitudes of interview participants towards circular fashion practices. After analyzing the interview transcripts in line with the existing literature, it can be claimed that these attitudes stem from the particular personal traits. As there are significant number of studies examining the relationship between personal characteristics and social desirability, themes extracted from the interviews were interpreted in association with these studies. As a result, it would not be wrong to argue that in addition to education level, social desirability tendency of individuals is correlated with their personal traits and thus their attitudes towards the circular fashion.

In this exploratory research, four different themes extracted from the interviews which are clothing performance, emotional brand attachment, greenwashing concerns, and openness to change were examined in relation with the social desirability. These themes were investigated depending upon the theoretical framework and research questions. The relationship between social desirability bias and engaging in circular fashion is found as a result of the research and type of this relationship were studied. It is inferred that the personal attitudes of each group evaluated based on these themes are interdependent. The connection between each characteristic belonging to the groups having different social desirability level is discussed.

Even though all participants agree with the idea that the current fashion system is problematic, their attitudes towards the need for change is different. The group of the participants with the lower social desirability scores are more suspicious towards the change of the fashion industry. As they are more pessimistic about the circular fashion model, green claims are misleading, and they are mostly used as a marketing strategy by fashion brands according to this group. In contrast, the other group supports transformation of the current fashion industry towards a circularity as it is essential to put more emphasis on environmental and social sustainability. Thus, suspicion about the brands whether they are authentic with their messages or engage in greenwashing can be associated with the attitude of openness to change. One of the participants with low social desirability score also defines herself as status quo supporter who give more

importance to clothing performance than other factors. Since making a purchasing decision based on the performance criterion mainly quality and durability is perceived as less risky. If individuals are loyal to specific brands due to these performance related features, they would be reluctant to have a try other brands implementing circular model. Because of this risk averse attitude of consumers who have low social desirability, they may become more suspicious about the change. In addition, quality concern in circular fashion applications if the performance of a garment satisfies expectations of the consumers (Lang and Zhang, 2019, p. 158) can be another reason of this attitude. That's why they would be unwilling towards transition of the fashion industry towards a circular economy and engagement with these circular fashion applications compared to the other consumers with high social desirability level.

Clothing performance can be interpreted as an individual concern since expectations from high quality garments are mostly on a personal level such as comfort and wellbeing. Since clothing performance is the main shopping criterion with the consumers with low level of social desirability, this feature can be affiliated with their individualist approach. As it is discussed in the findings, the other consumer group with high social desirability makes the decisions heavily with collective concerns. They are anxious about the future of existing linear fashion model and willing to take smaller steps to tackle with this issue for the benefits of both society and environment. In contrast to clothing performance, effort to transform the fashion model to be more sustainable about the collective wellbeing is highlighted. As the participants with higher social desirability level have a more collectivist approach, they believe that both consumers and brands have social responsibility to change the current consumption habits.

5.1.Theoretical and Practical Implications

This research sought to discover the relationship between social desirability bias and engaging in circular fashion. While some scholars have researched consumer traits and behaviors in terms of circular economy in other industries (Edbring, Lehner and Mont, 2016, p. 6), there are also other studies about the correlation between these traits and the circular fashion in specific countries including Finland (Korsunova, Horn and Vainio, 2021), Sweden (Borg, Mont and Schoonover, 2020) and Korea (Kim, Hye and Lee, 2021). Although theoretical framework of circular economy has been defined by global organizations and governmental agencies, business strategies also have been shaped by fashion industry towards circular applications. This research attempts to

contribute to understanding consumer attitudes towards their consumption habits and support more circular future. Cultural acceptance of consumers has an important impact on CE applications (Jesus and Mendonça, 2018, p. 83) as also founded in the research. Thus, this study makes contribution to the existing literature about circular economy by evaluating the fashion context among Turkish consumers. In addition, as there are many studies in the literature that found existing correlation between personal characteristics and social desirability tendency (Havan and Kohút, 2019, p. 39), this research provides insight about these traits in respect of attitude towards the circular fashion.

This study, which focuses on the different consumer attitudes towards the social media messages about circular fashion is intended to contribute to theory by trying to bring another perspective to the field of communication of fashion brands. Therefore, it is believed that this exploratory study makes contribution to the field of social media communication of fashion brands by comprehensively covering the stages of the entire research design. Fashion brands which especially adopt sustainability approach and circular economy model can effectively evaluate the impact of social desirability tendency on engaging in circular fashion and have insight about their target consumers. They can benefit from the research findings to differentiate themselves from their competitors.

The interview results provide meaningful insights for the fashion brands engaging in circular economy applications. According to these findings it is critical to create green value for fashion brands to consider not only their environmental performance, but also quality attributes. Providing transparency in the production process and avoiding greenwashing activities would create stronger emotional bond for the consumers. Emotional brand attachment is key in terms of shaping consumer attitudes towards the brand and building consumer loyalty. Since consumers are skeptical about the sustainability claims of the fashion brands, it is critical to share authentic and consistent messages.

5.2.Limitations and Further Research

This study is limited due to the fact that the sample size is relatively small; only 44 short interviews were conducted. In further research, larger and more heterogeneous sample such as including other professions would represent the population better. In addition, social media posts of six global fashion brands which have different approaches towards circular economy were analyzed via semantic

network analysis in this study. To expand the scope of the paper, future research would be conducted with more brands that have various circular fashion practices. Additionally, in this research, four different themes were extracted from the interviews. Further research can focus on each concept separately. One of the themes of clothing performance, emotional brand attachment, greenwashing concerns, and openness to change in relation with social desirability bias and circular fashion can be investigated profoundly. In conjunction with these themes, personal traits of two groups with different social desirability level can be studied further.

The scope of the exploratory study is limited because it was conducted only in Turkey. Since the fashion brands taking place in this research are well-known all over the world, future research can be conducted in other countries. Turkish version of the short form of Marlowe-Crown Social Desirability Scale prepared by Ural and Özbiricikli (2006, pp. 394-402) was used in the survey. In addition to this form, other short versions of the Marlowe-Crown Social Desirability Scale which had been designed based on cultural differences can be used in further research in different cultures. Also results of the study need further investigation. To Caputo (2017, p. 9-10), online setting for this scale may result in more anonymous answers than face-to-face format as individuals beware responding in a socially desirable way. For this reason, further research would be validated with more suitable features for the online interview or conducted in a physical environment.

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APPENDICES

APPENDIX A

Survey Questions

Dear Participant,

In my master's thesis conducted in the Department of Marketing Communication and Public Relations of the Izmir University of Economics under the supervision of Doç. Dr. Selin Türkel, we are conducting academic research on circular fashion and social desirability bias. Filling out the questionnaire will make an important contribution to our scientific work. The data obtained will only be used within the scope of the research. The information you provide will be kept strictly confidential and will only be used as aggregated findings for academic purposes. Thank you in advance for taking the time to complete this survey.

Student Name:

Participant Name (does not have to be real name):

Survey No:

I. Listed below are a number of statements about your personal attitudes and characteristics. Read each expression carefully and indicate your level of agreement with each statement by ticking the appropriate answer next to it. Define yourself not as you want to be in the future, but as you see yourself now.

Evaluate the statements between 1-Strongly disagree, 2-Disagree, 3-Slightly disagree, 4- Slightly agree, 5-Agree, 6- Strongly agree.

Table 15. Marlowe-Crown Social Desirability Scale (Ural, and Özbirecikli, 2006)

Statement	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
1. I have never intensely dislike anyone.	1	2	3	4	5	6
2. I am always careful about my manner of dress.	1	2	3	4	5	6
3. No matter who I'm talking to, I'm always a good listener.	1	2	3	4	5	6

Table 15 (Continued). Marlowe-Crown Social Desirability Scale (Ural, and Özbirecikli, 2006)

4. I'm always willing to admit it when I make a mistake.	1	2	3	4	5	6
5. I am always try to practice what I preach.	1	2	3	4	5	6
6. I would never think of letting someone else be punished for my wrongdoings.	1	2	3	4	5	6
7. I have never been irked when people expressed ideas very different from my own.	1	2	3	4	5	6

Table 16. Turkish Version of the Short Form of Marlowe-Crown Social Desirability Scale (Ural, and Özbirecikli, 2006)

The Short Form of Marlowe-Crown Social Desirability Scale (Turkish)
1.Asla birinden çok fazla nefret etmem.
2. Daima giyimime özen gösteririm.
3.Kiminle konuştuğumun hiç önemi yoktur, daima iyi bir dinleyiciyimdir.
4.Hata yaptığımda daima itiraf etmek isterim.
5.Başkalarına verdiğim öğütleri daima kendim de uygulamaya çalışırım.
6.Hatalarımdan dolayı başka birinin cezalandırılmasına seyirci kalmayı asla düşünmedim.
7.Diğer insanlar benimkinden çok farklı fikirler ileri sürdüğünde hiç canım sıkılmaz.

II. What is your gender?

A) Female B) Male C) Prefer not to answer

III. How old are you?

A) 18-25

B) 26-35

C) 36-45

D)46-55

E) 56-65

E) 66 and over

IV. What is your marital status?

A) Single

B) Married

V. What is your level of education?

A) No diploma

B) Elementary school

C) Junior high school

D) Highschool diploma

E) Bachelor's degree

F) Master's degree and over

VI. What is your occupation?

A) Housewife

B) Retired

C) Student

D) Worker

E) Civil servant

F) Executive (unit chef, unit manager, specialist etc.)

G) Senior executive (general manager, coordinator, etc.)

H) Faculty member

I) Businessman

J) Other (please specify)

VII. Are you currently employed?

A) Yes

B) No

VIII. What is your monthly personal income?

A) 0–9000 TL

B) 9001–15000 TL

C) 15001–21000 TL

D) 21001–27000 TL

E) 27001–33000 TL

F) 33001 and over

IX. What is your monthly household income?

A) 0–18000 TL

B) 18001–30000 TL

C) 30001–42000 TL

D) 42001–54000 TL

E) 54001–66000 TL

F) 66001 and over

X. How do you define your socioeconomic status?

A) Lower income

B) Lower middle income

C) Middle income

D) Upper middle income

E) Upper income

APPENDIX B

Interview Questions

I will share with you some brand messages about circular fashion. Please indicate your feelings and thoughts regarding these messages.

1. We believe in buying better and wearing longer.

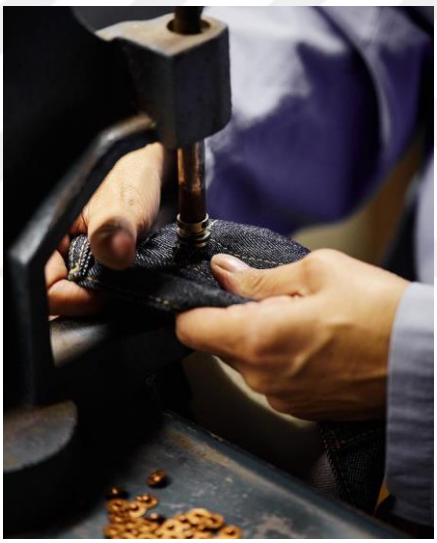
2. Fashion industry needs to change.

3. It (circular fashion) is a social responsibility.

4. We move towards circularity.

5. Collection is produced with organic cotton.

6. We produce garments that are built to last.



Please answer the following three questions regarding each message above.

1. Please choose a color from the wheel that reflects the emotion of the message and give at least three reasons why you chose this color.

2. Would you consider shopping from the brand that shares this message? Why/why not? Please explain.

3. How do you define a person (other than you) who finds this message positive? Please explain with at least three adjectives.

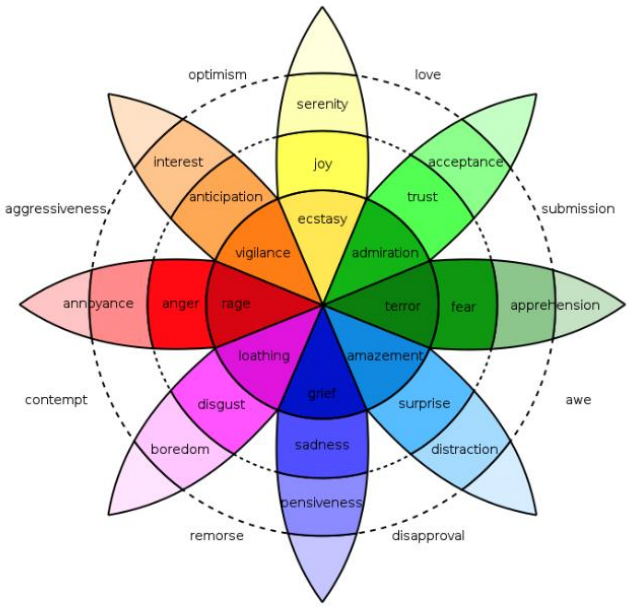


Figure 3. Plutchik's Wheel of Emotions (Tromp and Pechenizkiy, 2014)

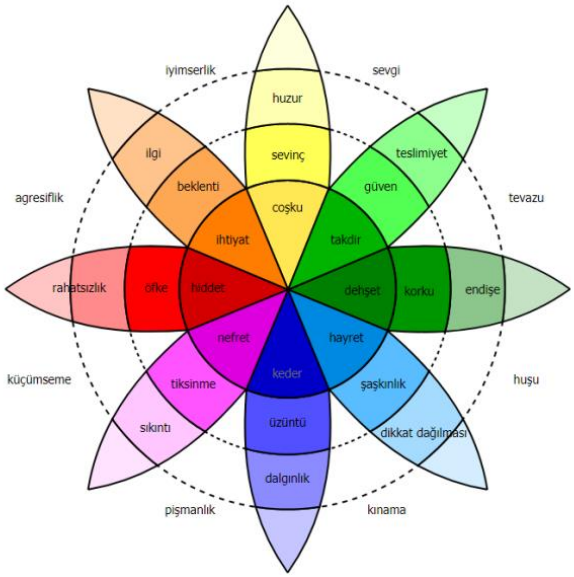


Figure 4. Plutchik's Wheel of Emotions (Turkish) (Uçan and Sezer, 2019)

APPENDIX C

Whole Lists of Findings Related to Semantic Network Analysis

Input Degree Centralization

Rank	Vertex	Value	Id
1	126	1.0000	Fashion industry needs to change.
2	75	0.5979	We believe in buying better and wearing longer.
3	212	0.4742	It is responsibility.
4	182	0.4124	It is cradletocradle certified.
5	7	0.3814	It is an innovation.
6	1	0.3299	We move towards circularity.
7	280	0.3299	You are credited to buy something.
8	127	0.2990	Collection is produced with organic cotton.
9	164	0.2887	Wear worn.
10	193	0.2680	It is fully recyclable.
11	102	0.2577	Get involved.
12	301	0.2577	It is better for the soil?.
13	124	0.2371	Sustainability is essential.
14	237	0.2371	It is circularity.
15	26	0.2371	We produce garments that are built to last.
16	136	0.2371	We use renewable energy.
17	122	0.2165	We believe in circular fashion.
18	188	0.2165	Our partnerships are focused on climate.
19	90	0.2165	When you no longer need it, trade in.
20	207	0.2062	We can buy less.
21	74	0.2062	Pass it on to someone who will use it.
22	285	0.2062	Safe dyes and chemicals are used.
23	154	0.1959	We design for circularity.
24	144	0.1959	We reduce our fiber impact.
25	177	0.1856	We want every material can be safely reused.
26	18	0.1856	Wear it.

27 63 0.1753 We adopt new practices including reducing carbon emissions.

28 240 0.1649 It is a process to move towards a sustainable future.

29 334 0.1649 It is my cloth.

30 245 0.1546 The materials we use matter.

31 229 0.1546 We believe in quality of life.

32 54 0.1546 We make your clothes.

33 218 0.1546 It is fashion revolution.

34 98 0.1546 We are saving our home planet.

35 197 0.1546 Clothes are made to gather memories.

36 320 0.1546 Care for it.

37 317 0.1546 The issue is social fairness.

38 305 0.1546 Worker wellbeing positively impacts the supply chain workers.

39 151 0.1546 We never stop innovating.

40 283 0.1546 It is an act of healing the labor for a broader change.

41 58 0.1443 Our production is in Europe.

42 92 0.1443 Experts offer free repair.

43 319 0.1443 Repair it.

44 315 0.1443 Pieces are made in socially responsible factories.

45 299 0.1443 Worker wellbeing is being prioritized and improved.

46 60 0.1340 We make sustainable clothes.

47 311 0.1340 The future is circular.

48 304 0.1340 The main ingredient in our clothing is fossil fuels.

49 143 0.1340 We are finding ways to use less water.

50 141 0.1340 We are restoring our resources.

51 267 0.1340 Core materials are sustainably sourced.

52 254 0.1237 It is our consumption commitment.

53 59 0.1237 Feel green.

54 228 0.1237 Recycling is really important.

55	162	0.1237	It eliminates the concept of waste.
56	39	0.1237	It is upcycled post consumer waste.
57	36	0.1237	Our goal is to source all of the materials more sustainably.
58	282	0.1237	Find purpose.
59	211	0.1134	Wear your garment until the end.
60	101	0.1134	Find community.
61	100	0.1134	Protect the mother earth.
62	191	0.1134	We can make a big impact.
63	181	0.1134	We are producing in local factories.
64	159	0.1134	Clothes are made to gather stories.
65	158	0.1134	We limit use of the most essential resources in the production process.
66	313	0.1134	It should be accessible to all.
67	312	0.1134	It is product circularity.
68	318	0.1134	Buy used or new.
69	152	0.1134	We are improving cotton cultivation.
70	147	0.1134	We help factories become more energy efficient.
71	140	0.1134	Organic cotton uses less water than conventional cotton.
72	130	0.1134	Cradletocradle certified pieces are bought to the market.
73	246	0.1031	Our partnerships are focused on supporting local communities.
74	224	0.1031	Waste less.
75	111	0.1031	A technology transforms textile waste into a new material.
76	49	0.1031	It is world environment day.
77	93	0.1031	Extend the life of garment by repairing.
78	85	0.1031	We have a debt to pay back to the environment.
79	310	0.1031	The products are assessed according to the sustainability issues.
80	306	0.1031	We protect our water quality.
81	294	0.1031	It is better for farmers.

82 287 0.1031 Organic cotton does not use synthetic pesticides.

83 279 0.1031 Organic cotton saves CO2.?

84 67 0.1031 It is our climate commitment.

85 269 0.1031 Organic cotton saves energy.

86 266 0.1031 Clothing waste is transformed into fabric.

87 260 0.1031 There is so much waste that we can leverage.

88 251 0.0928 We adopt new industry practices including reducing waste.

89 113 0.0928 It is made with recycled materials.

90 206 0.0928 Keep it minimal.

91 194 0.0928 Update old pieces to create new ones.

92 316 0.0928 A best thing we can do for the planet is reduce overall consumption.

93 187 0.0928 We are taking steps to more sustainable production.

94 45 0.0928 Cradletocradle Certified is sustainably produced.

95 86 0.0928 It is made with natural dyes.

96 166 0.0928 Support grassroots organizations and foundations.

97 80 0.0928 Collection is vintage.

98 309 0.0928 Suppliers are closely being worked with for a broader change.

99 300 0.0928 We source more sustainable cotton.

100 33 0.0928 We limit our environmental impact.

101 30 0.0825 Wear longer.

102 156 0.0825 We take step towards purposeful consumption.

103 116 0.0825 Circularity is to extend the life of products.

104 233 0.0825 Most of the clothing material is plastic.

105 221 0.0825 We’re seeking sustainable fiber innovations.

106 219 0.0825 The fiber is obtained in line with the product policy.

107 104 0.0825 When we repair, we can find joy in the stuff we already own.

108 50 0.0825 We want our customers to make sustainable choices.

109 199 0.0825 We’re hosting workshops to show you how to repair.

110 42 0.0825 It is second hand.

111 339 0.0825 If we don't rain in oil and gas, what's at stake is the future of humanity.

112 338 0.0825 It's a win for mother earth.

113 314 0.0825 A best thing for the planet is keep stuff in use longer.

114 302 0.0825 We're designing for circularity.

115 298 0.0825 We want our materials to live a long life and a future.

116 293 0.0825 Our factory base is A/B rated.

117 71 0.0825 We make better clothes.

118 253 0.0722 We focus on programs and partnerships.

119 250 0.0722 Most of our cotton come from sustainable sources.

120 248 0.0722 We sort your garment when you no longer need it.

121 29 0.0722 It is a clothing to go the distance.

122 235 0.0722 Keep clothes in play as long as possible.

123 227 0.0722 Bring your clothes back to shops.

124 6 0.0722 A technology dissolves cotton cellulose from textile waste.

125 336 0.0722 NGO insights guide the creation of circular economy guidelines.

126 200 0.0722 Take action.

127 23 0.0722 Throw in your discarded clothes.

128 47 0.0722 Circular economy is a big opportunity for the sustainable fashion industry.

129 337 0.0722 This end-of-season collection is reworked before being marked down in value.

130 81 0.0722 We are building a sustainable future.

131 322 0.0722 Discover the cherish waste collection.

132 40 0.0722 We make the fashion industry more circular.

133 295 0.0722 We explore the possibilities presented by innovations.

134 288 0.0722 Each time the clothing is reused, waste accumulated will be reduced.

135 252 0.0619 We update operations for efficiency.

136 125 0.0619 Reworking the unique fabric takes effort and time.

137 61 0.0619 We are taking wear forever to a whole new level.

138 3 0.0619 It's a durable piece.

139 307 0.0619 It is the same quality product at a lower cost.

140 55 0.0619 In conversion cotton is grown in the transition from conventional to certified organic cotton.

141 308 0.0619 Make fibers that will get woven into the garment.

142 176 0.0619 The iconic parts are removed for recycling.

143 333 0.0619 The foundation works with institutions to mobilize solutions.

144 330 0.0619 Receive the gift card.

145 284 0.0619 Make room.

146 19 0.0619 They are innovative programs.

147 296 0.0619 Our goal is to reach all the communities.

148 286 0.0619 This collection is sourced from textile associations.

149 292 0.0619 It is an act of healing the resources that make the garment.

150 35 0.0619 We take your garment back when you no longer need it.

151 275 0.0619 Sorter insights guide the creation of circular economy guidelines.

152 128 0.0619 It is thrift shop.

153 256 0.0619 It gives a spirit that's a piece that's full of repairs.

154 28 0.0515 It's a timeless piece.

155 281 0.0515 It has a spirit.

156 192 0.0515 Our cotton came from sustainable sources.

157 335 0.0515 A small closet keeps on track with the self-imposed clothing contract.

158 10 0.0515 This partnership represents an advancement in recycling.

159 165 0.0515 Become a volunteer.

160 291 0.0515 Uncovered actions that businesses can take on a government level to change the planet.

161 145 0.0515 We're reducing our shipping carbon footprint through process adaptations.

162 303 0.0515 The naked plastic product looks like a pellet.

163 277 0.0515 Less than one percent of the world's cotton is organic.

164 276 0.0515 No other fabric ages as well as denim.

165 272 0.0515 A little stitch goes a long way.

166 271 0.0515 We offer a special product while supplies last.

167 270 0.0515 It is sustainably made.

168 268 0.0515 Each piece is graded by hand.

169 265 0.0515 The new material is made from pulp.

170 263 0.0515 Collector insights guide the creation of circular economy guidelines.

171 262 0.0515 The foundation works with policymakers to mobilize solutions.

172 255 0.0412 Turn a very low value item into a durable good that could last.

173 249 0.0412 Our biodiversity plan has key initiatives.

174 247 0.0412 There are many garments most of which end up in landfill.

175 123 0.0412 We set ambitious sustainability targets.

176 321 0.0412 It is a new cotton project.

177 243 0.0412 We search for processes to limit our impact.

178 239 0.0412 Manufacturing insights guide the creation of circular economy guidelines.

179 238 0.0412 The foundation works with academia to mobilize solutions.

180 117 0.0412 Welcome every stage of life.

181 214 0.0412 We become more sustainable with better processes and products.

182 38 0.0412 Uncovered actions that businesses can take on a corporate level to change the planet.

183 103 0.0412 Our garment is made from recycled polyester.

184 51 0.0412 An organization works to source organically.

185 203 0.0412 We recycle discarded fishing nets.

186 196 0.0412 We strive towards a sustainable future.

187 190 0.0412 It means buying more conscious when it comes to quality.

188 91 0.0412 Out with the old and in with the new.

189 43 0.0412 Cradletocradle? certified products are a key part of our product catalogue.

190 148 0.0412 We host workshops for our upcycled collection.

191 297 0.0412 Ethylene is the primary material for most plastics.

192 273 0.0412 Big opportunity was for collecting for this noble polymer.

193 138 0.0412 Feel good in the second hand.

194 160 0.0412 Our tailor shops customize your old favorites.

195 289 0.0412 Buying used is always the best for the planet.

196 137 0.0412 We produce in our factory.

197 261 0.0412 When garments get old, wear while gardening, hiking and surfing.

198 259 0.0412 Make the world a better place.

199 258 0.0412 Our life is directly tied to how we treat to the land.

200 232 0.0309 Our partners repurpose nets into new materials.

201 244 0.0309 We give an used textile a new life.

202 241 0.0309 The remains of components are separated.

203 155 0.0309 Learn more about our sustainability initiatives.

204 132 0.0309 Our partners train farmers in organic practices.

205 231 0.0309 Our activism is inherent in who we are.

206 168 0.0309 Our partner collects discarded fishing nets for recycling.

207 226 0.0309 An organization works with artisans from underserved communities.

208 225 0.0309 It feels good to do good.

209 223 0.0309 When it is made to last, we consume less.

210 222 0.0309 Our sustainability begins as an active resourcefulness.

211 220 0.0309 Our partners link farmers with fair-paying market partners for their products.

212 216 0.0309 Organic cotton is more sustainable.

213 331 0.0309 It is a new step in social responsibility.

214 108 0.0309 Collection is designed with its whole life cycle and future.

215 236 0.0309 Every piece of clothing has a purpose.

216 215 0.0309 We want to be better for our environment.

217 213 0.0309 Collection is eco-friendly.

218 118 0.0309 The end of your clothes doesn’t mean the end.

219 217 0.0309 Pass knowledge to serve new farmers.?

220 24 0.0309 Expand the lifecycle of your clothes.

221 230 0.0309 It’s easier to find the retro garment on the wish list.

222 323 0.0309 There's no limit what garments can do.

223 264 0.0309 The aim is to manufacture garments with the high standards.

224 290 0.0309 Plastic comes from oil and gas.

225 31 0.0309 Collection is with a lifetime warranty.

226 329 0.0309 Rewear the favourite clothes.

227 209 0.0309 Retail insights guide the creation of circular economy guidelines.

228 332 0.0309 Our industry can learn how to make sustainable choices.

229 34 0.0309 Shop second hand.

230 208 0.0309 The foundation works with businesses to mobilize solutions.

231 274 0.0309 Uncovered actions that businesses can take on an individual level to change the planet.

232 73 0.0309 It’s important to create consciously.

233 278 0.0309 Core materials are cotton, polyester, and man-made cellulosics.

234 27 0.0206 We throw away our clothes.

235 328 0.0206 Four seasons became the inspiration for the project.

236 169 0.0206 Most synthetic clothing create the plastic based fibers we wear.

237 204 0.0206 Majority of our clothes come at the cost of pollution.

238 205 0.0206 We have time to do things rather than endless loads of laundry.

239 129 0.0206 Earth is the foundation of sustainable items offering longevity and recyclability.

240 210 0.0206 The fibres are decoloured.

241 234 0.0206 Gas and oil industry threatens the clothing industry.

242 201 0.0206 Do something about the environment.

243 202 0.0206 Empower a new generation of artisans.

244 195 0.0206 Second hand gives new life to old garment.

245 186 0.0206 The focus point is animal welfare.

246 185 0.0206 Our partners train farmers in organic practices.

247 183 0.0206 Energy is the foundation of sustainable items offering longevity and recyclability.

248 180 0.0206 It is the responsible initiative of recycled cotton.

249 89 0.0206 Clothes are worn for generations.

250 184 0.0206 Organic cotton feel good on your skin.

251 175 0.0206 The aim is to create garments with the finest materials.

252 174 0.0206 Brand insights guide the creation of circular economy guidelines.

253 173 0.0206 The Foundation accelerates the transition to a circular economy.

254 171 0.0206 Majority of clothes come at the cost of slave labor.

255 53 0.0206 Being transparent with the stakeholders is our core value.

256 163 0.0206 Get involved grassroots groups to meet the climate crisis.

257 37 0.0206 We share our sustainability report.?

258 189 0.0206 Cotton is our most used material.

259 9 0.0206 It is made from recycled carbon emissions.

260 179 0.0206 Think responsible.

261 178 0.0206 We understand the sustainability challenges of the fashion industry.

262 257 0.0206 Find events in your area.

263 65 0.0206 We introduce the give better guide.

264 120 0.0103 Help people that live on planet.

265 153 0.0103 Explore the passion for circular fashion through upcycled designs.

266 324 0.0103 Buy clothes built to last.

267 62 0.0103 Sustainability is with our bio cotton clothes.

268 242 0.0103 It is used in polyester yarn.

269 57 0.0103 You don't have to choose between style and sustainability.

270 135 0.0103 Garments are made from European linen.

271 146 0.0103 They’re made to last.

272 109 0.0103 Academic insights guide the creation of circular economy guidelines.

273 150 0.0103 Hopes and aspirations become wearable realities.

274 161 0.0103 It is built better today.

275 133 0.0103 Worker is in the finishing department.

276 76 0.0103 We've curated our most sustainable collection.

277 149 0.0103 The fashion industry plays a part in climate crisis.

278 99 0.0103 Our collaboration makes each piece unique.

279 327 0.0103 Our garments are fair trade certified sewn.

280 325 0.0103 Combining conscious approach with classic elements is the way to reimagine.

281 52 0.0103 Workers are in the process of making clothes.

282 139 0.0103 There are many steps to use organic cotton and less water.

283 32 0.0103 Reduce the fashion footprint.

284 112 0.0103 Capturing carbon emissions limits the use and direct release of fossil resources.

285 167 0.0103 During the era of activism, the traditional fabric became a tool of protest.

286 170 0.0103 Fossil fuels used to make clothing accelerate the environmental crisis.

287 134 0.0103 Farmers are nurturing the plants.

288 157 0.0103 These natural dyes are made with plants.

289 198 0.0103 Clean out the closet.

290 326 0.0103 Consciously chosen materials boost the good vibes.

291 110 0.0103 It is a platform to develop new materials and technologies.

292 131 0.0103 There is a difference between organic and conventional cotton.

293 142 0.0103 Wear often.

294 4 0.0103 Sustainability Innovation Hub supports partners to scaleup their initiatives.

295 56 0.0103 Wardrobe choice is sustainable.

296 41 0.0103 Comfort is with our bio cotton clothes.

297 172 0.0103 The pandemic presents an opportunity to connect with subjects.

298 121 0.0103 We define more sustainable materials.

299 119 0.0103 It is mindfully made.

300 11 0.0103 It is an innovative solution to turn materials into a textile fiber.

301 114 0.0103 It is a bio material made by microorganisms.

302 115 0.0103 Make it last.

303 5 0.0000 The used garments are recovered.

304 48 0.0000 Vintage is trendy.

305 66 0.0000 They are crafted of cottonized hemp.

306 77 0.0000 We are working to change consumption habits.

307 21 0.0000 Transparency is a key in designs.

308 2 0.0000 Redesign is a project by the foundation.

309 83 0.0000 It's earth day.

310 105 0.0000 The clothing industry has a plastic problem.

311 78 0.0000 Approach the fashion industry with a different lens.

312 68 0.0000 Wash less.

313 84 0.0000 Botanical dyes are used.

314 69 0.0000 We are aware of the dark side of fashion.

315 12 0.0000 Sustainability Innovation Hub makes our products more sustainable.

316 95 0.0000 It looks as good as it did decades ago.

317 8 0.0000 A technology enables the conversion of carbon from waste.

318 97 0.0000 It is built to reduce harm.

319 44 0.0000 Water is the foundation of sustainable items offering longevity and recyclability.

320 64 0.0000 Utilize love of nature with creations of sustainability and circularity.

321 87 0.0000 It’s world water day.

322 13 0.0000 Wear recycled fibres.

323 94 0.0000 We give employees some paid time off.

324 82 0.0000 Be always upfront about social issues.

325 14 0.0000 Old garments are on someone else.

326 107 0.0000 Smaller spaces help consuming less.

327 88 0.0000 Direct a short film for second hand.

328 25 0.0000 The designer invents new material by using waste.

329 96 0.0000 Trends don’t last a lifetime.

330 20 0.0000 Waste is the starting point for art piece.

331 79 0.0000 Collection is inspired by mother nature.

332 106 0.0000 Plastics are essential for durable clothing.

333 22 0.0000 Each clothing is made in the sustainable CradletoCradle Certified? fabric.

334 15 0.0000 Experts are bringing new life to old garments.

335 46 0.0000 Circular fashion looks so good.

336 16 0.0000 Share it.

337 72 0.0000 Better starts with how they’re made.

338 17 0.0000 They are made from air carbon.

339 70 0.0000 Vintage collection is made using upcycled.

Sum (all values): 24.7732

Output Degree Centralization

Rank	Vertex	Value	Id
1	126	1.0000	Fashion industry needs to change.
2	75	0.9623	We believe in buying better and wearing longer.
3	40	0.7547	We make the fashion industry more circular.
4	212	0.6981	It is responsibility.
5	26	0.6792	We produce garments that are built to last.
6	35	0.6415	We take your garment back when you no longer need it.
7	127	0.5849	Collection is produced with organic cotton.
8	1	0.5472	We move towards circularity.
9	67	0.5472	It is our climate commitment.
10	162	0.4717	It eliminates the concept of waste.
11	63	0.4528	We adopt new practices including reducing carbon emissions.

12 50 0.4528 We want our customers to make sustainable choices.

13 36 0.4528 Our goal is to source all of the materials more sustainably.

14 116 0.4340 Circularity is to extend the life of products.

15 108 0.3962 Collection is designed with its whole life cycle and future.

16 99 0.3962 Our collaboration makes each piece unique.

17 77 0.3962 We are working to change consumption habits.

18 124 0.3774 Sustainability is essential.

19 237 0.3774 It is circularity.

20 37 0.3774 We share our sustainability report.?

21 248 0.3585 We sort your garment when you no longer need it.

22 207 0.3585 We can buy less.

23 196 0.3585 We strive towards a sustainable future.

24 164 0.3585 Wear worn.

25 18 0.3585 Wear it.

26 58 0.3396 Our production is in Europe.

27 188 0.3396 Our partnerships are focused on climate.

28 39 0.3396 It is upcycled post consumer waste.

29 76 0.3396 We've curated our most sustainable collection.

30 47 0.3208 Circular economy is a big opportunity for the sustainable fashion industry.

31 61 0.3019 We are taking wear forever to a whole new level.

32 193 0.3019 It is fully recyclable.

33 182 0.3019 It is cradletocradle certified.

34 86 0.3019 It is made with natural dyes.

35 151 0.3019 We never stop innovating.

36 228 0.2830 Recycling is really important.

37 23 0.2830 Throw in your discarded clothes.

38 85 0.2830 We have a debt to pay back to the environment.

39 33 0.2830 We limit our environmental impact.

40 107 0.2642 Smaller spaces help consuming less.

41 105 0.2642 The clothing industry has a plastic problem.
42 45 0.2642 Cradletocradle Certified is sustainably produced.
43 289 0.2642 Buying used is always the best for the planet.
44 280 0.2642 You are credited to buy something.
45 244 0.2453 We give an used textile a new life.
46 28 0.2453 It's a timeless piece.
47 227 0.2453 Bring your clothes back to shops.
48 53 0.2453 Being transparent with the stakeholders is our core value.
49 90 0.2453 When you no longer need it, trade in.
50 172 0.2453 The pandemic presents an opportunity to connect with subjects.
51 83 0.2453 It's earth day.
52 122 0.2264 We believe in circular fashion.
53 60 0.2264 We make sustainable clothes.
54 59 0.2264 Feel green.
55 225 0.2264 It feels good to do good.
56 100 0.2264 Protect the mother earth.
57 24 0.2264 Expand the lifecycle of your clothes.
58 81 0.2264 We are building a sustainable future.
59 307 0.2264 It is the same quality product at a lower cost.
60 301 0.2264 It is better for the soil?.
61 141 0.2264 We are restoring our resources.
62 136 0.2264 We use renewable energy.
63 245 0.2075 The materials we use matter.
64 55 0.2075 In conversion cotton is grown in the transition from conventional to certified organic cotton.
65 51 0.2075 An organization works to source organically.
66 98 0.2075 We are saving our home planet.
67 176 0.2075 The iconic parts are removed for recycling.
68 5 0.2075 The used garments are recovered.
69 314 0.2075 A best thing for the planet is keep stuff in use longer.

70 38 0.2075 Uncovered actions that businesses can take on a corporate level to change the planet.

71 74 0.2075 Pass it on to someone who will use it.

72 144 0.2075 We reduce our fiber impact.

73 140 0.2075 Organic cotton uses less water than conventional cotton.

74 138 0.2075 Feel good in the second hand.

75 3 0.1887 It's a durable piece.

76 219 0.1887 The fiber is obtained in line with the product policy.

77 49 0.1887 It is world environment day.

78 92 0.1887 Experts offer free repair.

79 316 0.1887 A best thing we can do for the planet is reduce overall consumption.

80 159 0.1887 Clothes are made to gather stories.

81 158 0.1887 We limit use of the most essential resources in the production process.

82 156 0.1887 We take step towards purposeful consumption.

83 310 0.1887 The products are assessed according to the sustainability issues.

84 147 0.1887 We help factories become more energy efficient.

85 143 0.1887 We are finding ways to use less water.

86 137 0.1887 We produce in our factory.

87 131 0.1887 There is a difference between organic and conventional cotton.

88 130 0.1887 Cradletocradle certified pieces are bought to the market.

89 210 0.1698 The fibres are decoloured.

90 184 0.1698 Organic cotton feel good on your skin.

91 177 0.1698 We want every material can be safely reused.

92 163 0.1698 Get involved in grassroots groups to meet the climate crisis.

93 312 0.1698 It is product circularity.

94 154 0.1698 We design for circularity.

95 299 0.1698 Worker wellbeing is being prioritized and improved.

96 267 0.1698 Core materials are sustainably sourced.

97 254 0.1509 It is our consumption commitment.

98 125 0.1509 Reworking the unique fabric takes effort and time.

99 251 0.1509 We adopt new industry practices including reducing waste.

100 30 0.1509 Wear longer.

101 241 0.1509 The remains of components are separated.

102 224 0.1509 Waste less.

103 216 0.1509 Organic cotton is more sustainable.

104 106 0.1509 Plastics are essential for durable clothing.

105 104 0.1509 When we repair, we can find joy in the stuff we already own.

106 200 0.1509 Take action.

107 199 0.1509 We're hosting workshops to show you how to repair.

108 166 0.1509 Support grassroots organizations and foundations.

109 10 0.1509 This partnership represents an advancement in recycling.

110 318 0.1509 Buy used or new.

111 152 0.1509 We are improving cotton cultivation.

112 298 0.1509 We want our materials to live a long life and a future.

113 149 0.1509 The fashion industry plays a part in climate crisis.

114 71 0.1509 We make better clothes.

115 69 0.1509 We are aware of the dark side of fashion.

116 287 0.1321 Organic cotton does not use synthetic pesticides.

117 249 0.1321 Our biodiversity plan has key initiatives.

118 233 0.1321 Most of the clothing material is plastic.

119 265 0.1321 The new material is made from pulp.

120 96 0.1321 Trends don't last a lifetime.

121 95 0.1321 It looks as good as it did decades ago.

122 93 0.1321 Extend the life of garment by repairing.

123 43 0.1321 Cradletocradle? certified products are a key part of our product catalogue.

124 170 0.1321 Fossil fuels used to make clothing accelerate the environmental crisis.

125 165 0.1321 Become a volunteer.

126 148 0.1321 We host workshops for our upcycled collection.

127 294 0.1321 It is better for farmers.

128 279 0.1321 Organic cotton saves CO2.?

129 269 0.1321 Organic cotton saves energy.

130 2 0.1321 Redesign is a project by the foundation.

131 132 0.1321 Our partners train farmers in organic practices.

132 7 0.1132 It is an innovation.

133 123 0.1132 We set ambitious sustainability targets.

134 246 0.1132 Our partnerships are focused on supporting local communities.

135 121 0.1132 We define more sustainable materials.

136 234 0.1132 Gas and oil industry threatens the clothing industry.

137 232 0.1132 Our partners repurpose nets into new materials.

138 221 0.1132 We’re seeking sustainable fiber innovations.

139 109 0.1132 Academic insights guide the creation of circular economy guidelines.

140 319 0.1132 Repair it.

141 103 0.1132 Our garment is made from recycled polyester.

142 102 0.1132 Get involved.

143 204 0.1132 Majority of our clothes come at the cost of pollution.

144 101 0.1132 Find community.

145 203 0.1132 We recycle discarded fishing nets.

146 278 0.1132 Core materials are cotton, polyester, and man-made cellulosics.

147 48 0.1132 Vintage is trendy.

148 189 0.1132 Cotton is our most used material.

149 171 0.1132 Majority of clothes come at the cost of slave labor.

150 169 0.1132 Most synthetic clothing create the plastic based fibers we wear.

151 168 0.1132 Our partner collects discarded fishing nets for recycling.

152 80 0.1132 Collection is vintage.

153 161 0.1132 It is built better today.

154 306 0.1132 We protect our water quality.

155 134 0.1132 Farmers are nurturing the plants.

156 253 0.0943 We focus on programs and partnerships.

157 118 0.0943 The end of your clothes doesn’t mean the end.

158 117 0.0943 Welcome every stage of life.

159 57 0.0943 You don't have to choose between style and sustainability.

160 229 0.0943 We believe in quality of life.

161 226 0.0943 An organization works with artisans from underserved communities.

162 111 0.0943 A technology transforms textile waste into a new material.

163 211 0.0943 Wear your garment until the end.

164 52 0.0943 Workers are in the process of making clothes.

165 206 0.0943 Keep it minimal.

166 191 0.0943 We can make a big impact.

167 11 0.0943 It is an innovative solution to turn materials into a textile fiber.

168 186 0.0943 The focus point is animal welfare.

169 185 0.0943 Our partners train farmers in organic practices.

170 179 0.0943 Think responsible.

171 44 0.0943 Water is the foundation of sustainable items offering longevity and recyclability.

172 19 0.0943 They are innovative programs.

173 174 0.0943 Brand insights guide the creation of circular economy guidelines.

174 320 0.0943 Care for it.

175 317 0.0943 The issue is social fairness.

176 285 0.0943 Safe dyes and chemicals are used.

177 277 0.0943 Less than one percent of the world's cotton is organic.

178 274 0.0943 Uncovered actions that businesses can take on an individual level to change the planet.

179 266 0.0943 Clothing waste is transformed into fabric.

180 256 0.0943 It gives a spirit that's a piece that's full of repairs.

181 252 0.0755 We update operations for efficiency.

182 250 0.0755 Most of our cotton come from sustainable sources.

183 295 0.0755 We explore the possibilities presented by innovations.

184 12 0.0755 Sustainability Innovation Hub makes our products more sustainable.

185 236 0.0755 Every piece of clothing has a purpose.

186 113 0.0755 It is made with recycled materials.

187 220 0.0755 Our partners link farmers with fair-paying market partners for their products.

188 27 0.0755 We throw away our clothes.

189 217 0.0755 Pass knowledge to serve new farmers.?

190 6 0.0755 A technology dissolves cotton cellulose from textile waste.

191 209 0.0755 Retail insights guide the creation of circular economy guidelines.

192 178 0.0755 We understand the sustainability challenges of the fashion industry.

193 201 0.0755 Do something about the environment.

194 97 0.0755 It is built to reduce harm.

195 56 0.0755 Wardrobe choice is sustainable.

196 133 0.0755 Worker is in the finishing department.

197 187 0.0755 We are taking steps to more sustainable production.

198 46 0.0755 Circular fashion looks so good.

199 91 0.0755 Out with the old and in with the new.

200 181 0.0755 We are producing in local factories.

201 89 0.0755 Clothes are worn for generations.

202 311 0.0755 The future is circular.

203 173 0.0755 The Foundation accelerates the transition to a circular economy.

204 31 0.0755 Collection is with a lifetime warranty.

205 54 0.0755 We make your clothes.

206 4 0.0755 Sustainability Innovation Hub supports partners to scaleup their initiatives.

207 145 0.0755 We're reducing our shipping carbon footprint through process adaptations.

208 290 0.0755 Plastic comes from oil and gas.

209 281 0.0755 It has a spirit.

210 247 0.0755 There are many garments most of which end up in landfill.

211 34 0.0755 Shop second hand.

212 273 0.0755 Big opportunity was for collecting for this noble polymer.

213 260 0.0755 There is so much waste that we can leverage.

214 129 0.0755 Earth is the foundation of sustainable items offering longevity and recyclability.

215 257 0.0755 Find events in your area.

216 208 0.0566 The foundation works with businesses to mobilize solutions.

217 62 0.0566 Sustainability is with our bio cotton clothes.

218 120 0.0566 Help people that live on planet.

219 239 0.0566 Manufacturing insights guide the creation of circular economy guidelines.

220 29 0.0566 It is a clothing to go the distance.

221 231 0.0566 Our activism is inherent in who we are.

222 110 0.0566 It is a platform to develop new materials and technologies.

223 218 0.0566 It is fashion revolution.

224 214 0.0566 We become more sustainable with better processes and products.

225 73 0.0566 It’s important to create consciously.

226 198 0.0566 Clean out the closet.

227 160 0.0566 Our tailor shops customize your old favorites.

228 194 0.0566 Update old pieces to create new ones.

229 192 0.0566 Our cotton came from sustainable sources.

230 190 0.0566 It means buying more conscious when it comes to quality.

231 183 0.0566 Energy is the foundation of sustainable items offering longevity and recyclability.

232 72 0.0566 Better starts with how they’re made.

233 42 0.0566 It is second hand.

234 41 0.0566 Comfort is with our bio cotton clothes.

235 291 0.0566 Uncovered actions that businesses can take on a government level to change the planet.

236 297 0.0566 Ethylene is the primary material for most plastics.

237 305 0.0566 Worker wellbeing positively impacts the supply chain workers.

238 272 0.0566 A little stitch goes a long way.

239 283 0.0566 It is an act of healing the labor for a broader change.

240 8 0.0566 A technology enables the conversion of carbon from waste.

241 271 0.0566 We offer a special product while supplies last.

242 255 0.0566 Turn a very low value item into a durable good that could last.

243 32 0.0566 Reduce the fashion footprint.

244 242 0.0377 It is used in polyester yarn.

245 68 0.0377 Wash less.

246 243 0.0377 We search for processes to limit our impact.
247 66 0.0377 They are crafted of cottonized hemp.
248 302 0.0377 We're designing for circularity.
249 238 0.0377 The foundation works with academia to mobilize solutions.
250 259 0.0377 Make the world a better place.
251 180 0.0377 It is the responsible initiative of recycled cotton.
252 213 0.0377 Collection is eco-friendly.
253 119 0.0377 It is mindfully made.
254 25 0.0377 The designer invents new material by using waste.
255 150 0.0377 Hopes and aspirations become wearable realities.
256 197 0.0377 Clothes are made to gather memories.
257 146 0.0377 They’re made to last.
258 263 0.0377 Collector insights guide the creation of circular economy guidelines.
259 84 0.0377 Botanical dyes are used.
260 87 0.0377 It’s world water day.
261 235 0.0377 Keep clothes in play as long as possible.
262 292 0.0377 It is an act of healing the resources that make the garment.
263 167 0.0377 During the era of activism, the traditional fabric became a tool of protest.
264 14 0.0377 Old garments are on someone else.
265 268 0.0377 Each piece is graded by hand.
266 315 0.0377 Pieces are made in socially responsible factories.
267 20 0.0377 Waste is the starting point for art piece.
268 17 0.0377 They are made from air carbon.
269 15 0.0377 Experts are bringing new life to old garments.
270 9 0.0377 It is made from recycled carbon emissions.
271 303 0.0377 The naked plastic product looks like a pellet.
272 258 0.0377 Our life is directly tied to how we treat to the land.
273 215 0.0377 We want to be better for our environment.

274 16 0.0377 Share it.

275 65 0.0377 We introduce the give better guide.

276 142 0.0189 Wear often.

277 286 0.0189 This collection is sourced from textile associations.

278 308 0.0189 Make fibers that will get woven into the garment.

279 135 0.0189 Garments are made from European linen.

280 79 0.0189 Collection is inspired by mother nature.

281 88 0.0189 Direct a short film for second hand.

282 78 0.0189 Approach the fashion industry with a different lens.

283 70 0.0189 Vintage collection is made using upcycled.

284 205 0.0189 We have time to do things rather than endless loads of laundry.

285 288 0.0189 Each time the clothing is reused, waste accumulated will be reduced.

286 112 0.0189 Capturing carbon emissions limits the use and direct release of fossil resources.

287 309 0.0189 Suppliers are closely being worked with for a broader change.

288 262 0.0189 The foundation works with policymakers to mobilize solutions.

289 223 0.0189 When it is made to last, we consume less.

290 275 0.0189 Sorter insights guide the creation of circular economy guidelines.

291 313 0.0189 It should be accessible to all.

292 202 0.0189 Empower a new generation of artisans.

293 115 0.0189 Make it last.

294 13 0.0189 Wear recycled fibres.

295 270 0.0189 It is sustainably made.

296 21 0.0189 Transparency is a key in designs.

297 175 0.0189 The aim is to create garments with the finest materials.

298 282 0.0189 Find purpose.

299 114 0.0189 It is a bio material made by microorganisms.

300 230 0.0189 It’s easier to find the retro garment on the wish list.

301 304 0.0189 The main ingredient in our clothing is fossil fuels.

302 240 0.0189 It is a process to move towards a sustainable future.

303 261 0.0189 When garments get old, wear while gardening, hiking and surfing.

304 222 0.0189 Our sustainability begins as an active resourcefulness.

305 284 0.0189 Make room.

306 296 0.0189 Our goal is to reach all the communities.

307 128 0.0189 It is thrift shop.

308 293 0.0189 Our factory base is A/B rated.

309 139 0.0189 There are many steps to use organic cotton and less water.

310 94 0.0189 We give employees some paid time off.

311 276 0.0189 No other fabric ages as well as denim.

312 82 0.0189 Be always upfront about social issues.

313 155 0.0189 Learn more about our sustainability initiatives.

314 332 0.0000 Our industry can learn how to make sustainable choices.

315 331 0.0000 It is a new step in social responsibility.

316 339 0.0000 If we don't rain in oil and gas, what's at stake is the future of humanity.

317 323 0.0000 There's no limit what garments can do.

318 64 0.0000 Utilize love of nature with creations of sustainability and circularity.

319 329 0.0000 Rewear the favourite clothes.

320 22 0.0000 Each clothing is made in the sustainable CradletoCradle Certified? fabric.

321 322 0.0000 Discover the cherish waste collection.

322 328 0.0000 Four seasons became the inspiration for the project.

323 321 0.0000 It is a new cotton project.

324 334 0.0000 It is my cloth.

325 264 0.0000 The aim is to manufacture garments with the high standards.

326 338 0.0000 It's a win for mother earth.

327 300 0.0000 We source more sustainable cotton.

328 157 0.0000 These natural dyes are made with plants.

329 337 0.0000 This end-of-season collection is reworked before being marked down in value.

330 153 0.0000 Explore the passion for circular fashion through upcycled designs.

331 325 0.0000 Combining conscious approach with classic elements is the way to reimagine.

332 195 0.0000 Second hand gives new life to old garment.

333 330 0.0000 Receive the gift card.

334 336 0.0000 NGO insights guide the creation of circular economy guidelines.

335 335 0.0000 A small closet keeps on track with the self-imposed clothing contract.

336 333 0.0000 The foundation works with institutions to mobilize solutions.

337 327 0.0000 Our garments are fair trade certified sewn.

338 326 0.0000 Consciously chosen materials boost the good vibes.

339 324 0.0000 Buy clothes built to last.

Sum (all values): 45.3396

Input Closeness Centrality

Rank	Vertex	Value	Id
1	126	1.0000	Fashion industry needs to change.
2	75	0.9747	We believe in buying better and wearing longer.

3	1	0.9279	We move towards circularity.
4	212	0.8894	It is responsibility.
5	188	0.8668	Our partnerships are focused on climate.
6	7	0.8629	It is an innovation.
7	124	0.8616	Sustainability is essential.
8	127	0.8591	Collection is produced with organic cotton.
9	182	0.8591	It is cradletocradle certified.
10	237	0.8440	It is circularity.
11	193	0.8440	It is fully recyclable.
12	60	0.8367	We make sustainable clothes.
13	240	0.8190	It is a process to move towards a sustainable future.
14	207	0.8132	We can buy less.
15	26	0.8121	We produce garments that are built to last.
16	301	0.8064	It is better for the soil?.
17	122	0.8031	We believe in circular fashion.
18	285	0.8031	Safe dyes and chemicals are used.
19	162	0.7997	It eliminates the concept of waste.
20	154	0.7975	We design for circularity.
21	164	0.7964	Wear worn.
22	317	0.7932	The issue is social fairness.
23	85	0.7910	We have a debt to pay back to the environment.
24	311	0.7910	The future is circular.
25	98	0.7888	We are saving our home planet.
26	63	0.7867	We adopt new practices including reducing carbon emissions.
27	58	0.7835	Our production is in Europe.
28	245	0.7814	The materials we use matter.
29	299	0.7814	Worker wellbeing is being prioritized and improved.
30	181	0.7803	We are producing in local factories.
31	136	0.7803	We use renewable energy.
32	312	0.7772	It is product circularity.
33	254	0.7761	It is our consumption commitment.

34 310 0.7761 The products are assessed according to the sustainability issues.

35 143 0.7761 We are finding ways to use less water.

36 45 0.7751 Cradletocradle Certified is sustainably produced.

37 39 0.7741 It is upcycled post consumer waste.

38 206 0.7730 Keep it minimal.

39 151 0.7720 We never stop innovating.

40 246 0.7710 Our partnerships are focused on supporting local communities.

41 47 0.7710 Circular economy is a big opportunity for the sustainable fashion industry.

42 248 0.7699 We sort your garment when you no longer need it.

43 280 0.7669 You are credited to buy something.

44 224 0.7659 Waste less.

45 102 0.7659 Get involved.

46 158 0.7608 We limit use of the most essential resources in the production process.

47 18 0.7608 Wear it.

48 144 0.7608 We reduce our fiber impact.

49 313 0.7588 It should be accessible to all.

50 187 0.7569 We are taking steps to more sustainable production.

51 59 0.7539 Feel green.

52 305 0.7539 Worker wellbeing positively impacts the supply chain workers.

53 86 0.7510 It is made with natural dyes.

54 140 0.7500 Organic cotton uses less water than conventional cotton.

55 156 0.7490 We take step towards purposeful consumption.

56 302 0.7490 We're designing for circularity.

57 71 0.7461 We make better clothes.

58 141 0.7461 We are restoring our resources.

59 93 0.7452 Extend the life of garment by repairing.

60	80	0.7452	Collection is vintage.
61	267	0.7452	Core materials are sustainably sourced.
62	194	0.7414	Update old pieces to create new ones.
63	42	0.7414	It is second hand.
64	100	0.7395	Protect the mother earth.
65	152	0.7395	We are improving cotton cultivation.
66	306	0.7385	We protect our water quality.
67	113	0.7366	It is made with recycled materials.
68	74	0.7329	Pass it on to someone who will use it.
69	197	0.7311	Clothes are made to gather memories.
70	315	0.7301	Pieces are made in socially responsible factories.
71	229	0.7292	We believe in quality of life.
72	90	0.7292	When you no longer need it, trade in.
73	300	0.7233	We source more sustainable cotton.
74	320	0.7219	Care for it.
75	319	0.7210	Repair it.
76	293	0.7191	Our factory base is A/B rated.
77	125	0.7175	Reworking the unique fabric takes effort and time.
78	49	0.7175	It is world environment day.
79	294	0.7175	It is better for farmers.
80	287	0.7175	Organic cotton does not use synthetic pesticides.
81	279	0.7175	Organic cotton saves CO2.?
82	269	0.7175	Organic cotton saves energy.
83	268	0.7166	Each piece is graded by hand.
84	337	0.7163	This end-of-season collection is reworked before being marked down in value.
85	67	0.7157	It is our climate commitment.
86	128	0.7157	It is thrift shop.
87	191	0.7139	We can make a big impact.
88	286	0.7120	This collection is sourced from textile associations.
89	213	0.7113	Collection is eco-friendly.
90	103	0.7113	Our garment is made from recycled polyester.

91 247 0.7070 There are many garments most of which end up in landfill.

92 147 0.7052 We help factories become more energy efficient.

93 334 0.7052 It is my cloth.

94 283 0.7027 It is an act of healing the labor for a broader change.

95 54 0.7010 We make your clothes.

96 218 0.7010 It is fashion revolution.

97 251 0.6993 We adopt new industry practices including reducing waste.

98 30 0.6976 Wear longer.

99 50 0.6976 We want our customers to make sustainable choices.

100 253 0.6968 We focus on programs and partnerships.

101 116 0.6968 Circularity is to extend the life of products.

102 318 0.6968 Buy used or new.

103 316 0.6934 A best thing we can do for the planet is reduce overall consumption.

104 314 0.6926 A best thing for the planet is keep stuff in use longer.

105 221 0.6901 We’re seeking sustainable fiber innovations.

106 19 0.6901 They are innovative programs.

107 145 0.6901 We're reducing our shipping carbon footprint through process adaptations.

108 250 0.6893 Most of our cotton come from sustainable sources.

109 295 0.6893 We explore the possibilities presented by innovations.

110 81 0.6876 We are building a sustainable future.

111 92 0.6868 Experts offer free repair.

112 252 0.6852 We update operations for efficiency.

113 228 0.6836 Recycling is really important.

114 177 0.6836 We want every material can be safely reused.

115 123 0.6828 We set ambitious sustainability targets.

116 190 0.6812 It means buying more conscious when it comes to quality.

117 36 0.6812 Our goal is to source all of the materials more sustainably.

118 211 0.6788 Wear your garment until the end.

119 222 0.6772 Our sustainability begins as an active resourcefulness.

120 73 0.6772 It’s important to create consciously.

121 192 0.6748 Our cotton came from sustainable sources.

122 35 0.6740 We take your garment back when you no longer need it.

123 29 0.6733 It is a clothing to go the distance.

124 200 0.6686 Take action.

125 108 0.6640 Collection is designed with its whole life cycle and future.

126 309 0.6640 Suppliers are closely being worked with for a broader change.

127 159 0.6632 Clothes are made to gather stories.

128 333 0.6622 The foundation works with institutions to mobilize solutions.

129 249 0.6610 Our biodiversity plan has key initiatives.

130 166 0.6610 Support grassroots organizations and foundations.

131 262 0.6583 The foundation works with policymakers to mobilize solutions.

132 307 0.6572 It is the same quality product at a lower cost.

133 130 0.6572 Cradletocradle certified pieces are bought to the market.

134 238 0.6544 The foundation works with academia to mobilize solutions.

135 235 0.6542 Keep clothes in play as long as possible.

136 208 0.6504 The foundation works with businesses to mobilize solutions.

137 256 0.6498 It gives a spirit that's a piece that's full of repairs.

138 270 0.6491 It is sustainably made.

139 173 0.6465 The Foundation accelerates the transition to a circular economy.

140 40 0.6440 We make the fashion industry more circular.

141 289 0.6419 Buying used is always the best for the planet.

142 266 0.6328 Clothing waste is transformed into fabric.

143 281 0.6314 It has a spirit.

144 282 0.6287 Find purpose.

145 230 0.6280 It’s easier to find the retro garment on the wish list.

146 214 0.6280 We become more sustainable with better processes and products.

147 34 0.6280 Shop second hand.

148 335 0.6277 A small closet keeps on track with the self-imposed clothing contract.

149 101 0.6266 Find community.

150 276 0.6259 No other fabric ages as well as denim.

151 33 0.6259 We limit our environmental impact.

152 61 0.6253 We are taking wear forever to a whole new level.

153 225 0.6253 It feels good to do good.

154 338 0.6242 It's a win for mother earth.

155 111 0.6239 A technology transforms textile waste into a new material.

156 137 0.6206 We produce in our factory.

157 288 0.6204 Each time the clothing is reused, waste accumulated will be reduced.

158 138 0.6186 Feel good in the second hand.

159 330 0.6178 Receive the gift card.

160 298 0.6173 We want our materials to live a long life and a future.

161 196 0.6160 We strive towards a sustainable future.

162 23 0.6160 Throw in your discarded clothes.

163 163 0.6146 Get involved grassroots groups to meet the climate crisis.

164 24 0.6133 Expand the lifecycle of your clothes.

165 53 0.6127 Being transparent with the stakeholders is our core value.

166 55 0.6121 In conversion cotton is grown in the transition from conventional to certified organic cotton.

167 277 0.6108 Less than one percent of the world's cotton is organic.

168 4 0.6108 Sustainability Innovation Hub supports partners to scaleup their initiatives.

169 223 0.6095 When it is made to last, we consume less.

170 227 0.6088 Bring your clothes back to shops.

171 322 0.6085 Discover the cherish waste collection.

172 3 0.6063 It's a durable piece.

173 332 0.6049 Our industry can learn how to make sustainable choices.

174 104 0.6038 When we repair, we can find joy in the stuff we already own.

175 199 0.6038 We’re hosting workshops to show you how to repair.

176 284 0.6012 Make room.

177 272 0.6006 A little stitch goes a long way.

178 165 0.5981 Become a volunteer.

179 139 0.5981 There are many steps to use organic cotton and less water.

180 117 0.5969 Welcome every stage of life.

181 91 0.5896 Out with the old and in with the new.

182 179 0.5884 Think responsible.

183 236 0.5878 Every piece of clothing has a purpose.

184 65 0.5854 We introduce the give better guide.

185 261 0.5837 When garments get old, wear while gardening, hiking and surfing.

186 189 0.5831 Cotton is our most used material.

187 160 0.5802 Our tailor shops customize your old favorites.

188 257 0.5778 Find events in your area.

189 148 0.5767 We host workshops for our upcycled collection.

190 129 0.5755 Earth is the foundation of sustainable items offering longevity and recyclability.

191 324 0.5745 Buy clothes built to last.

192 258 0.5682 Our life is directly tied to how we treat to the land.

193 231 0.5665 Our activism is inherent in who we are.

194 57 0.5660 You don't have to choose between style and sustainability.

195 99 0.5649 Our collaboration makes each piece unique.

196 271 0.5643 We offer a special product while supplies last.

197 51 0.5627 An organization works to source organically.

198 155 0.5624 Learn more about our sustainability initiatives.

199 331 0.5623 It is a new step in social responsibility.

200 28 0.5616 It's a timeless piece.

201 244 0.5610 We give an used textile a new life.

202 226 0.5610 An organization works with artisans from underserved communities.

203 115 0.5607 Make it last.

204 202 0.5588 Empower a new generation of artisans.

205 167 0.5554 During the era of activism, the traditional fabric became a tool of protest.

206 321 0.5520 It is a new cotton project.

207 219 0.5504 The fiber is obtained in line with the product policy.

208 176 0.5452 The iconic parts are removed for recycling.

209 118 0.5432 The end of your clothes doesn’t mean the end.

210 198 0.5406 Clean out the closet.

211 292 0.5381 It is an act of healing the resources that make the garment.

212 255 0.5351 Turn a very low value item into a durable good that could last.

213 216 0.5351 Organic cotton is more sustainable.

214 184 0.5346 Organic cotton feel good on your skin.

215 131 0.5341 There is a difference between organic and conventional cotton.

216 327 0.5335 Our garments are fair trade certified sewn.

217 149 0.5331 The fashion industry plays a part in climate crisis.

218 52 0.5249 Workers are in the process of making clothes.

219 329 0.5235 Rewear the favourite clothes.

220 6 0.5216 A technology dissolves cotton cellulose from textile waste.

221 278 0.5202 Core materials are cotton, polyester, and man-made cellulosics.

222 186 0.5179 The focus point is animal welfare.

223 27 0.5174 We throw away our clothes.

224 259 0.5147 Make the world a better place.

225 37 0.5142 We share our sustainability report.?

226 121 0.5138 We define more sustainable materials.

227 201 0.5138 Do something about the environment.

228 31 0.5106 Collection is with a lifetime warranty.

229 119 0.5097 It is mindfully made.

230 132 0.5022 Our partners train farmers in organic practices.

231 243 0.4857 We search for processes to limit our impact.

232 180 0.4845 It is the responsible initiative of recycled cotton.

233 120 0.4829 Help people that live on planet.

234 220 0.4789 Our partners link farmers with fair-paying market partners for their products.

235 264 0.4767 The aim is to manufacture garments with the high standards.

236 32 0.4754 Reduce the fashion footprint.

237 134 0.4742 Farmers are nurturing the plants.

238 328 0.4737 Four seasons became the inspiration for the project.

239 175 0.4737 The aim is to create garments with the finest materials.

240 110 0.4730 It is a platform to develop new materials and technologies.

241 56 0.4707 Wardrobe choice is sustainable.

242 217 0.4577 Pass knowledge to serve new farmers.?

243 185 0.4563 Our partners train farmers in organic practices.

244 43 0.4555 Cradletocradle? certified products are a key part of our product catalogue.

245 215 0.4541 We want to be better for our environment.

246 183 0.4527 Energy is the foundation of sustainable items offering longevity and recyclability.

247 195 0.4463 Second hand gives new life to old garment.

248 265 0.4380 The new material is made from pulp.

249 241 0.4350 The remains of components are separated.

250 210 0.4337 The fibres are decoloured.

251 133 0.4199 Worker is in the finishing department.

252 76 0.4103 We've curated our most sustainable collection.

253 135 0.3850 Garments are made from European linen.

254 150 0.3438 Hopes and aspirations become wearable realities.

255 304 0.1045 The main ingredient in our clothing is fossil fuels.

256 260 0.0821 There is so much waste that we can leverage.

257 339 0.0784 If we don't rain in oil and gas, what's at stake is the future of humanity.

258 233 0.0672 Most of the clothing material is plastic.

259 308 0.0647 Make fibers that will get woven into the garment.

260 336 0.0597 NGO insights guide the creation of circular economy guidelines.

261 303 0.0580 The naked plastic product looks like a pellet.

262 296 0.0523 Our goal is to reach all the communities.

263 275 0.0523 Sorter insights guide the creation of circular economy guidelines.

264 297 0.0513 Ethylene is the primary material for most plastics.

265 10 0.0448 This partnership represents an advancement in recycling.

266 263 0.0448 Collector insights guide the creation of circular economy guidelines.

267 290 0.0448 Plastic comes from oil and gas.

268 291 0.0448 Uncovered actions that businesses can take on a government level to change the planet.

269 169 0.0384 Most synthetic clothing create the plastic based fibers we wear.

270 38 0.0373 Uncovered actions that businesses can take on a corporate level to change the planet.

271 203 0.0373 We recycle discarded fishing nets.

272 273 0.0373 Big opportunity was for collecting for this noble polymer.

273 239 0.0373 Manufacturing insights guide the creation of circular economy guidelines.

274 178 0.0348 We understand the sustainability challenges of the fashion industry.

275 209 0.0299 Retail insights guide the creation of circular economy guidelines.

276 168 0.0299 Our partner collects discarded fishing nets for recycling.

277 232 0.0299 Our partners repurpose nets into new materials.

278 323 0.0299 There's no limit what garments can do.

279 274 0.0299 Uncovered actions that businesses can take on an individual level to change the planet.

280 11 0.0285 It is an innovative solution to turn materials into a textile fiber.

281 205 0.0224 We have time to do things rather than endless loads of laundry.

282 9 0.0224 It is made from recycled carbon emissions.

283 174 0.0224 Brand insights guide the creation of circular economy guidelines.

284 171 0.0224 Majority of clothes come at the cost of slave labor.

285 89 0.0224 Clothes are worn for generations.

286 234 0.0224 Gas and oil industry threatens the clothing industry.

287 204 0.0224 Majority of our clothes come at the cost of pollution.

288 112 0.0179 Capturing carbon emissions limits the use and direct release of fossil resources.

289 242 0.0149 It is used in polyester yarn.

290 170 0.0149 Fossil fuels used to make clothing accelerate the environmental crisis.

291 109 0.0149 Academic insights guide the creation of circular economy guidelines.

292 62 0.0149 Sustainability is with our bio cotton clothes.

293 157 0.0149 These natural dyes are made with plants.

294 142 0.0149 Wear often.

295 325 0.0149 Combining conscious approach with classic elements is the way to reimagine.

296 146 0.0149 They’re made to last.

297 114 0.0149 It is a bio material made by microorganisms.

298 41 0.0149 Comfort is with our bio cotton clothes.

299 153 0.0149 Explore the passion for circular fashion through upcycled designs.

300 326 0.0149 Consciously chosen materials boost the good vibes.

301 172 0.0149 The pandemic presents an opportunity to connect with subjects.

302 161 0.0149 It is built better today.

303 72 0.0000 Better starts with how they’re made.

304 106 0.0000 Plastics are essential for durable clothing.

305 46 0.0000 Circular fashion looks so good.

306 82 0.0000 Be always upfront about social issues.

307 15 0.0000 Experts are bringing new life to old garments.

308 97 0.0000 It is built to reduce harm.

309 17 0.0000 They are made from air carbon.

310 64 0.0000 Utilize love of nature with creations of sustainability and circularity.

311 20 0.0000 Waste is the starting point for art piece.

312 12 0.0000 Sustainability Innovation Hub makes our products more sustainable.

313 84 0.0000 Botanical dyes are used.

314 83 0.0000 It's earth day.

315 78 0.0000 Approach the fashion industry with a different lens.

316 14 0.0000 Old garments are on someone else.

317 94 0.0000 We give employees some paid time off.

318 66 0.0000 They are crafted of cottonized hemp.

319 77 0.0000 We are working to change consumption habits.

320 107 0.0000 Smaller spaces help consuming less.

321 105 0.0000 The clothing industry has a plastic problem.

322 5 0.0000 The used garments are recovered.

323 79 0.0000 Collection is inspired by mother nature.

324 95 0.0000 It looks as good as it did decades ago.

325 25 0.0000 The designer invents new material by using waste.

326 21 0.0000 Transparency is a key in designs.

327 68 0.0000 Wash less.

328 16 0.0000 Share it.

329 87 0.0000 It’s world water day.

330 96 0.0000 Trends don’t last a lifetime.

331 13 0.0000 Wear recycled fibres.

332 44 0.0000 Water is the foundation of sustainable items offering longevity and recyclability.

333 2 0.0000 Redesign is a project by the foundation.

334 70 0.0000 Vintage collection is made using upcycled.

335 48 0.0000 Vintage is trendy.

336 8 0.0000 A technology enables the conversion of carbon from waste.

337 69 0.0000 We are aware of the dark side of fashion.

338 22 0.0000 Each clothing is made in the sustainable CradletoCradle Certified? fabric.

339 88 0.0000 Direct a short film for second hand.

Sum (all values): 168.0986

Output Closeness Centrality

Rank	Vertex	Value	Id
1	75	1.0000	We believe in buying better and wearing longer.
2	126	0.9585	Fashion industry needs to change.
3	35	0.9281	We take your garment back when you no longer need it.
4	40	0.9219	We make the fashion industry more circular.
5	26	0.9098	We produce garments that are built to last.
6	127	0.9083	Collection is produced with organic cotton.
7	50	0.9054	We want our customers to make sustainable choices.
8	63	0.8995	We adopt new practices including reducing carbon emissions.
9	1	0.8966	We move towards circularity.
10	212	0.8796	It is responsibility.
11	116	0.8699	Circularity is to extend the life of products.
12	162	0.8672	It eliminates the concept of waste.
13	193	0.8605	It is fully recyclable.
14	124	0.8578	Sustainability is essential.
15	188	0.8565	Our partnerships are focused on climate.
16	81	0.8499	We are building a sustainable future.
17	18	0.8447	Wear it.
18	207	0.8396	We can buy less.

19 228 0.8384 Recycling is really important.

20 143 0.8371 We are finding ways to use less water.

21 36 0.8333 Our goal is to source all of the materials more sustainably.

22 47 0.8296 Circular economy is a big opportunity for the sustainable fashion industry.

23 237 0.8259 It is circularity.

24 76 0.8259 We've curated our most sustainable collection.

25 77 0.8238 We are working to change consumption habits.

26 154 0.8222 We design for circularity.

27 39 0.8186 It is upcycled post consumer waste.

28 74 0.8186 Pass it on to someone who will use it.

29 99 0.8174 Our collaboration makes each piece unique.

30 61 0.8102 We are taking wear forever to a whole new level.

31 86 0.8102 It is made with natural dyes.

32 246 0.8079 Our partnerships are focused on supporting local communities.

33 23 0.8055 Throw in your discarded clothes.

34 280 0.8055 You are credited to buy something.

35 196 0.8043 We strive towards a sustainable future.

36 151 0.8032 We never stop innovating.

37 225 0.8020 It feels good to do good.

38 182 0.8020 It is cradletocradle certified.

39 58 0.8009 Our production is in Europe.

40 37 0.7986 We share our sustainability report.?

41 130 0.7974 Cradletocradle certified pieces are bought to the market.

42 108 0.7963 Collection is designed with its whole life cycle and future.

43 33 0.7951 We limit our environmental impact.

44 248 0.7940 We sort your garment when you no longer need it.

45 60 0.7929 We make sustainable clothes.

46 67 0.7906 It is our climate commitment.

47 244 0.7872 We give an used textile a new life.

48 38 0.7869 Uncovered actions that businesses can take on a corporate level to change the planet.

49 59 0.7850 Feel green.

50 122 0.7828 We believe in circular fashion.

51 24 0.7817 Expand the lifecycle of your clothes.

52 92 0.7806 Experts offer free repair.

53 227 0.7773 Bring your clothes back to shops.

54 224 0.7751 Waste less.

55 245 0.7741 The materials we use matter.

56 253 0.7730 We focus on programs and partnerships.

57 267 0.7708 Core materials are sustainably sourced.

58 28 0.7698 It's a timeless piece.

59 45 0.7676 Cradletocradle Certified is sustainably produced.

60 138 0.7666 Feel good in the second hand.

61 136 0.7666 We use renewable energy.

62 148 0.7655 We host workshops for our upcycled collection.

63 254 0.7645 It is our consumption commitment.

64 159 0.7645 Clothes are made to gather stories.

65 137 0.7645 We produce in our factory.

66 301 0.7634 It is better for the soil?.

67 71 0.7592 We make better clothes.

68 164 0.7582 Wear worn.

69 158 0.7582 We limit use of the most essential resources in the production process.

70 98 0.7541 We are saving our home planet.

71 30 0.7500 Wear longer.

72 177 0.7500 We want every material can be safely reused.

73 147 0.7500 We help factories become more energy efficient.

74 251 0.7480 We adopt new industry practices including reducing waste.

75 310 0.7480 The products are assessed according to the sustainability issues.

76 149 0.7480 The fashion industry plays a part in climate crisis.

77 312 0.7470 It is product circularity.

78 125 0.7450 Reworking the unique fabric takes effort and time.

79 123 0.7430 We set ambitious sustainability targets.

80 19 0.7430 They are innovative programs.

81 150 0.7430 Hopes and aspirations become wearable realities.

82 278 0.7430 Core materials are cotton, polyester, and man-made cellulosics.

83 95 0.7428 It looks as good as it did decades ago.

84 141 0.7420 We are restoring our resources.

85 140 0.7410 Organic cotton uses less water than conventional cotton.

86 89 0.7390 Clothes are worn for generations.

87 161 0.7380 It is built better today.

88 219 0.7371 The fiber is obtained in line with the product policy.

89 181 0.7371 We are producing in local factories.

90 289 0.7341 Buying used is always the best for the planet.

91 145 0.7332 We're reducing our shipping carbon footprint through process adaptations.

92 317 0.7322 The issue is social fairness.

93 298 0.7293 We want our materials to live a long life and a future.

94 53 0.7283 Being transparent with the stakeholders is our core value.

95 43 0.7283 Cradletocradle? certified products are a key part of our product catalogue.

96 85 0.7283 We have a debt to pay back to the environment.

97 144 0.7283 We reduce our fiber impact.

98 46 0.7274 Circular fashion looks so good.

99 121 0.7274 We define more sustainable materials.

100 307 0.7236 It is the same quality product at a lower cost.

101 160 0.7217 Our tailor shops customize your old favorites.

102 314 0.7217 A best thing for the planet is keep stuff in use longer.

103 49 0.7208 It is world environment day.

104 316 0.7208 A best thing we can do for the planet is reduce overall consumption.

105 131 0.7208 There is a difference between organic and conventional cotton.

106 100 0.7198 Protect the mother earth.

107 184 0.7198 Organic cotton feel good on your skin.

108 216 0.7189 Organic cotton is more sustainable.

109 294 0.7180 It is better for farmers.

110 287 0.7180 Organic cotton does not use synthetic pesticides.

111 279 0.7180 Organic cotton saves CO2.?

112 269 0.7180 Organic cotton saves energy.

113 97 0.7153 It is built to reduce harm.

114 107 0.7138 Smaller spaces help consuming less.

115 90 0.7134 When you no longer need it, trade in.

116 152 0.7106 We are improving cotton cultivation.

117 249 0.7097 Our biodiversity plan has key initiatives.

118 51 0.7097 An organization works to source organically.

119 172 0.7092 The pandemic presents an opportunity to connect with subjects.

120 57 0.7088 You don't have to choose between style and sustainability.

121 306 0.7088 We protect our water quality.

122 48 0.7081 Vintage is trendy.

123 83 0.7081 It's earth day.

124 190 0.7079 It means buying more conscious when it comes to quality.

125 55 0.7070 In conversion cotton is grown in the transition from conventional to certified organic cotton.

126 318 0.7061 Buy used or new.

127 65 0.7061 We introduce the give better guide.

128 72 0.7059 Better starts with how they’re made.

129 73 0.7034 It’s important to create consciously.

130 146 0.7012 They’re made to last.

131 299 0.6999 Worker wellbeing is being prioritized and improved.

132 191 0.6999 We can make a big impact.

133 221 0.6981 We’re seeking sustainable fiber innovations.

134 189 0.6981 Cotton is our most used material.

135 250 0.6964 Most of our cotton come from sustainable sources.

136 295 0.6964 We explore the possibilities presented by innovations.

137 68 0.6960 Wash less.

138 7 0.6946 It is an innovation.

139 192 0.6946 Our cotton came from sustainable sources.

140 176 0.6946 The iconic parts are removed for recycling.

141 104 0.6929 When we repair, we can find joy in the stuff we already own.

142 199 0.6920 We’re hosting workshops to show you how to repair.

143 93 0.6920 Extend the life of garment by repairing.

144 142 0.6915 Wear often.

145 319 0.6912 Repair it.

146 44 0.6906 Water is the foundation of sustainable items offering longevity and recyclability.

147 320 0.6903 Care for it.

148 111 0.6886 A technology transforms textile waste into a new material.

149 223 0.6886 When it is made to last, we consume less.

150 156 0.6869 We take step towards purposeful consumption.

151 62 0.6867 Sustainability is with our bio cotton clothes.

152 41 0.6867 Comfort is with our bio cotton clothes.

153 129 0.6860 Earth is the foundation of sustainable items offering longevity and recyclability.

154 186 0.6852 The focus point is animal welfare.

155 5 0.6847 The used garments are recovered.

156 187 0.6835 We are taking steps to more sustainable production.

157 183 0.6835 Energy is the foundation of sustainable items offering longevity and recyclability.

158 134 0.6835 Farmers are nurturing the plants.

159 132 0.6827 Our partners train farmers in organic practices.

160 31 0.6810 Collection is with a lifetime warranty.

161 215 0.6801 We want to be better for our environment.

162 56 0.6777 Wardrobe choice is sustainable.

163 185 0.6777 Our partners train farmers in organic practices.

164 272 0.6768 A little stitch goes a long way.

165 211 0.6752 Wear your garment until the end.

166 217 0.6744 Pass knowledge to serve new farmers.?

167 220 0.6735 Our partners link farmers with fair-paying market partners for their products.

168 52 0.6735 Workers are in the process of making clothes.

169 54 0.6727 We make your clothes.

170 210 0.6727 The fibres are decoloured.

171 80 0.6727 Collection is vintage.

172 133 0.6727 Worker is in the finishing department.

173 285 0.6719 Safe dyes and chemicals are used.

174 117 0.6719 Welcome every stage of life.

175 179 0.6719 Think responsible.

176 218 0.6711 It is fashion revolution.

177 34 0.6711 Shop second hand.

178 42 0.6703 It is second hand.

179 135 0.6703 Garments are made from European linen.

180 3 0.6695 It's a durable piece.

181 241 0.6695 The remains of components are separated.

182 315 0.6695 Pieces are made in socially responsible factories.

183 270 0.6687 It is sustainably made.

184 139 0.6687 There are many steps to use organic cotton and less water.

185 313 0.6679 It should be accessible to all.

186 128 0.6679 It is thrift shop.

187 265 0.6663 The new material is made from pulp.

188 311 0.6647 The future is circular.

189 10 0.6603 This partnership represents an advancement in recycling.

190 266 0.6568 Clothing waste is transformed into fabric.

191 96 0.6566 Trends don’t last a lifetime.

192 6 0.6560 A technology dissolves cotton cellulose from textile waste.

193 214 0.6529 We become more sustainable with better processes and products.

194 229 0.6491 We believe in quality of life.

195 255 0.6491 Turn a very low value item into a durable good that could last.

196 256 0.6491 It gives a spirit that's a piece that's full of repairs.

197 281 0.6484 It has a spirit.

198 82 0.6467 Be always upfront about social issues.

199 11 0.6414 It is an innovative solution to turn materials into a textile fiber.

200 118 0.6372 The end of your clothes doesn’t mean the end.

201 120 0.6372 Help people that live on planet.

202 178 0.6371 We understand the sustainability challenges of the fashion industry.

203 252 0.6357 We update operations for efficiency.

204 180 0.6343 It is the responsible initiative of recycled cotton.

205 27 0.6285 We throw away our clothes.

206 12 0.6285 Sustainability Innovation Hub makes our products more sustainable.

207 305 0.6257 Worker wellbeing positively impacts the supply chain workers.

208 302 0.6229 We're designing for circularity.

209 103 0.6222 Our garment is made from recycled polyester.

210 268 0.6201 Each piece is graded by hand.

211 32 0.6194 Reduce the fashion footprint.

212 113 0.6174 It is made with recycled materials.

213 206 0.6167 Keep it minimal.

214 91 0.6160 Out with the old and in with the new.

215 4 0.6153 Sustainability Innovation Hub supports partners to scaleup their initiatives.

216 236 0.6153 Every piece of clothing has a purpose.

217 110 0.6146 It is a platform to develop new materials and technologies.

218 69 0.6125 We are aware of the dark side of fashion.

219 198 0.6106 Clean out the closet.

220 66 0.6087 They are crafted of cottonized hemp.

221 226 0.6066 An organization works with artisans from underserved communities.

222 106 0.6059 Plastics are essential for durable clothing.

223 213 0.6039 Collection is eco-friendly.

224 197 0.6026 Clothes are made to gather memories.

225 170 0.6019 Fossil fuels used to make clothing accelerate the environmental crisis.

226 16 0.6008 Share it.

227 247 0.6006 There are many garments most of which end up in landfill.

228 234 0.5980 Gas and oil industry threatens the clothing industry.

229 79 0.5957 Collection is inspired by mother nature.

230 274 0.5941 Uncovered actions that businesses can take on an individual level to change the planet.

231 277 0.5929 Less than one percent of the world's cotton is organic.

232 271 0.5923 We offer a special product while supplies last.

233 243 0.5923 We search for processes to limit our impact.

234 284 0.5911 Make room.

235 200 0.5898 Take action.

236 166 0.5898 Support grassroots organizations and foundations.

237 102 0.5885 Get involved.

238 105 0.5782 The clothing industry has a plastic problem.

239 87 0.5685 It’s world water day.

240 230 0.5640 It’s easier to find the retro garment on the wish list.

241 101 0.5457 Find community.

242 232 0.5455 Our partners repurpose nets into new materials.

243 203 0.5455 We recycle discarded fishing nets.

244 168 0.5455 Our partner collects discarded fishing nets for recycling.

245 273 0.5445 Big opportunity was for collecting for this noble polymer.

246 8 0.5418 A technology enables the conversion of carbon from waste.

247 171 0.5401 Majority of clothes come at the cost of slave labor.

248 204 0.5401 Majority of our clothes come at the cost of pollution.

249 242 0.5381 It is used in polyester yarn.

250 20 0.5349 Waste is the starting point for art piece.

251 9 0.5349 It is made from recycled carbon emissions.

252 222 0.5331 Our sustainability begins as an active resourcefulness.

253 260 0.5327 There is so much waste that we can leverage.

254 282 0.5321 Find purpose.

255 112 0.5312 Capturing carbon emissions limits the use and direct release of fossil resources.

256 194 0.5311 Update old pieces to create new ones.

257 29 0.5296 It is a clothing to go the distance.

258 119 0.5291 It is mindfully made.

259 283 0.5291 It is an act of healing the labor for a broader change.

260 292 0.5286 It is an act of healing the resources that make the garment.

261 240 0.5281 It is a process to move towards a sustainable future.

262 276 0.5281 No other fabric ages as well as denim.

263 25 0.5182 The designer invents new material by using waste.

264 88 0.5170 Direct a short film for second hand.

265 94 0.5044 We give employees some paid time off.

266 235 0.5041 Keep clothes in play as long as possible.

267 14 0.4856 Old garments are on someone else.

268 15 0.4856 Experts are bringing new life to old garments.

269 163 0.4711 Get involved grassroots groups to meet the climate crisis.

270 165 0.4688 Become a volunteer.

271 257 0.4684 Find events in your area.

272 201 0.4668 Do something about the environment.

273 231 0.4394 Our activism is inherent in who we are.

274 258 0.4384 Our life is directly tied to how we treat to the land.

275 259 0.4377 Make the world a better place.

276 296 0.4320 Our goal is to reach all the communities.

277 309 0.4279 Suppliers are closely being worked with for a broader change.

278 205 0.4128 We have time to do things rather than endless loads of laundry.

279 261 0.4102 When garments get old, wear while gardening, hiking, and surfing.

280 233 0.0691 Most of the clothing material is plastic.

281 2 0.0691 Redesign is a project by the foundation.

282 109 0.0605 Academic insights guide the creation of circular economy guidelines.

283 169 0.0605 Most synthetic clothing create the plastic based fibers we wear.

284 174 0.0518 Brand insights guide the creation of circular economy guidelines.

285 291 0.0478 Uncovered actions that businesses can take on a government level to change the planet.

286 173 0.0432 The Foundation accelerates the transition to a circular economy.

287 209 0.0432 Retail insights guide the creation of circular economy guidelines.

288 290 0.0432 Plastic comes from oil and gas.

289 208 0.0345 The foundation works with businesses to mobilize solutions.

290 297 0.0345 Ethylene is the primary material for most plastics.

291 239 0.0345 Manufacturing insights guide the creation of circular economy guidelines.

292 84 0.0259 Botanical dyes are used.

293 167 0.0259 During the era of activism, the traditional fabric became a tool of protest.

294 238 0.0259 The foundation works with academia to mobilize solutions.

295 17 0.0259 They are made from air carbon.

296 303 0.0259 The naked plastic product looks like a pellet.

297 263 0.0259 Collector insights guide the creation of circular economy guidelines.

298 293 0.0173 Our factory base is A/B rated.

299 21 0.0173 Transparency is a key in designs.

300 288 0.0173 Each time the clothing is reused, waste accumulated will be reduced.

301 286 0.0173 This collection is sourced from textile associations.

302 175 0.0173 The aim is to create garments with the finest materials.

303 78 0.0173 Approach the fashion industry with a different lens.

304 275 0.0173 Sorter insights guide the creation of circular economy guidelines.

305 262 0.0173 The foundation works with policymakers to mobilize solutions.

306 202 0.0173 Empower a new generation of artisans.

307 114 0.0173 It is a bio material made by microorganisms.

308 155 0.0173 Learn more about our sustainability initiatives.

309 70 0.0173 Vintage collection is made using upcycled.

310 308 0.0173 Make fibers that will get woven into the garment.

311 13 0.0173 Wear recycled fibres.

312 115 0.0173 Make it last.

313 304 0.0173 The main ingredient in our clothing is fossil fuels.

314 336 0.0000 NGO insights guide the creation of circular economy guidelines.

315 321 0.0000 It is a new cotton project.

316 328 0.0000 Four seasons became the inspiration for the project.

317 333 0.0000 The foundation works with institutions to mobilize solutions.

318 339 0.0000 If we don't rain in oil and gas, what's at stake is the future of humanity.

319 338 0.0000 It's a win for mother earth.

320 329 0.0000 Rewear the favourite clothes.

321 157 0.0000 These natural dyes are made with plants.

322 335 0.0000 A small closet keeps on track with the self-imposed clothing contract.

323 322 0.0000 Discover the cherish waste collection.

324 326 0.0000 Consciously chosen materials boost the good vibes.

325 64 0.0000 Utilize love of nature with creations of sustainability and circularity.

326 337 0.0000 This end-of-season collection is reworked before being marked down in value.

327 327 0.0000 Our garments are fair trade certified sewn.

328 264 0.0000 The aim is to manufacture garments with the high standards.

329 324 0.0000 Buy clothes built to last.

330 334 0.0000 It is my cloth.

331 323 0.0000 There's no limit what garments can do.

332 325 0.0000 Combining conscious approach with classic elements is the way to reimagine.

333 195 0.0000 Second hand gives new life to old garment.

334 330 0.0000 Receive the gift card.

335 22 0.0000 Each clothing is made in the sustainable CradletoCradle Certified? fabric.

336 332 0.0000 Our industry can learn how to make sustainable choices.

337 300 0.0000 We source more sustainable cotton.

338 331 0.0000 It is a new step in social responsibility.

339 153 0.0000 Explore the passion for circular fashion through upcycled designs.

Sum (all values): 193.1320

Betweenness Centrality

Rank	Vertex	Value	Id
1	126	1.0000	Fashion industry needs to change.
2	75	0.7561	We believe in buying better and wearing longer.
3	26	0.3274	We produce garments that are built to last.
4	1	0.3241	We move towards circularity.
5	212	0.2989	It is responsibility.
6	127	0.2140	Collection is produced with organic cotton.
7	7	0.1906	It is an innovation.
8	280	0.1503	You are credited to buy something.
9	39	0.1388	It is upcycled post consumer waste.

10	164	0.1358	Wear worn.
11	33	0.1276	We limit our environmental impact.
12	116	0.1162	Circularity is to extend the life of products.
13	85	0.1099	We have a debt to pay back to the environment.
14	98	0.1097	We are saving our home planet.
15	67	0.1089	It is our climate commitment.
16	228	0.1063	Recycling is really important.
17	92	0.1052	Experts offer free repair.
18	124	0.1032	Sustainability is essential.
19	113	0.1015	It is made with recycled materials.
20	63	0.1001	We adopt new practices including reducing carbon emissions.
21	207	0.0958	We can buy less.
22	156	0.0936	We take step towards purposeful consumption.
23	122	0.0898	We believe in circular fashion.
24	93	0.0885	Extend the life of garment by repairing.
25	191	0.0876	We can make a big impact.
26	74	0.0875	Pass it on to someone who will use it.
27	193	0.0850	It is fully recyclable.
28	18	0.0849	Wear it.
29	86	0.0823	It is made with natural dyes.
30	3	0.0814	It's a durable piece.
31	30	0.0805	Wear longer.
32	36	0.0786	Our goal is to source all of the materials more sustainably.
33	188	0.0750	Our partnerships are focused on climate.
34	60	0.0722	We make sustainable clothes.
35	176	0.0722	The iconic parts are removed for recycling.
36	162	0.0698	It eliminates the concept of waste.
37	104	0.0652	When we repair, we can find joy in the stuff we already own.
38	58	0.0635	Our production is in Europe.
39	50	0.0626	We want our customers to make sustainable choices.

40 248 0.0626 We sort your garment when you no longer need it.

41 199 0.0605 We’re hosting workshops to show you how to repair.

42 237 0.0587 It is circularity.

43 29 0.0575 It is a clothing to go the distance.

44 24 0.0573 Expand the lifecycle of your clothes.

45 102 0.0558 Get involved.

46 100 0.0546 Protect the mother earth.

47 144 0.0531 We reduce our fiber impact.

48 38 0.0531 Uncovered actions that businesses can take on a corporate level to change the planet.

49 158 0.0513 We limit use of the most essential resources in the production process.

50 81 0.0511 We are building a sustainable future.

51 55 0.0486 In conversion cotton is grown in the transition from conventional to certified organic cotton.

52 10 0.0477 This partnership represents an advancement in recycling.

53 206 0.0461 Keep it minimal.

54 90 0.0454 When you no longer need it, trade in.

55 182 0.0446 It is cradletocradle certified.

56 136 0.0445 We use renewable energy.

57 129 0.0444 Earth is the foundation of sustainable items offering longevity and recyclability.

58 256 0.0438 It gives a spirit that's a piece that's full of repairs.

59 49 0.0433 It is world environment day.

60 35 0.0422 We take your garment back when you no longer need it.

61 31 0.0415 Collection is with a lifetime warranty.

62 283 0.0404 It is an act of healing the labor for a broader change.

63 101 0.0402 Find community.

64 154 0.0383 We design for circularity.

65	51	0.0346	An organization works to source organically.
66	260	0.0335	There is so much waste that we can leverage.
67	159	0.0323	Clothes are made to gather stories.
68	166	0.0321	Support grassroots organizations and foundations.
69	61	0.0307	We are taking wear forever to a whole new level.
70	235	0.0299	Keep clothes in play as long as possible.
71	28	0.0289	It's a timeless piece.
72	138	0.0289	Feel good in the second hand.
73	54	0.0289	We make your clothes.
74	4	0.0285	Sustainability Innovation Hub supports partners to scaleup their initiatives.
75	143	0.0281	We are finding ways to use less water.
76	23	0.0273	Throw in your discarded clothes.
77	40	0.0265	We make the fashion industry more circular.
78	299	0.0262	Worker wellbeing is being prioritized and improved.
79	177	0.0259	We want every material can be safely reused.
80	76	0.0242	We've curated our most sustainable collection.
81	301	0.0234	It is better for the soil?.
82	59	0.0226	Feel green.
83	229	0.0221	We believe in quality of life.
84	151	0.0219	We never stop innovating.
85	282	0.0217	Find purpose.
86	148	0.0210	We host workshops for our upcycled collection.
87	200	0.0194	Take action.
88	267	0.0194	Core materials are sustainably sourced.
89	196	0.0189	We strive towards a sustainable future.
90	211	0.0186	Wear your garment until the end.
91	56	0.0182	Wardrobe choice is sustainable.
92	42	0.0170	It is second hand.
93	73	0.0169	It’s important to create consciously.
94	45	0.0160	Cradletocradle Certified is sustainably produced.
95	140	0.0153	Organic cotton uses less water than conventional cotton.

96	219	0.0146	The fiber is obtained in line with the product policy.
97	103	0.0145	Our garment is made from recycled polyester.
98	155	0.0145	Learn more about our sustainability initiatives.
99	52	0.0145	Workers are in the process of making clothes.
100	311	0.0139	The future is circular.
101	265	0.0132	The new material is made from pulp.
102	245	0.0131	The materials we use matter.
103	227	0.0127	Bring your clothes back to shops.
104	194	0.0109	Update old pieces to create new ones.
105	141	0.0108	We are restoring our resources.
106	266	0.0105	Clothing waste is transformed into fabric.
107	305	0.0104	Worker wellbeing positively impacts the supply chain workers.
108	160	0.0100	Our tailor shops customize your old favorites.
109	165	0.0098	Become a volunteer.
110	47	0.0095	Circular economy is a big opportunity for the sustainable fashion industry.
111	130	0.0092	Cradletocradle certified pieces are bought to the market.
112	246	0.0087	Our partnerships are focused on supporting local communities.
113	197	0.0085	Clothes are made to gather memories.
114	53	0.0080	Being transparent with the stakeholders is our core value.
115	224	0.0075	Waste less.
116	111	0.0075	A technology transforms textile waste into a new material.
117	125	0.0074	Reworking the unique fabric takes effort and time.
118	80	0.0073	Collection is vintage.
119	123	0.0065	We set ambitious sustainability targets.
120	132	0.0061	Our partners train farmers in organic practices.
121	181	0.0060	We are producing in local factories.

122 285 0.0055 Safe dyes and chemicals are used.

123 43 0.0053 Cradletocradle? certified products are a key part of our product catalogue.

124 19 0.0047 They are innovative programs.

125 163 0.0046 Get involved grassroots groups to meet the climate crisis.

126 147 0.0042 We help factories become more energy efficient.

127 118 0.0041 The end of your clothes doesn’t mean the end.

128 254 0.0029 It is our consumption commitment.

129 99 0.0028 Our collaboration makes each piece unique.

130 27 0.0017 We throw away our clothes.

131 233 0.0016 Most of the clothing material is plastic.

132 89 0.0016 Clothes are worn for generations.

133 108 0.0015 Collection is designed with its whole life cycle and future.

134 71 0.0015 We make better clothes.

135 37 0.0014 We share our sustainability report.?

136 152 0.0012 We are improving cotton cultivation.

137 32 0.0006 Reduce the fashion footprint.

138 251 0.0004 We adopt new industry practices including reducing waste.

139 221 0.0003 We’re seeking sustainable fiber innovations.

140 253 0.0003 We focus on programs and partnerships.

141 117 0.0003 Welcome every stage of life.

142 190 0.0003 It means buying more conscious when it comes to quality.

143 304 0.0003 The main ingredient in our clothing is fossil fuels.

144 91 0.0003 Out with the old and in with the new.

145 137 0.0001 We produce in our factory.

146 203 0.0001 We recycle discarded fishing nets.

147 9 0.0001 It is made from recycled carbon emissions.

148 57 0.0001 You don't have to choose between style and sustainability.

149 316 0.0001 A best thing we can do for the planet is reduce overall consumption.

150 314 0.0001 A best thing for the planet is keep stuff in use longer.

151 307 0.0001 It is the same quality product at a lower cost.

152 289 0.0001 Buying used is always the best for the planet.

153 187 0.0001 We are taking steps to more sustainable production.

154 11 0.0000 It is an innovative solution to turn materials into a textile fiber.

155 186 0.0000 The focus point is animal welfare.

156 185 0.0000 Our partners train farmers in organic practices.

157 184 0.0000 Organic cotton feel good on your skin.

158 183 0.0000 Energy is the foundation of sustainable items offering longevity and recyclability.

159 313 0.0000 It should be accessible to all.

160 309 0.0000 Suppliers are closely being worked with for a broader change.

161 180 0.0000 It is the responsible initiative of recycled cotton.

162 179 0.0000 Think responsible.

163 178 0.0000 We understand the sustainability challenges of the fashion industry.

164 44 0.0000 Water is the foundation of sustainable items offering longevity and recyclability.

165 88 0.0000 Direct a short film for second hand.

166 175 0.0000 The aim is to create garments with the finest materials.

167 174 0.0000 Brand insights guide the creation of circular economy guidelines.

168 173 0.0000 The Foundation accelerates the transition to a circular economy.

169 172 0.0000 The pandemic presents an opportunity to connect with subjects.

170 171 0.0000 Majority of clothes come at the cost of slave labor.

171 170 0.0000 Fossil fuels used to make clothing accelerate the environmental crisis.

172 169 0.0000 Most synthetic clothing create the plastic based fibers we wear.

173 168 0.0000 Our partner collects discarded fishing nets for recycling.

174 167 0.0000 During the era of activism, the traditional fabric became a tool of protest.

175 83 0.0000 It's earth day.

176 41 0.0000 Comfort is with our bio cotton clothes.

177 82 0.0000 Be always upfront about social issues.

178 308 0.0000 Make fibers that will get woven into the garment.

179 317 0.0000 The issue is social fairness.

180 161 0.0000 It is built better today.

181 292 0.0000 It is an act of healing the resources that make the garment.

182 312 0.0000 It is product circularity.

183 294 0.0000 It is better for farmers.

184 281 0.0000 It has a spirit.

185 78 0.0000 Approach the fashion industry with a different lens.

186 277 0.0000 Less than one percent of the world's cotton is organic.

187 77 0.0000 We are working to change consumption habits.

188 247 0.0000 There are many garments most of which end up in landfill.

189 255 0.0000 Turn a very low value item into a durable good that could last.

190 315 0.0000 Pieces are made in socially responsible factories.

191 273 0.0000 Big opportunity was for collecting for this noble polymer.

192 264 0.0000 The aim is to manufacture garments with the high standards.

193 328 0.0000 Four seasons became the inspiration for the project.

194 79 0.0000 Collection is inspired by mother nature.

195 146 0.0000 They’re made to last.

196 145 0.0000 We're reducing our shipping carbon footprint through process adaptations.

197 324 0.0000 Buy clothes built to last.

198 128 0.0000 It is thrift shop.

199 142 0.0000 Wear often.

200 275 0.0000 Sorter insights guide the creation of circular economy guidelines.

201 279 0.0000 Organic cotton saves CO2.?

202 139 0.0000 There are many steps to use organic cotton and less water.

203 69 0.0000 We are aware of the dark side of fashion.

204 34 0.0000 Shop second hand.

205 68 0.0000 Wash less.

206 135 0.0000 Garments are made from European linen.

207 134 0.0000 Farmers are nurturing the plants.

208 331 0.0000 It is a new step in social responsibility.

209 65 0.0000 We introduce the give better guide.

210 131 0.0000 There is a difference between organic and conventional cotton.

211 293 0.0000 Our factory base is A/B rated.

212 64 0.0000 Utilize love of nature with creations of sustainability and circularity.

213 333 0.0000 The foundation works with institutions to mobilize solutions.

214 339 0.0000 If we don't rain in oil and gas, what's at stake is the future of humanity.

215 239 0.0000 Manufacturing insights guide the creation of circular economy guidelines.

216 225 0.0000 It feels good to do good.

217 327 0.0000 Our garments are fair trade certified sewn.

218 17 0.0000 They are made from air carbon.

219 157 0.0000 These natural dyes are made with plants.

220 121 0.0000 We define more sustainable materials.

221 120 0.0000 Help people that live on planet.

222 119 0.0000 It is mindfully made.

223 300 0.0000 We source more sustainable cotton.

224 325 0.0000 Combining conscious approach with classic elements is the way to reimagine.

225 302 0.0000 We're designing for circularity.

226 115 0.0000 Make it last.

227 276 0.0000 No other fabric ages as well as denim.

228 271 0.0000 We offer a special product while supplies last.

229 268 0.0000 Each piece is graded by hand.

230 336 0.0000 NGO insights guide the creation of circular economy guidelines.

231 334 0.0000 It is my cloth.

232 318 0.0000 Buy used or new.

233 296 0.0000 Our goal is to reach all the communities.

234 107 0.0000 Smaller spaces help consuming less.

235 13 0.0000 Wear recycled fibres.

236 6 0.0000 A technology dissolves cotton cellulose from textile waste.

237 338 0.0000 It's a win for mother earth.

238 290 0.0000 Plastic comes from oil and gas.

239 25 0.0000 The designer invents new material by using waste.

240 288 0.0000 Each time the clothing is reused, waste accumulated will be reduced.

241 297 0.0000 Ethylene is the primary material for most plastics.

242 250 0.0000 Most of our cotton come from sustainable sources.

243 295 0.0000 We explore the possibilities presented by innovations.

244 12 0.0000 Sustainability Innovation Hub makes our products more sustainable.

245 48 0.0000 Vintage is trendy.

246 72 0.0000 Better starts with how they’re made.

247 330 0.0000 Receive the gift card.

248 319 0.0000 Repair it.

249 46 0.0000 Circular fashion looks so good.

250 2 0.0000 Redesign is a project by the foundation.

251 274 0.0000 Uncovered actions that businesses can take on an individual level to change the planet.

252 291 0.0000 Uncovered actions that businesses can take on a government level to change the planet.

253 22 0.0000 Each clothing is made in the sustainable CradletoCradle Certified? fabric.

254 87 0.0000 It’s world water day.

255 5 0.0000 The used garments are recovered.

256 21 0.0000 Transparency is a key in designs.

257 84 0.0000 Botanical dyes are used.

258 20 0.0000 Waste is the starting point for art piece.

259 306 0.0000 We protect our water quality.

260 62 0.0000 Sustainability is with our bio cotton clothes.

261 287 0.0000 Organic cotton does not use synthetic pesticides.

262 149 0.0000 The fashion industry plays a part in climate crisis.

263 209 0.0000 Retail insights guide the creation of circular economy guidelines.

264 133 0.0000 Worker is in the finishing department.

265 236 0.0000 Every piece of clothing has a purpose.

266 262 0.0000 The foundation works with policymakers to mobilize solutions.

267 220 0.0000 Our partners link farmers with fair-paying market partners for their products.

268 261 0.0000 When garments get old, wear while gardening, hiking and surfing.

269 257 0.0000 Find events in your area.

270 243 0.0000 We search for processes to limit our impact.

271 269 0.0000 Organic cotton saves energy.

272 8 0.0000 A technology enables the conversion of carbon from waste.

273 284 0.0000 Make room.

274 16 0.0000 Share it.

275 249 0.0000 Our biodiversity plan has key initiatives.

276 286 0.0000 This collection is sourced from textile associations.

277 241 0.0000 The remains of components are separated.

278 222 0.0000 Our sustainability begins as an active resourcefulness.

279 105 0.0000 The clothing industry has a plastic problem.

280 322 0.0000 Discover the cherish waste collection.

281 320 0.0000 Care for it.

282 272 0.0000 A little stitch goes a long way.

283 112 0.0000 Capturing carbon emissions limits the use and direct release of fossil resources.

284 242 0.0000 It is used in polyester yarn.

285 259 0.0000 Make the world a better place.

286 213 0.0000 Collection is eco-friendly.

287 114 0.0000 It is a bio material made by microorganisms.

288 252 0.0000 We update operations for efficiency.

289 278 0.0000 Core materials are cotton, polyester, and man-made cellulosics.

290 70 0.0000 Vintage collection is made using upcycled.

291 258 0.0000 Our life is directly tied to how we treat to the land.

292 244 0.0000 We give an used textile a new life.

293 270 0.0000 It is sustainably made.

294 15 0.0000 Experts are bringing new life to old garments.

295 217 0.0000 Pass knowledge to serve new farmers.?

296 230 0.0000 It’s easier to find the retro garment on the wish list.

297 14 0.0000 Old garments are on someone else.

298 66 0.0000 They are crafted of cottonized hemp.

299 332 0.0000 Our industry can learn how to make sustainable choices.

300 263 0.0000 Collector insights guide the creation of circular economy guidelines.

301 234 0.0000 Gas and oil industry threatens the clothing industry.

302 303 0.0000 The naked plastic product looks like a pellet.

303 153 0.0000 Explore the passion for circular fashion through upcycled designs.

304 218 0.0000 It is fashion revolution.

305 298 0.0000 We want our materials to live a long life and a future.

306 231 0.0000 Our activism is inherent in who we are.

307 223 0.0000 When it is made to last, we consume less.

308 240 0.0000 It is a process to move towards a sustainable future.

309 310 0.0000 The products are assessed according to the sustainability issues.

310 208 0.0000 The foundation works with businesses to mobilize solutions.

311 335 0.0000 A small closet keeps on track with the self-imposed clothing contract.

312 214 0.0000 We become more sustainable with better processes and products.

313 202 0.0000 Empower a new generation of artisans.

314 106 0.0000 Plastics are essential for durable clothing.

315 323 0.0000 There's no limit what garments can do.

316 226 0.0000 An organization works with artisans from underserved communities.

317 238 0.0000 The foundation works with academia to mobilize solutions.

318 204 0.0000 Majority of our clothes come at the cost of pollution.

319 215 0.0000 We want to be better for our environment.

320 232 0.0000 Our partners repurpose nets into new materials.

321 110 0.0000 It is a platform to develop new materials and technologies.

322 97 0.0000 It is built to reduce harm.

323 192 0.0000 Our cotton came from sustainable sources.

324 321 0.0000 It is a new cotton project.

325 216 0.0000 Organic cotton is more sustainable.

326 201 0.0000 Do something about the environment.

327 337 0.0000 This end-of-season collection is reworked before being marked down in value.

328 210 0.0000 The fibres are decoloured.

329 150 0.0000 Hopes and aspirations become wearable realities.

330 329 0.0000 Rewear the favourite clothes.

331 109 0.0000 Academic insights guide the creation of circular economy guidelines.

332 95 0.0000 It looks as good as it did decades ago.

333 205 0.0000 We have time to do things rather than endless loads of laundry.

334 195 0.0000 Second hand gives new life to old garment.

335 198 0.0000 Clean out the closet.

336 189 0.0000 Cotton is our most used material.

337 326 0.0000 Consciously chosen materials boost the good vibes.

338 96 0.0000 Trends don’t last a lifetime.

339 94 0.0000 We give employees some paid time off.

Sum (all values): 8.4400