

Micro-Fashion Designing:

An Examination of Sustainable Garment Production and Fast Fashion Alternatives

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### **Abstract**

An emerging subset of the sustainable fashion industry identified by this study, micro-fashion designing is a form of garment production where each part of the production process is operated by one person. The purpose of this study is to examine micro-fashion designing practices, and further, to determine if they can be translated into the larger fashion industry. This study reviews existing literature on the linear economy and the environmental and social impacts of the fast fashion industry. Additionally, this research analyzes the framework of the sustainable fashion industry, the effectiveness of selling platforms like Depop, and alternative modes of garment production used by micro-fashion designers. Original qualitative research was conducted in the form of surveys and interviews with sellers identifying as micro-fashion designers on the app Depop, in order to research their garment production processes, the challenges they face in production and expanding their businesses, and their views on sustainability and the larger fashion industry. The research informs policy recommendations applicable at the local, state, and federal levels, focusing on how to reform traditional fast fashion practices by implementing the sustainable garment production processes of upcycling, zero-waste, slow fashion, and the use of secondhand materials.

## Introduction

The fast fashion industry has become a dominating force of low-cost production, quick manufacturing, and a rapidly evolving trend cycle, creating a surplus of waste by large fashion retailers (Moorhouse, 2020). The fashion industry relies on a pattern of overconsumption in a linear economy, where garments are produced only to be discarded before the next trend season, but a new trend of sustainable consumption has risen in recent years, encouraging consumers to shop more ethically (Ulasewicz, 2008). This trend of ethical consumption supports non-traditional modes of garment production, such as upcycling, zero waste, slow fashion, and sustainable materials (Aakko & Niinimäki, 2018). These practices are highlighted within a subset of the sustainable fashion industry: micro-fashion designing. Micro-fashion designers have become visible on online selling apps like Depop, which are marketed to sell secondhand and sustainable garments, where the micro-designers in this study, make, market, and distribute sustainably handmade garments. Offering a direct connection between producer and consumer, micro-designing avoids over-production and excess waste through sustainable garment production, potentially offering more transparency and ethical standards to the fashion industry.

I have chosen to research micro-fashion designing because it is an emerging subset of the sustainable fashion market that has the potential to transform the larger fashion industry into a more transparent and ethical business. Secondly, there is little existing research on sustainable micro-fashion designing practices. This paper conducts an in-depth analysis of sustainable fashion design practices, focusing on micro-fashion designers selling on the online app Depop. Micro-designers on Depop, were surveyed and interviewed about their experiences implementing sustainability into their business practice. Data was collected about the micro-designer's modes of sustainable fashion design, the challenges they face in sustainable

micro-designing, the problems with traditional fashion production, and the obstacles in expanding sustainably from the micro-scale. The culmination of this research is a comprehensive list of policy recommendations about how to expand and popularize sustainable micro-fashion design practices and how to translate these practices to the larger fashion industry.

## **Background**

### **Definitions**

Fast Fashion: The rapid production of cheap clothing by mass-market retailers manufactured in response to the trend cycle, characterized by a supply chain focused on profit and over-consumption.

Sustainable Fashion: A process of fashion design focused on the ethical production of garments, alternative materials, and slow fashion.

Micro-Fashion Designing: A process of fashion design produced on a micro-scale, where the entire production process is typically run by one person. This mode of fashion design is an emerging sect of the sustainable fashion industry, utilizing ethical and sustainable materials production processes.

### **Introduction to Fast Fashion**

Over recent decades, the fashion industry has become a low-cost, fast-production industry, which is now commonly referred to as fast fashion. Internationally, the fast-fashion industry was worth \$30.58 billion in 2021, with a compound annual growth rate of 21.9% and an expected worth of \$39.84 billion by 2025 (Research and Markets, 2021). In the fast fashion industry, large global garment retailers take the look and design elements of designer fashion houses and reproduce them quickly and inexpensively. Common factors of fast fashion brands

include: large selection of items, short turnaround time between marketing and manufacturing, unethical labor practices, and low quality materials.

Traditionally, fashion apparel retailers relied upon forecasting fashion trends and consumer demand prior to the actual time of consumption. However, within the past 20 years, fashion retailers globally have competed with one another through rapid production and a speedup of the trend cycle, producing a significantly faster market (Bhardwaj and Fairhurst, 2010). Up until the mid-20th century, the fashion industry conducted four seasons per year, where consumers could only shop within those collections and were not being overwhelmed with a continuous flow of merchandise. The switch to a fast fashion cycle reduced the gap between designing, production, and distribution, allowing for a more frequent and higher level of consumption. Due to the competitiveness of today's fashion market, there exists a constant need to refresh the cycle, contributing to the move of many retailers to increase the number of production seasons or the frequency in which merchandise is changed. Today, many fast fashion brands prescribe to a cycle of 52 micro-seasons per year, producing new items on either a rolling or weekly basis, with larger collections dropped in between (Sehgal, 2020). Brands such as Zara and H&M follow a bi-weekly delivery schedule of new merchandise, carrying a large inventory of garments at all times, creating new styles and trends frequently (VanDyke, 2020). The continuous change in product encourages the public to consume more and shop more frequently with the idea that items are limited and inventory will quickly change.

With an increased rate of production and continuous shift in the fashion trend cycle, clothing produced for fast fashion companies is typically made from low quality and wasteful materials (Mukherjee, 2014). The fast fashion industry has a linear economy, items are made quickly and cheaply where they are to be worn a few times and ultimately discarded

(Moorhouse, 2020). Due to this quick production and distribution of garments, globally, fast fashion is one of the most wasteful industries, responsible for 10% of carbon emissions, 35% of all microplastics and microfibers, 31% of the plastic pollution in the ocean, and the second largest consumer of water worldwide after agriculture (McFall-Johnsen, 2019). The industry's pressure to reduce costs and speed up production time has led to the increased use of cheap, and often toxic, textiles such as polyester and cotton (Rauturier, 2021).

### **The Sustainable Fashion Industry**

The goal of the sustainable fashion industry is to slow down the global production and consumption processes in fashion, and to develop socially responsible and eco-conscious materials and production practices (Kutsenkova, 2017). The sustainable fashion industry offers more ethical purchasing choices for consumers, marketing garments on behalf of durability, sustainable fabrics and other materials, and ethical labor (Ulasewicz, 2020). Although an alternative to fast fashion, there are few industry requirements for what is considered sustainable; therefore, ethical consumption may be difficult for buyers despite a fashion retailer's green labeling.

Although many brands have pledged to adopt sustainable practices in recent years, sustainable fashion is a voluntary industry (Whelan & Fink, 2016). Companies like the Swedish retailer H&M, the second largest retailer globally, and Zara, the largest clothing company globally, have set sustainability goals to be achieved by 2030, pledging to use 100% recycled and sustainable materials by this time (Robertson, 2022). H&M for example, offers a clothing recycling program where customers can return clothes in-store, using renewable energy for a portion of their supply chain. The company has also semi-adopted eco-conscious materials like organic cotton and recycled polyester, yet while these campaigns demonstrate an effort to



become more sustainable, the brand's actual sustainability is unclear due to a lack of regulation and industry standard for what's considered sustainable.

When items are produced ethically and sustainably, the price of labor and materials is reflected since they consume more time, labor, and more expensive resources. On behalf of this cost, sustainably made fashion is often based on a value system placed by an individual and their personal consumption habits (Khatib, 2021). The pricing of sustainable garments considers all portions of the supply chain and quality control of lasting products, allowing for more consistent and higher employee wages, humane production, less water waste, less micro plastics produced, and thus, higher prices (Pasqualicchio, 2021). A store's prices often reflect the brand's dedication to reducing their environmental impact, similar to how a consumer's sustainability consciousness affects how much they may choose to pay for a garment. Fast fashion brands often price items cheaply, reflecting their use of unsustainable materials, quick trend turnover, and exploited labor.

### **Micro-Fashion Designing**

An emerging market in the sustainable fashion industry, micro-designing is an entrepreneurial form of fashion design (Aako & Niinimäki, 2018). The antithesis of the fast fashion market, micro-fashion designing enterprises selling small batch goods, often designed with eco-conscious and secondhand materials. Through micro-scale designing practices, designers have the ability to develop committed and personal relationships with consumers, as well as maintain close attention to production quality by personally overseeing every aspect of the production process. Micro-designers have more flexibility in production methods and design, offering consumers a more personal and sustainable alternative to the fast fashion industry. This direct oversight over the entire production process gives micro-designers the opportunity to develop micro-scale business skills from a creative outlet.

Online apps like Depop are platforms where users, like micro-fashion designers, can combine their personality with their stores, as well as directly sell their craft and oversee all aspects of the design, production, and manufacturing processes (Morrison, 2015). Apps like Depop promote secondhand, slow fashion, upcycled clothing, etc., where buyers can make more ethical purchasing choices. Although fast fashion companies financially dominate the fashion industry, Depop, for example, takes more than \$410 million per year in sales, doubling each year since the app was founded in 2011 (Butler, 2018). Depop is both a profitable and sustainable alternative to the traditional fashion market, but rather a marketplace that allows for creativity, personality, and cultural expression (Blackwell, 2021).

Micro-designers often specialize in sustainably handmade and reworked garments, for example: repurposed corsets made from secondhand and recycled materials. Secondhand materials acquired from thrift stores, donations, and repurposing, provide an alternative to traditional firsthand textile use, as well as a large profit margin since these materials are cheaper than buying firsthand (Irick & Eike, 2020). Other practices utilized by micro-designers include upcycling or reworking secondhand garments, zero waste or using 100% of each material, and slow fashion or slowly producing exclusive and one-off items. Secondhand materials combined with ethical garment production processes allow for a sustainable supply chain, and thus an environmentally and socially responsible alternative to fast fashion garment production.

Although little research exists on micro-fashion designing, micro-entrepreneurship, such as that on apps like Depop, show that a direct connection between producer and consumer provides for a more ethical standard of business (Aakko & Niinimäki, 2018). For micro-scale fashion labels, items are produced in small quantities; therefore, overconsumption and overstocking inventory are not an issue. These businesses also lack the financial resources to

overconsume and waste materials since they're running at a low scale; therefore, the level of waste and excess remains low.

## **Literature Review**

### **The Problems with the Fast Fashion Market**

The current fast fashion market reflects a linear lifespan for garments, producing products at low prices and encouraging disposability and an increasing trend cycle. Because of this turnover, garments produced by fast fashion companies quickly lose their appeal to consumers and are eventually disposed of. In the study *Sustainable Markets: Motivating Factors, Barriers, and Remedies for Mobilization of Slow Fashion*, the authors focus on the increasing turnover rate of fashion trends and the environmental consequences caused by the wasteful practices of the fast fashion industry (Ertekin & Atik, 2014). While the speed in which fashion is produced may not be the main determinate in waste, fast fashion is often motivated by unethical consumption and large profit margins (Fletcher, 2010). The fast fashion industry has created a rapid trend cycle, constantly marketing new products and encouraging consumers to shop often and unethically. Rapid changes in the trend cycle, or the concept of what's fashionable at a given time, engages consumers in an unrelenting pattern of waste and unsustainable consumption.

In *How is the fashion industry adapting to the needs and wants of the ethical consumer?*, Yasmina Magdy (2020) investigates the manufacturing and supply of garments in the fast fashion market, researching whether or not the fashion industry has the ability to become sustainable. Magdy argues that the ethical consumer is someone who wishes to make a positive impact when buying a product or service, also claiming that consumers are becoming more socially and environmentally conscious of the clothing they buy. Magdy states that the fashion industry is making slow progress in response to the growing demand for ethically sourced garments and that

the changes being made are not enough to fulfill the social and environmental wants of buyers. While some in the fast fashion retailers are working towards more ethical conditions, Magdy's study highlights the role consumers play in sustainability through their purchasing behavior and that more ethical purchasing opportunities can relieve the wasteful nature of the fast fashion industry. For example, consumers are the most important players in the fashion industry, and consumer actions such as boycotting a brand and demanding more ethical standards, can be extremely effective. Ethical consumerism is on the rise within millennials and Gen Z due to a younger median age in consumers, but the rise of social media and influencers may continue to promote the rapid trend cycle of the fast fashion industry (Pearlman, 2019).

## **The Problems of the Sustainable Fashion Industry**

### **I. Introduction**

The fashion industry is characterized by a linear product life cycle, with the supply chains often based primarily on product style, creating a challenging environment for the implementation of sustainability practices. Macchion et al (2017) studied the ethical practices of sustainable fashion in order to examine the main strategic approaches used in sustainable fashion supply chain management. The study finds that fashion companies are primarily interested in maintaining the price of products while decreasing the price of production and delivery. The traditional manufacturing of fashion follows a model of what Macchion et al calls "the paradigm of unlimited resources and the world's unlimited capacity for regeneration", exploiting labor and natural resources without bounds (Macchion et al, 2017). This traditional mode of manufacturing is unsustainable, for it disregards the finite nature of natural resources and the consequences for abused and exploited laborers. Macchion et al shows that companies fully integrating ethical and sustainable practices into their supply chains can be very competitive in the fashion market; yet

despite the benefits of a transition to more sustainable supply chains, the current sustainable fashion market has little regulation, ethical standard or review, and lacks company accountability, allowing for issues in marketing, limited stock, and little aesthetic variation.

## **II. Regulation and Greenwashing**

Although growing more popular, the sustainable fashion industry is bound with little regulation or consequences for unethical practices. Pauliina Isokangas (2020) studied *The Fashion Industry Charter for Climate Action*, a charter aimed to reduce the fashion industry's greenhouse gas emissions, created by the United Nations Climate Change conference in 2018. The Charter was created by 43 signatories, promising to uphold the charter's standards on a voluntary basis. This charter is an example of unenforceable environmental and labor standards placed on the fashion industry. A lack of accountability and enforcement in the global fashion industry are often compensated by unconventional methods like reputational pressure, and consumer backlash, emphasizing the lack of industry repercussions (Isokangas, 2020). While unconventional methods can assist in regulating, lack of policy may allow for unethical environmental and labor practices to remain unchecked and thus, continue in the fashion industry.

Another issue with the sustainable fashion industry, greenwashing is considered a misleading advertisement strategy used by fashion companies in order to market their garments and production as sustainable. The study *Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk*, Yu-Shan Chen and Ching-Hsun Chang focus on how greenwashing frequently occurs in the fashion industry, building off of green messages and sustainable marketing strategies. For example, green terms like "eco", "sustainable", "environmentally friendly", etc, are often used misleadingly due to vague

definitions or industry standards, allowing fashion companies to market their products as ethical or sustainable when they actually are not (Chen & Chang, 2013). Consumers typically rely on company advertisements when making purchasing decisions and the misleadingness of greenwashing is undermining consumer confidence in ethically produced garments (Chen, 2010). Greenwash has the potential to damage the entire green market and legitimately sustainable companies; therefore, the author recommends companies provide more information on why their items are considered green, allowing consumers to obtain enough information to be able to compare brands and make conscious and informed purchasing decisions.

Eco-labels, or third-party sustainability verifications, are an alternative for verifying if a garment is sustainable or not. While the credibility of third-party labels can be questionable, Pavel Castka and Charles J. Corbett examine the increased use of private regulation for sustainability in the study *Governance of Eco-Labels: Opinion and Media Coverage*. The study says that the increased demand for eco-friendly products has led to a growth in green washing, but that the “credibility gap” in sustainable products can be resolved by independent third-party guarantees (Dando & Swift, 2003; TerraChoice, 2010). Third party certifications are voluntary standards, where private companies create a rule, or standard, for their products as a form of soft law (Mörth, 2004). These certifications assessed by independent third-party organizations can determine whether or not specific products or aspects of a production process are sustainable and ethical, granting some verification through audits (Castka & Corbett, 2014). The audits and certifications themselves may only cover certain parts of a product; therefore, the legitimacy and effectiveness of eco-labels and third-party certifications depends largely on the company completing the audit and what consumers determine to be credible.

### **III. Aesthetics**

Throughout history, fashion has been used as a symbol of personal taste, status, class, etc., and the sustainable fashion market is not exempt from the social expression clothing offers to consumers. According to Kate Power and Oksana Mont in *The Role of Formal and Informal Forces in Shaping Consumption and Implications for Sustainable Society: Part II*, many people find sustainable lifestyles to be difficult or unattractive due to aesthetic concerns (Power & Mont, 2010). Aesthetics are often a crucial factor to the garments consumers choose to buy and there is limited data on what consumers expect from eco-fashion. In *Consumer Aesthetics and Environmental Ethics: Problems and Possibilities*, the authors refer to sustainable consumer products like unbleached fabrics and non-toxic dyed clothing, as “aesthetically unappealing”. The authors reference that environmentally friendly fabrics and materials don’t take into account the stylistic preferences of consumers and that sustainable fashion downplays the role of aesthetics when compared with ethics (Sadar & Chyon, 2015). The study also claims that the conflict between sustainability and aesthetics is dire and that “[a]esthetics...is why you buy something” and that current eco-fashion may only appeal to certain groups of consumers (Postrel, 2003). Eco-fashion has also been associated with hippies and environmental movements and activism, linking the aesthetics to specific fabrics like linen and bamboo fiber (Welters, 2008). The minimal aesthetic variation in eco or alternative fabrics contrast the versatility of fabrics like polyester and cotton commonly used in the fast fashion industry, which are more adaptable and thus, appeals to larger audiences.

### **Micro-Fashion Designers and Design Practice**

According to Aakko and Niinimäki (2018), some micro-fashion designers consider their labels as an extension of their personality, focusing on personal goals, sustainability, and creativity, above profit making. The primary focus on the aesthetic and ethical qualities of

production cannot be reduced to “business needs”; therefore, traditional business practices cannot serve them. For example, business measures like forward planning, monitoring stock levels, outsourcing, etc., may add extra stress to micro-designers already disadvantaged with minimal cash flow, management and organizational skills, and fundamental business awareness (Craik, 2015). According to the study, many micro-scale fashion designers are strongly driven by creative ambition alone, failing to develop a business strategy when developing their brand. This practice may limit the potential for business development and commercialization; therefore, success in micro-scale fashion brands requires adequate business planning and continuous creative endeavors.

*In Fashion Designers as Entrepreneurs: Challenges and Advantages of Micro-size Companies*, Maarit Aakko and Kirsi Niinimäki identify micro-size fashion companies as “business where creativity is a successful combination of fashion creativity and entrepreneurial creativity”, examining the obstacles of business growth on a micro scale, small scale business orientation, and the intrinsic aesthetic and creative values that balance the business and private life (Aakko and Niinimäki, 2018). Entrepreneurship in the fashion industry requires a collision of creative design skill and business practice, yet these fields require different expertise and often fall into “dreamer” entrepreneurship, or starting a business in order to realize one’s dreams (Landau, 1982). Micro-fashion designers fall under the dreamer category since they are typically run by the designer themselves and are characterized by a high-level of innovation and minimal risk taking. This business style is predominantly seen in micro fashion labels, for “the designer might take lead responsibility not only for design and creative direction but also for the company itself, thus having a dual role of fashion designer and entrepreneur”, facing these designers with the competing demands of creative activity and business operations.



The questions of how designers practice sustainable fashion and what challenges they face in creating a sustainable independent label are discussed by Olga Gurova and Daria Morozova in *A critical approach to sustainable fashion: Practices of clothing designers in the Kallio neighborhood of Helsinki*. The study focuses primarily on micro-designers in Finland, where the concept of sustainable fashion has recently gained popularity and micro-scale fashion labels have emerged from the country's new fashion market. The study defines fashion as sustainable if

there is no harm done to people or the planet, and that a thing or process, once put into action, can enhance the well-being of the people who interact with it and the environment it is developed and used within (Ulasewicz, 2008).

The definition is based on the “cradle to cradle” principle which assumes that designers approach materials from a lifecycle point of view, demonstrating a care for the environment and human welfare (McDonough & Braungart, 2002). This method of fashion design offers an alternative to the linear nature of fast fashion, where sustainability for micro-designers is based on the belief that materials and labor are valuable resources. The study finds that micro-designers contribute a significant portion to the Kallio's fashion industry, forming out of a so-called “craft renaissance”, or the return to skilled productions of clothing through new practices (Crewe, 2013). These micro-designers are often referred to as “social entrepreneurs”, or designers that are able “to persuade, enlighten, touch hearts, shift perceptions, articulate new meanings, and move new concepts through the fashion system”, intersecting micro-scale fashion with sustainability (Ulasewicz, 2008). The concept of sustainability is used as a strategy for these designers in order for them to compete with the fast fashion market with an ideologically significant impact (Gurova and Murozova, 2016). From the study, the authors identified four patterns of sustainable

fashion used by the Kallio designers commonly practiced at the micro-scale: upcycling, trashion, slow fashion, and zero waste.

### **I. Upcycling**

In *Upcycling as a Design Strategy for Product Lifetime Optimization and Societal Change*, the authors examine the challenges and solutions to upcycled production in order to determine how best to engage with the public on environmental issues in the garment industry and the wasteful nature of fast fashion. The authors state that “The concept of upcycling presents an opportunity for designers to lead the way forward, in sustainability utilising the many tonnes of textile waste produced to create increased value and satisfy the constant demand for new fashion, while technological developments advance towards more sustainable methods of production”, examining this through five independent designers in the UK (Han, 2015). In the findings, the authors compare the production processes of standard fashion design with the production process of upcycled fashion design, noting that the standard fashion design process neither requested or offered sustainable options. See Appendix A for a diagram of the standard fashion design process. The upcycled design process utilizes discarded and secondhand materials, diverting the garment waste from landfills, modeled off of a specialist denim upcycling boutique in Manchester. This upcycling model highlights the process of material sourcing, employing ‘patchwork’ pattern cutting and other techniques as the ways to best utilize all available materials and produce little waste. Several variations of manufacturing were employed in the upcycling model, relying heavily on social media and online commerce for promotion and marketing, collaborating with larger brands, and selling at trade shows; whereas, the standard design model relied little on these same tactics.

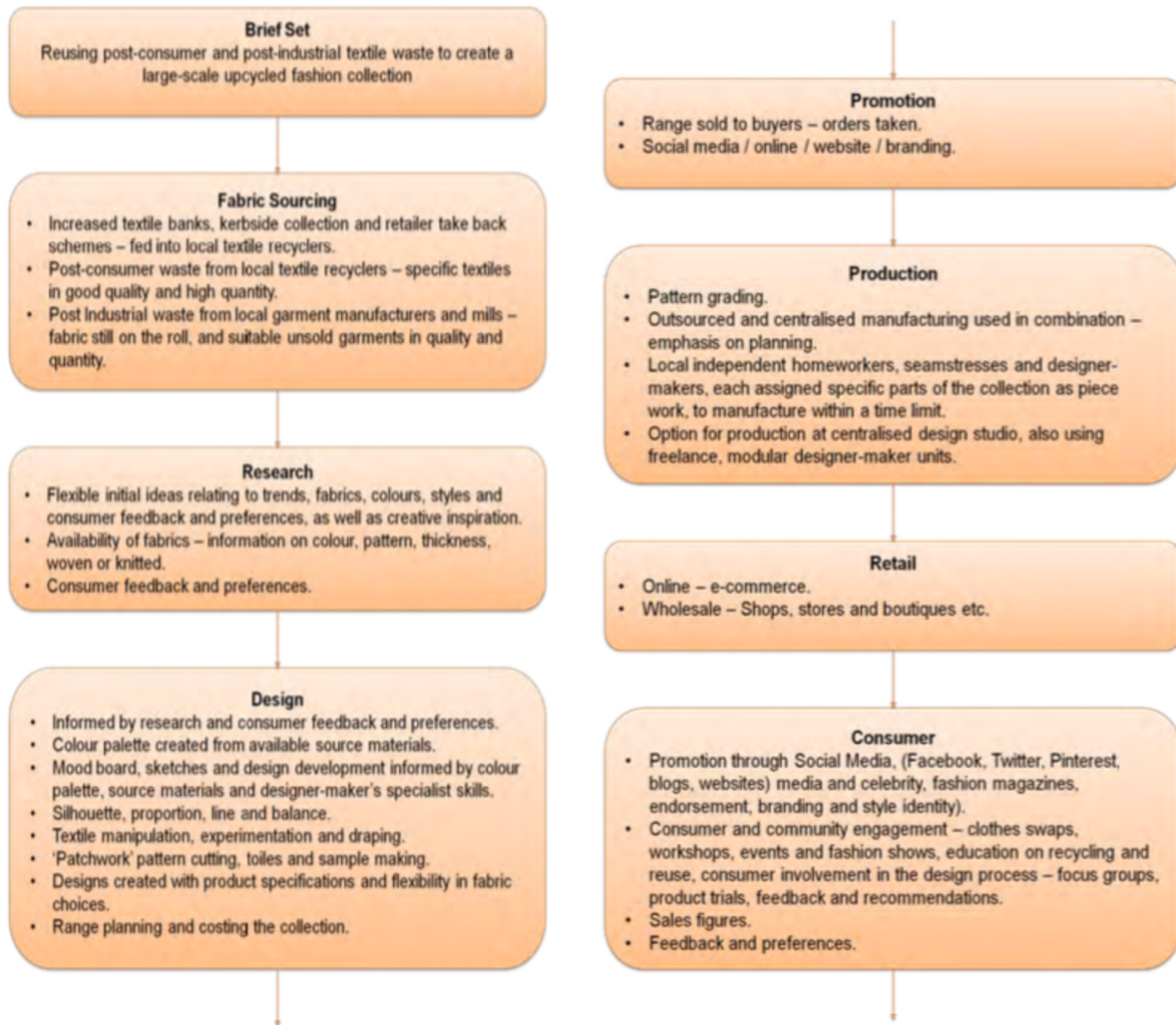


Figure 1. The upcycled fashion design and production model (Han, 2015).

The authors state that the figures show a clear distinction between the standard design and upcycled design processes, typically at the fabric sourcing stage. Fabric sourcing occurs early in the upcycling process, whereas fabric is designed and sourced much later in the standard design process, typically after ordering and pre-production. The restricted choice in fabric selection of the upcycled process sources solely from pre-existing textiles and limits the possible production, utilizing a source material that does not rely on raw materials, but rather limits the contribution of garment waste to landfills. The authors conclude that micro-designers dependent on the upcycling model take on a more centralized role in production than designers utilizing the

standard design model. This process gives designers the ability to oversee all aspects of the design process, significantly reducing waste production and encouraging the ethos and lifestyle of sustainable fashion.

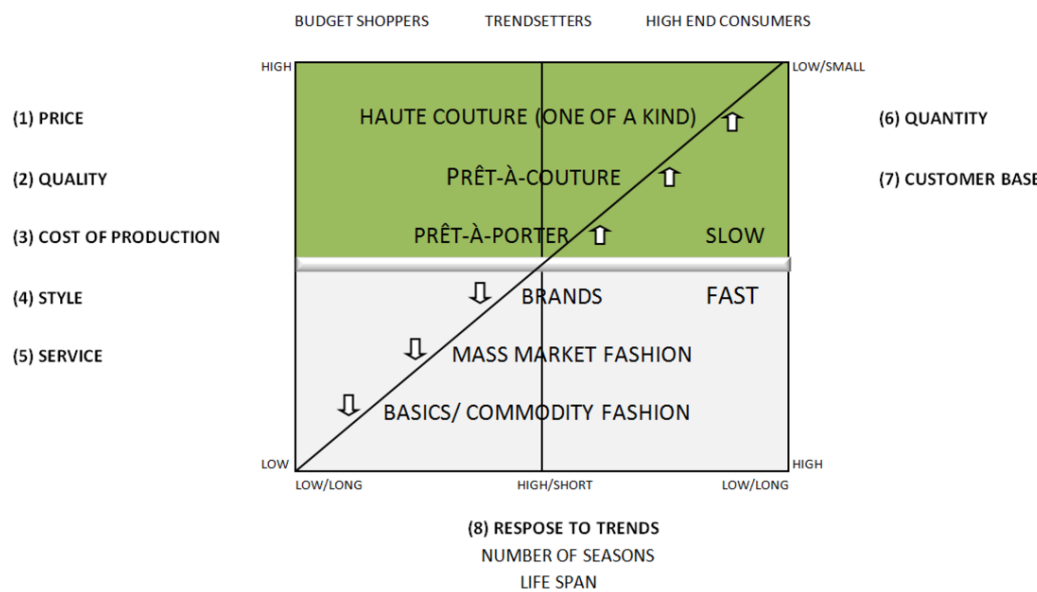
An emerging and alternative mode of upcycling is known as ‘trashion’, or the reutilization of disposed objects and materials. In the study *Trashion: The Return of the Disposed*, Bahar Emgin calls attention to the last cycle of life for many garments. The upcycling of discarded garments and materials has developed into a new category of sustainable design that can “act as a tool of transformation and reintroduces into certain orders what was once deemed waste” (Emgin, 2012). The transformation of existing materials into fashion emphasizes the growing desire of consumers to ethically utilize limited resources. Emgin states that “Design, as a conduit of disposal, reintroduces rubbish as objects of distinction, invaluable and potentially priceless”, encouraging designers to introduce discarded and neglected materials into their design process in order to create sustainable and exclusive creations for a transforming fashion market.

## **II. Slow Fashion**

Slow fashion is the process of slowing the fashion cycle through measured production and consumption, without the exploitation of human and environmental resources, entailing higher quality garments with a longer lifespan. In the study *A theoretical investigation of slow fashion: sustainable future of the apparel industry*, Sojin Jung and ByoungHo Jin explore the dimensions of slow fashion through scale development, defining slow fashion as equitable and local, authentic, exclusive, and functional (Jung & Jin, 2014). The authors find that slow fashion isn’t simply the opposite of fast fashion, but items have a greater value added through hand craftsmanship and longer periods of time spent on each garment, reasonable workloads, local designers and businesses, and exclusivity. Slow fashion is also a process of shifting consumers’

mindsets from a quantity to quality perspective, since in the mass-produced fast fashion market, garments are produced in large quantities with excessive and often international labor (Fletcher, 2007). Consumers may feel “poverty midst plenty” when purchasing fast fashion due to a lack of unique items, diversity, and personal connection to the garments. The authors say that diverse fashion is found through heterogenous fashion items made in the slow fashion market, where these items will have higher quality, functionality, and authenticity due to the amount of time spent producing such items, as compared to the quick turn over of the fast fashion market. The study even suggests that slow fashion involves small quantities of unique products; therefore, they thrive in small-scale businesses and could aid in the revival of small business apparel and production.

In the study *Key Issues in Slow Fashion: Current Challenges and Future Perspectives*, the authors study the business practice of slow fashion, examining price, quality, cost, style, service, quantity, customers, and response to the trend cycle. The authors use these eight factors to create a fashion matrix, determining the significance and contribution of each segment within the sustainable fashion industry (Štefko & Steffek, 2018). See Figure 2 below.



**Figure 2. The fashion matrix. Numbers in parentheses correspond to the different sects within the fashion industry (Štefko & Steffek, 2018).**

The authors claim that the concept of slow fashion is a highly personalized experience that encourages consumers to examine how their garments were made or where they originate. This experience translates to higher pricing for sustainable items produced through slow fashion processes, but in turn, these items often have a longer lifespan. Cost of production is also higher for these goods, due to equitable labor and local or fair-trade materials, yet the materials and process of creation often result in exclusive and authentic products with limited quantity, unavailable in the fast fashion market. Service is often more personal or direct from designer to consumer since smaller quantities are produced since slow fashion producers are less likely to respond to the trend cycle than fast fashion producers, but the research shows that slow fashion consumers are more likely to buy less at a higher quality. The authors say that retailers need to educate their consumers in the production of their apparel and that slow fashion will be a developing market dependent on the adaptation of retailers and consumer buying habits.

### **III. Zero Waste**

Zero waste fashion design involves the concern of the designer and manufacturer to utilize as much of a material as possible. In the study *Zero-Waste Fashion Design: a study at the intersection of cloth, fashion design and pattern cutting*, Timo Rissanen focuses on pattern cutting as an integral part of the fashion design process. Rissanen states that “fashion designers and fashion companies ought to have the space, time and economic incentive to design and produce less—in a material sense—but with more consideration and with an in-depth understanding of the complex nature of fashion and sustainability”, defending decoupling fashion design from economic growth (Rissanen, 2013). Rissanen also points out that while micro-scale fashion designers have explored waste reduction in their design processes, larger

fashion companies tend to be less careful and precise with fabric cutting, thus creating more waste. Using the “Cut and Sew” method, designers can adequately save fabric by cutting each piece of fabric directly next to the other, rather than spacing each piece out on the fabric and creating micro scraps that cannot be used. This method of pattern cutting is also known as the “Jigsaw Puzzle” since each piece fits directly into the next, creating zero waste from the fabric, as displayed by the Mark Liu dress pictured in Figure 3. This method is important in micro-scale production since designers must maximize limited quantities of fabric and materials sourced, whereas fast fashion companies have the economic incentive to produce quickly, and thus wasting more fabric and materials.



**Figure 3. Zero-waste dress designed by Mark Liu, 2007 (Rissanen, 2013).**

In *A Renaissance in Material Appreciation: Case Study in Zero Waste Fashion*, by Kirsi Niinimäki focuses on new design approaches that challenge the conventional methods of

industrial, or fast, fashion design. Zero-waste pattern cutting aims to totally eliminate fabric waste in the pattern cutting process, starting the design process at the pattern-making stage, where the process traditionally begins with the form and style of the clothing (Niinimäki, 2015). Zero-waste pattern cutting can “generate a new appreciation of textile materials in fashion design and create motivation for fashion designers to create textiles themselves”, creating new and experimental ways to design and perceive fashion. The designer can start the design process from the width of the fabric, determining what design could be possible with the amount of fabric at hand, or beginning at one detail, like a sleeve, and constructing the entire garment out of this one piece. The author introduces three types of zero-waste pattern cutting: planned chaos, where pieces are cut together out of a unified block of fabric, geo cut, where fabric is cut and constructed in geometrical forms of triangles and squares, and exploratory, where cutting is fluid and dress-form manipulation (McQuillan, 2011). These forms of pattern cutting offer an alternative and sustainable method of fashion design, creating opportunities for one-of-a-kind pieces made ethically from limited materials.

### **Sustainable Clothing Apps**

Although little research exists on the impact of reselling apps, such as Depop, on sustainable micro-scale designing, emerging literature shows how reselling apps may become an important new dimension of the sustainable fashion market.

The use of internet technologies, specifically online reselling applications, have fostered the facilitation of “access based consumption”, enabling new business models in the sustainable fashion industry (Hu et al, 2019). In the study *Challenging Current Fashion Business Models: Entrepreneurship Through Access Based Consumption In The Second-Hand Luxury Garment Sector Within A Circular Economy*, Hu et al (2019) state that individuals are driven to engage in



collaborative consumption through apps by social communities, possible economic growth, and sustainable development, providing an opportunity for the fashion industry to grow sustainably. This sustainable growth shown through online consumption models may take form in minimizing waste through alternative design practices, decreasing the production of clothing, and by embracing the circular economy (Perlacia et al, 2016). Online selling apps allow for the sharing and selling of garments and other products, where micro-designers, for example, can market their products to a large pool of consumers (Botsman & Rogers, 2011).

In the study *Understanding the intention to buy secondhand clothing on sharing economy platforms: The influence of sustainability, distance from the consumer system, and economic motivations*, the authors study reveals three motivations for consumer to buy from shared economy platforms, also known as reselling apps, identifying these motivations as perceived sustainability, economic motivations, and distance from the consumption system. The study finds that individual perceptions of environmental and societal sustainability influences consumers' decisions to distance themselves from the consumption system of buying new garments and supporting the fast fashion industry. The economic motivation of consumers is also activated on online reselling apps, if consumers are willing to pay more for unique and exclusive items not available in the traditional fashion market. This collaborative consumption “involves people who coordinate the acquisition and distribution of a resource for a monetary or nonmonetary compensation”, avoiding contributing to the negative environmental impacts of the fast fashion industry (Styvén & Mariani, 2020).

### **Methods**

In order to understand the role of micro-designers in the fashion industry, I researched the practices of micro-scale fashion labels on the online app Depop, a platform for handmade and

secondhand clothing sales. I also researched ethical consumption, modes of sustainable designing, and the linear economy of the fast fashion industry through existing literature.

I surveyed and interviewed micro-fashion designers operating on Depop. I selected micro-designers who make, market, and distribute their own products, operating with goals of sustainability in mind. I surveyed 32 individuals fitting these criteria, in order to gain a clearer understanding of the role micro-designing plays in minimizing waste within the fashion industry, encouraging ethical consumption, and their marketing of sustainable garments. This original research provided me with informed and professional opinions about the influence micro-designers could have on the traditionally wasteful practices of the fashion industry. The individuals surveyed and interviewed all have stores on Depop where they design, produce, and distribute their own garments, responsible for every part of the production process. These individuals typically had other full-time occupations and conduct business for their online shops part-time.

Over a three-month period, I contacted approximately 75 individuals on Depop fitting the criteria of micro-fashion designers created in this research. 32 of those I reached out to completed the survey and four were interviewed. Participants were surveyed and interviewed anonymously and will remain anonymous for research purposes. Interviewers were labeled and will be referred to as Anonymous 1, Anonymous 2, Anonymous 3, and Anonymous 4. The full survey data is in Appendix D.

In the survey, I asked each participant the same series of questions, covering topics including seller demographics, sustainability practices the sellers have introduced into their business model, the cost and marketing of micro-producing, etc. Once the surveys were completed by all participants, I went through and collected data to be used to inform my

proposed solutions for encouraging the growth of micro-fashion labels and the use of sustainable methods of designing. See Appendix B for survey questions.

At the end of the survey participants were asked to participate in an interview. Four semi-structured interviews were conducted to gain more insight into how these micro-designers conduct themselves and implement sustainability into their businesses. Questions cover each designer's supply chain, their sustainable practices, and the challenges they face in the implementation of sustainability. See Appendix C for a list of interview questions.

### **Data/Findings**

The main findings identified through the data collected are issues surrounding sustainability in the fashion industry, establishing micro-fashion designing as a growing branch of the sustainable fashion industry, translating micro-scale practices into a larger and more productive scale, challenges faced by micro-designers in producing both sustainably and profitably, and Depop as a growing platform for micro-fashion design.

### **Background and Participant Demographics**

Thirty participants were between the ages of 18 and 30, with only three participants over age 30. Eighteen of these participants were ages 23-29 and 11 were 18-22. Twenty-seven of the participants identified as female, four identified as non-binary or third gender, and one participant identified as male.

Geographically, survey results were more dispersed with 11 participants running their business in the western U.S., 10 in the eastern region, seven in the Midwest, and four located in the south.

### **Recurrent Sustainability in Micro-Fashion Designing**

One of the main topics identified through the data collected is material sourcing and sustainable modes of micro-scale garment production. Every person interviewed regularly practiced one, or multiple, sustainable modes of fashion design, such as upcycling, zero-waste, slow fashion, and the use of secondhand or found materials. All 32 participants said they utilize upcycling in their garment production, 31 primarily using secondhand materials, 23 producing through slow fashion, and 12 using a zero waste model where every part of the fabric is utilized.

Anonymous 1 interviewee discussed their methods of material sourcing, primarily focusing on using secondhand and vintage materials.

...almost exclusively the materials that I'm working with are coming from the thrift store...I even buy fabric from the thrift store, which means somebody else bought it a long time ago and then got rid of it. There's so much there that I don't feel the need to go and buy it brand new.

Other interviewees shared similar viewpoints on what they look for in materials, specifically that there is a surplus of potential and materials at thrift stores. For example, two interviewees focused on sourcing pieces of stained or otherwise 'unwearable' articles of clothing from the secondhand market, repurposing or cutting around the stains to upcycle the original garment. Anonymous 4, a designer for a large fast fashion company, runs her upcycling business part time on Depop creating corsets and vests made from found items and items that have been thrown away. Anonymous 4 said:

...you can find a lot of random things on the street. All my friends and family know that I do that. So one time my brother was walking and he passed this house where this interior designer was getting rid of upholstery fabric, so he scooped up a bunch of fabric for me...That was pretty sustainable because it would've ended up in the trash and it just needed to be washed. Fabric from thrift stores too.

There was a general consensus amongst the participants that upcycling and the use of secondhand materials were the easiest, as well as the cheapest, modes of sustainable production to employ. These practices required very little effort from the designers, but required a prior

knowledge of the unsustainability of the fashion industry and constant material sourcing.

Integration and maintenance of these practices were so easy to employ that 25 of the 32 survey participants had devoted eight or more hours to integrating sustainable practices into their business.

### **Challenges in Packaging & Pricing**

Several participants shared a struggle with the packaging and distribution aspect of the production process, specifically the cost of eco-friendly compostable or biodegradable mailers. Many of the participants packaged their items in reusable mailers or boxes they already had, but several switched to poly mailers. Several participants agreed that the poly mailers are not the environmentally friendly option for shipping their items, but the cost of eco-friendly mailers is too high for the amount they currently sell.

Another challenge participants faced in integrating more sustainable practices into their business is the rising prices of secondhand items. Two interviewees agreed that while secondhand fabric and clothing is a cheaper option for materials, the prices at thrift stores, in their experience, have grown exponentially causing them to spend longer amounts of time sourcing materials. Some materials necessary for production cannot be purchased secondhand, such as needles and thread, clasps, grommets, etc., and must be sourced firsthand from large suppliers like Amazon or fabric stores. On the inflation of thrift stores and having to source elsewhere, Anonymous 2 said

...prices have gone up and I'm noticing that at the places close to me and the places in Chicago, unfortunately inflation is hitting the thrift store. So that makes it more difficult because, first of all, you're taking a larger miss by paying more money for materials, you never have any assurance that anything is going to sell.

Anonymous 3 agreed that there is no guarantee an item will sell, raising the question of overproduction and adequate pricing. The interviewee said that at times they have to wait until

items sell before creating more so they don't overproduce and burden themselves with various unsold items. As a result of the uncertainty of items selling, Anonymous 3 typically prices their items from \$75 to \$150, similar to the prices of the other participants. Although more expensive than many garments produced on the fast fashion market, the pricing takes into account the time spent sourcing sustainable and secondhand materials, ethical labor, quality and durability, and the exclusivity of the item produced. Even with the above traits, items typically sell sporadically and inconsistently, making it difficult for the micro-designers to pursue their business as full-time employment.

### **Depop as a Micro-Designing Platform**

In this study, participants were found and messaged through Depop, but when asked what platforms they sell on many gave multiple answers. The majority of participants were also selling their products on other platforms like Etsy, Mercari, Poshmark, etc., but have had the most success on Depop. When asked about their experience using Depop, Anonymous 1 said

...it's got a low barrier to entry, so pretty much anybody—you can go from sewing your own clothes in your closet to selling things that you buy at thrift stores to actually selling things you make. To me, it's a great platform. Unlike others, it offers a lot of opportunity.

Anonymous 2 said that although active online, most of their business is conducted in-person at flea markets and occasionally as a pop-up in storefronts. Despite having better sales in person, it is their goal to continue building their online presence, wanting to eventually hire an intern to assist with online inventory and marketing, or a social media manager.

One interviewee said that as the secondhand market keeps growing, it's visible to see on Depop. Although initially a creative outlet for many, the opportunity for having their items seen by a large audience is enough for some. The interviewee commented on how their store on

Depop is a good practice for learning customer service and how to profitably conduct a business.

Anonymous 3 said

I'm just gaining a lot of experience now working with buyers. Customer service has been a big thing I learned from being on Depop—something that I was not expecting to learn. Just talking to people, sourcing grommets and ribbon, that's been something new that I learned. So for me, I view it as learning, more so than even the profit.

A learning experience for the majority of participants, Depop has worked as a platform where micro-designers can create a business as an extension of themselves. Anonymous 1 expressed their desire to transition from Depop as their main business and eventually open a store front, but they could only do so because of the skills they developed from operating their Depop store.

### **Opinions on Translating Sustainable Practices to the Larger Fashion Industry**

When the four interviewees were asked if they could see similar modes of production utilized on a larger production scale in the overall sustainable fashion industry, all four were skeptical, yet hopeful. While all the participants found it simple to implement sustainable modes of garment making into their design and production processes, with their understanding of the fashion industry, interviewees were hopeful, yet skeptical when asked if they could see similar techniques being implemented into the larger fashion industry. For example, Anonymous 3 grew up with their father working as a tactical gear designer for Patagonia, where they say had fostered an ethical and environmentally conscious work environment. When Anonymous 3 was asked if they think similar practices to the ones implemented in their own business (upcycling, zero-waste, slow fashion) could be applied to the larger fashion industry, they said

I think that it could definitely. I think that, for example, when he [my father] was working at Patagonia, Patagonia has a policy available so that people who have old clothes from Patagonia, they can return them and I think that if brands have something like that, where, oh, I don't wear, or I ripped this tank top that I got from you five years ago, turn it

in like a glass bottle for instance...I know it's very hard for large brands to be doing that because they're always trying to produce new things, but I think it's extremely important that they start adopting and creating practices for sustainability.

On being sustainable and growing from a micro-scale to a mid-large sized company, one interviewee said that if it's possible for micro and mid-sized companies to employ sustainable practices, larger brands should too since they have the access and the resources to be sustainable, but it's simply easier for them not to be. The interviewee also referenced how small businesses, somewhat larger than micro-scale, can also produce sustainably by designing fabric and having it produced locally—referring specifically to the brand Offcut Studios, a UK based brand created and run by one person, where they utilize companies close to them to produce their fabric and use their fabric scraps and other small pieces to create one of a kind pieces. While it's difficult to be 100% sustainable, as this interviewee said, there are options for producing sustainably at a larger level.

Anonymous 4, a corporate fashion designer working for a large fast fashion brand in New York, talked about how their company does try to reduce waste, but it takes the voices of employers to enact change. The interviewee stated that some of her coworkers are constantly working on ways to be more sustainable, to implement more ethical design practices or more environmentally friendly materials. Running their Depop shop on the side of their full-time employment as a designer, this interviewee stated that she would not quit working for the larger brand because it's important for someone to continue to be a voice on the inside, letting their company know that both employees and consumers want more sustainable buying options. Anonymous 4 also stated that designing sustainably is easier when the scale is smaller, referencing that the company they work for is too large to practice similar sustainable modes of garment production as they do.



## **Data Analysis**

From the data collected through the surveys and interviews with micro-fashion designers selling on Depop, I was able to compare the information to existing literature and analyze significant differences and similarities. The surveyors and interviewees provided evidence of the growing sect of micro-fashion designing and how it can be associated with the sustainable fashion industry, as well as the challenges in incorporating successful and sustainable micro-scale modes of garment production into the larger fashion industry. In each of the data topics, the participants spoke of their personal experiences, offering insight into the field, obstacles and challenges, and tentative plans.

The following sections analyze the collected data in order to determine if micro-scale designing practices can be translated to the larger fashion industry and what obstacles may prevent a shift from occurring. The data is also analyzed to determine whether or not Depop is an effective platform for micro-fashion designing.

### **Translating Micro-Scale Sustainability**

As discussed in the literature review section, micro-scale sustainability includes the use of several modes of garment production: slow fashion, upcycling, zero waste, and secondhand materials. Micro-scale businesses like those run by the participants of this study are often initially established as a creative outlet, eventually turning to a small-scale business, combining entrepreneurial spirit with fashion creativity. This fusion of business practice and design skill and production often combine with the personal goals and morals of the creator, as seen in the data, producing a micro-scale sustainable business model. With little risk to be taken on apps like Depop, micro-designers employ sustainable modes of production like upcycling, slow fashion,

zero waste, and the use of secondhand materials—reducing costs and waste while producing exclusive and ethically made garments.

What the data shows in relation to modes of production like upcycling is that although possible for a mid to large scale business, the process of secondhand sourcing is less profitable for larger companies. Where one person is in charge of the entire production process, fewer garments are produced taking long periods of time and are; therefore, more expensive. On a larger scale, as of that of the fast fashion industry, vast amounts of garments are made in short periods of time with cheap firsthand materials that do not need to be sourced. While this model is unsustainable, it is more profitable on a larger scale. If modes like upcycling were used by larger fashion companies, garments would be more expensive but exemplify the uniqueness and exclusivity of items produced by micro-fashion designers. The concept of upcycling in general presents opportunities for designers to move forward in sustainability, taking advantage of secondhand materials and textile waste by creating new and original garments from discarded materials.

The key stage of the hypothetical application of upcycling in the broader fashion industry is in the material sourcing. If workers were hired to source secondhand materials, or even collect donated clothing and fabric pieces, organization would become one of the main aspects of the standard design process, rather than over-sourcing raw materials for the basis of garments. While one interviewee frequented fabric and other materials found on the street, found materials used for upcycling can literally be found anywhere, especially thrift stores, reintegrating what was once considered trash into a new item. Introducing secondhand materials into the standard design process would occur prior to the design stage, similar to the process used by micro-designers, where plans and designs are made on the basis of the materials available. Secondhand materials

may also be a cheaper alternative for large fashion retailers, since they do not need to design and order new fabric and materials, but rather use pre-existing, discarded, and donated materials. It is possible that the adoption of secondhand materials by large retailers may cause a continued price rise at thrift stores, an issue shared by several participants. Despite this, the interviewees agreed there is a surplus of secondhand materials available and that these materials are still preferred over buying firsthand and creating firsthand waste.

While upcycling, slow fashion, and other modes of sustainable production are alternatives to the fast fashion market, the data shows the unlikeliness of those translating to the larger fashion industry. Although some interviewees referenced brands like Patagonia that are trying, or have employed, sustainable aspects into their production models, the framework of the larger fashion industry does not parallel that of the micro-scale industry; therefore, it's unlikely sustainable modes used by the participants of this study will be transferred to a larger scale. The slow production of items cannot keep up with the quickly changing trend cycle of the fashion market, where overproduction and waste are expected in the production process. On the micro-scale, designers must be conscious of overproduction since resources are limited and items are not guaranteed to sell, and unsold items are unprofitable.

The zero-waste model poses another constraint for the hypothetical translation to the larger fashion industry, for it again, similar to the other modes, focuses on material sourcing and consideration of waste. These modes of production are sustainable for micro-scale designers, but companies must have the consideration and an in-depth understanding of why producing sustainably matters, which can be simple for micro-designers due to personal ties to their businesses, but complicated for larger companies that are often far removed from the production process. Fashion companies need to have the personal incentive to design and produce

sustainably, which through the data, has proven to be a matter of scale. Despite this, companies like Patagonia, as referenced by Anonymous 3, have created sustainable programs for clothing recycling and trade-ins. This shows that large retailers have the resources to produce sustainably but choose not to.

Although scale is a main deterrent for translating sustainable modes of garment production to the larger fashion industry, a shift to a more time-consuming production process would inherently produce more expensive garments. If micro-designing processes were introduced to large fashion retailers, it has the potential to shift the industry from a fast fashion market to a slow fashion industry. While the slow fashion market is smaller than the fast fashion industry, an adoption of slow fashion practices like upcycling, zero waste, and secondhand materials, would produce smaller quantities of garments, but at higher prices. Garments produced slowly on a larger scale could mimic that of items made by the micro-fashion designers in this study, offering more sustainable, ethically made, better quality clothing than that of fast fashion. While this shift is hypothetical due to scale issues, several participants in this study were hopeful that sustainable modes of garment production could be adopted by the larger fashion industry.

### **Depop's Effectiveness as a Micro-Designing Platform**

When it comes to the platforms for sustainable micro-producing, Depop has proven to be a viable platform for ethical and sustainable shopping. The app has facilitated a process of access based consumption where users are able to develop their own business and carry it out as they wish. As some of the interviewers said, the app is a platform for fashion entrepreneurship and fashion creativity, driving a collaborative and engaging production and consumption experience for buyers and consumers of sustainable fashion. Despite the fact that micro-fashion designing is

still a relatively new and emerging branch of the sustainable fashion industry, the platform, along with other selling apps identified by participants in the survey, allows for a large pool of ethical consumers to view sustainably made garments and introduce them to alternative modes of fashion.

While this app is still relatively new, it has offered several motivations for buyers and sellers, where buyers can search specifically for secondhand and sustainably made products. For example, Anonymous 2 identified that their buyers search through keywords like “sustainable” or “handmade” in order to find more sustainable options. Depop has offered micro-designers, like the ones in this study, a platform for selling ethically handmade items, grouping these sellers together and identifying them as a credible sect of the sustainable fashion industry. The algorithm Depop has created allows for a consistent exposure to sustainably made garments, where buyers can make conscious choices altered for them by the app. Depop’s reputation as a sustainable fashion app has assisted in the establishment of micro-fashion designing as a subset of the fashion industry, making sustainably made garments available to large audiences.

### **Policy Recommendations**

The data collected and analyzed in this study point to several key policy recommendations on the local, state, and federal levels. While improvements have been made to the fashion industry in recent years, more radical policy must be implemented to have a significant impact on garment production in the United States. My policy recommendations cover issues of subsidizing and funding, the implementation of sustainable processes in the larger fashion industry, and transparency of information. The policy recommendations presented are informed by the research I have conducted in this project and are presented as possible ways to aid and address the issues of unsustainable garment production in the fashion industry.

## **Financial Incentives**

### **I. Subsidies for Sustainable Supply Chains & Micro-Designing Practices**

The current fast fashion process for garment production operates by mass producing items made from firsthand materials, following a rapid trend cycle and disregarding wastage and excess materials. The interviewees agreed that the practices of upcycling, slow fashion, zero-waste, and the use of secondhand materials, are sustainable alternatives to traditional garment production and that large fashion companies have the resources to adopt these practices, but choose not to based solely on economic reasons. With this data in mind, I propose that fashion retailers with 50 or more employees adopt the sustainable practices of upcycling, zero-waste, the use of secondhand materials, and thus, slow fashion. The proposal requires large fashion retailers produce at least 10% of the garments through these processes, integrating a sustainable supply chain into their business practice.

In order to incentivize fashion retailers, I propose a subsidy applicable at the local, state, and federal levels. The cash amount is to be determined by the government entity responsible, with increases dependent on whether or not retailers expand their sustainable supply chain beyond the 10% benchmark. The 10% production is an achievable figure for retailers adopting a sustainable supply chain for the first time, and subsidies, for example, could be used to increase employee wages due to the new responsibilities of sustainable production, such as fabric sourcing, upcycling, etc. Subsidies would take form as cash disbursement, given directly to businesses transitioning their supply chains, in order to stimulate the growth of the sustainable fashion industry and slowly transition out unsustainable garment production processes.

A tax concession or credit is another subsidy that could be given to participating companies, lessening the tax burden for transitioning companies that may initially struggle with

added costs in materials, labor, and general manufacturing practices. A tax credit may be favorable to the participating government entity since the credit is determined post supply chain transition, rather than a cash subsidy at the beginning of the process. A tax concession would also be favorable for the smaller or newer participating fashion retailers because it gives these businesses the ability to grow, hire employees, and produce sustainably without having to pay large taxes. With a reduced amount of taxed income, smaller businesses will be able to grow and compete with larger retailers, while continuing to produce through sustainable methods, offering a larger scale of sustainably produced garments than previously possible.

## **II. Community Sponsored Workspaces**

Several interviewees described a challenge of micro-fashion designing as a desire to expand or continue similar practices on a larger scale, but cannot due to financial insecurities. For example, these desires included hiring an employee, expanding to a studio outside of their homes, or acquiring a storefront. One solution for these desires expressed by participants is co-working spaces, or spaces for entrepreneurs and independent workers to work alongside one another (Mitev et al, 2018). Collaborative co-working has the potential to develop workspaces that cultivate community and innovation, a potentially beneficial work environment for micro-fashion designers. In a co-working environment, micro-fashion designers, like those participating in this study, would have the opportunity to work alongside each other, collaborate on projects, and learn from one another. I propose community sponsored co-working office space for entrepreneurs, like micro-designers, be added to the Covid-19 business relief acts. The proposal would follow the lead of the Los Angeles County Economic Corporation, or LAEDC, a system of low-cost co-working spaces created by the Los Angeles County Board of Supervisors (LAEDC). The corporation is a private, non-profit organization created by LA County in order to

advance business education and prosperity for LA residents. I propose using the LAEDC as an example for other cities and government entities to provide cooperative workspaces and opportunities for entrepreneurs like the micro-designers in this study. These spaces could occur in city or state-owned buildings, warehouse spaces, university spaces, and unused government buildings. These programs and spaces would allow micro-designers to expand their businesses, or adopt them full time, with little financial risk, while potentially boosting the economy through the sale of the products they produce.

Under the Covid-19 business relief act and following the example of LAEDC, micro-designers would have access to small business assistance programs, as well as creative and collaborative work environments. If realized, micro-designers would have the opportunity to adopt a warehouse or workspace for free or low-cost, where they could potentially dedicate more time to their craft and business. These spaces would also provide more area for micro-designers to store materials, and potentially hire employees or assistants, as was desired by several participants. Without the financial risk of renting a warehouse or workspace, micro-fashion designers would have the opportunity to continue developing small-business skills without the insecurity of starting a new business. Co-working spaces could even take form as co-ops, since several of the participants in this study were from similar geographic regions. Co-working spaces could also be an opportunity for flexibility, for several study participants plan to transition out of their full-time employment, as well as a sense of community. While micro-fashion designing is a term designated to the participants in this study, many of the participants had never previously labeled themselves as such, but soon identified with the term. Co-working spaces would allow for micro-designers like those in this study, to develop communities of micro-fashion designers—creating an economic structure founded on cooperation and support, where the



designers can learn from one another and potentially collaborate on projects, business ventures, etc.

Co-working spaces would also give micro-designers a low financial risk opportunity to expand their businesses while continuing the use of upcycling, zero waste, slow fashion, and the use of secondhand materials. The low-cost spaces could potentially be an experiment to see if these businesses can remain at the same level of sustainability while growing and expanding their consumer bases.

### **III. Micro-Designing Partnerships**

Partnerships between micro-fashion designers and large fashion retailers could be established in the transition of traditionally unsustainable fashion companies adopting sustainable supply chains. Partnerships would allow micro-designers to grow their consumer base and promote their sustainable garment production, while simultaneously assisting with the sustainable designing of larger brands. This would be a mutually beneficial partnership, for micro-fashion designers would receive advertising and an increased consumer base from working with a larger retailer, and larger fashion companies would also benefit from a new audience of consumers desiring ethical and sustainably produced garments. In such partnerships, the larger fashion retailers involved would also be subject to the previously proposed subsidies and tax concessions since they will be working with the micro-designer to develop sustainable clothing lines, and thus a sustainable supply chain.

Partnerships have the potential to prevent the potential ramifications of large fashion retailers adopting sustainable micro-fashion designing processes. The potential consequences that may be avoided are price-gouging micro-designers, unregulated material sourcing, and design theft. By working directly with sustainable micro-designers, like those surveyed and

interviewed in this study, larger brands can adopt ethical practices with direct insight from individuals who have built businesses based on sustainable practices. In working with micro-designers, the sustainable designs and garments produced would not be at risk of design theft or price-gouging, since the two parties are working in cooperation with one another. Micro-designers will also have the opportunity to lead and assist in material sourcing practices, as well as the garment production itself through processes of upcycling, zero-waste, etc. While the sustainable micro-designers will not have total control over the garment production involved in potential partnerships, the coordination between micro-designers and large retailers is a starting point in the transition from fast fashion.

### **Expanding Transparency and New York State Senate Bill S7428**

Transparency for the materials the sustainable garment was made from can be ensured through a requirement to directly state where the materials were sourced, how they were constructed, and how much waste was produced. New York State Senate Bill S7428, or the “Fashion sustainability and social accountability act”, requires supply chain mapping and impact due diligence disclosure, holding fashion retailers and manufacturers liable to disclose environmental waste (The New York State Senate). The bill is applicable to every fashion retailer within the state of New York that has an annual worldwide gross receipts exceeding one hundred million dollars, where they are forced to disclose their production processes, as well as the environmental and social outcomes of their production. The environmental and social disclosure of the applicable retailers, if passed, must be posted on the fashion retailer sellers and manufacturers website with a transparent and understandable link to the required information. The linked information of the companies would also allow consumers to view what measures the company is taking in order to reduce their environmental and social impact.

Although the bill has not yet been passed, I propose it be expanded to all fashion retailers operating within the United States. This proposal would hold all large fashion retailers accountable and provide transparency in garment production to assist consumers in making informed and ethical buying choices. The expansion of the bill would uphold the same requirements for disclosure and adding a link to the retailer's website with transparent information. A nationwide transparency bill could potentially pressure large retailers to adopt more sustainable practices since consumers will have the opportunity to educate themselves on each business' practices, allowing them to make informed decisions on where they choose to buy from.

In accordance with requiring specific information to be linked on company websites, in order to make the details on wastage and how a garment was produced, I propose expanding upon New York's S7428, by requiring fashion retailers to provide a brief description under each specific item. For example, the state of California requires retailers to provide a Proposition 65 warning under each item that could be affected by exposure to chemicals that cause cancer, birth defects, and other reproductive harm (California Office of Environmental Health Hazard Assessment). The warning falls under the Safe Drinking Water and Toxic Enforcement Act of 1986, forcing manufacturers and fashion retailers to visibly market this warning under their products, allowing consumers to make a conscious choice about their health and what products they choose to consume. Following the lead of these warnings, I propose that fashion retailers be required to provide a notification under products made through unsustainable modes of production. This would require retailers to provide transparent information about how each item was made, including where it was manufactured, the labor used to create it, and the materials it was constructed from. This transparency provides consumers with an opportunity to make an

informed decision about the items they purchase, potentially dissuading them from buying unethical products. Retailers should also have the opportunity to add a message about how sustainable a specific item is. This message could include the sustainable process it was made through, the amount of waste produced, the difference in the amount of waste compared to more traditional modes of garment production, and the labor involved. This mandatory label about how an item was produced would allow customers to make informed purchases, permitting consumers with the responsibility of choosing what labor and production processes they will accept.

Sustainability labels could also model off of existing certifications proving sustainability and an ethical labor process. For example, the Fair Trade Certifications ensures that a brand pays fair wages to their employees in developing countries and that they are provided with safe working conditions. The Fair Trade Certifications shows consumers that a company is responsible to their employees and the environment, where products are made “according to rigorous, social, environmental, and economic standards” (Fair Trade Certified). The Sustainable Apparel Coalition is another example of a third-party certification for assessing a fashion retailer's levels of sustainability and environmental impact. The coalition measures the environmental, social, and labor impacts of fashion retailers in order to address inefficiencies with sustainable solutions. Data collected by the coalition on specific brands is available to the public, but I propose fashion retailers publicize their score in order to openly show consumers that their products are ethically made or that they are making an effort to transition their supply chain.

## Conclusion

In this study, I researched micro-fashion designing, establishing it as a significant and developing subset of the sustainable fashion industry. In order to do this, I reviewed existing literature and research on the U.S. fashion industry and the growth of the sustainable fashion market, as well as modes of micro-production like upcycling, zero-waste, the use of secondhand materials, and slow fashion. I surveyed 32 micro-designers and interviewed four, using Depop as a platform to find sellers that fit the micro-designer criteria established in this study. I analyzed this original research to determine specific barriers in translating sustainable micro-processes of garment production into the larger sustainable fashion industry, informing my policy recommendations.

I discussed existing literature about issues related to the wastefulness of the fast fashion industry, the issues of greenwashing, alternative fabrics, and aesthetic in the sustainable fashion industry, and the sustainable and exclusive nature of micro-fashion designing. In the literature review, I discovered that the micro-fashion designing processes of upcycling, zero-waste, slow fashion, and the use of secondhand materials, are alternatives to traditional processes of mass produced garment manufacturing. I used this informed data to mold questions I asked interviewees and surveyors when collecting the data. I analyzed the data in order to find patterns in the 32 survey responses and four interviews, determining which information is necessary to inform my policy recommendations. The data points to a need to translate micro-fashion designing practices to the larger fashion industry, in order to move away from the use of alternative fabrics, firsthand materials and waste, and the increasing trend cycle. From this, I determined that there is a need for policy change requiring large fashion retailers to become more sustainable and ethical businesses through a variety of measures.

The policy recommendations focus on how to translate sustainable micro-fashion designing practices to the larger fashion industry. The proposals include, subsidies and tax concessions for integrating a sustainable supply chain, labor and material warnings modeled off of California's Proposition 65 and New York State Assembly Bill A8352, and free or low-cost working spaces for micro-fashion designers and sustainable fashion retailers. The policy recommendations are applicable at local, state, and federal levels, and can be altered where necessary. The recommendations I have made in this study are informed proposals based on the research conducted and data collected from my survey and interviews.

This study is foundational research for the sustainable fashion industry's growing subset of micro-fashion designing. The study provides an original definition of the emerging sector and provides data collected from micro-fashion designers found on the app Depop, a growing platform for sustainable fashion. The research in this study provides policy recommendations for making the larger fashion industry more sustainable, specifically how to translate sustainability and micro-scale garment production processes onto a larger scale. More research will need to be conducted on the general micro-fashion designing practice, in order to better establish it as a significant market within the fashion industry. Future research should study how micro-fashion designers, situated similarly to participants in this study, continue to grow their businesses while remaining sustainable, or if they adopt less sustainable practices while increasing in size. Additionally, research should be conducted on potential new policies for reducing the waste produced by the fashion industry and how to continue increasing transparency in fashion designing practices. Finally, researchers should study the long-term effects of micro-fashion designing, potentially following garments of clothing in order to analyze the life cycle of clothing made through micro-designed processes.

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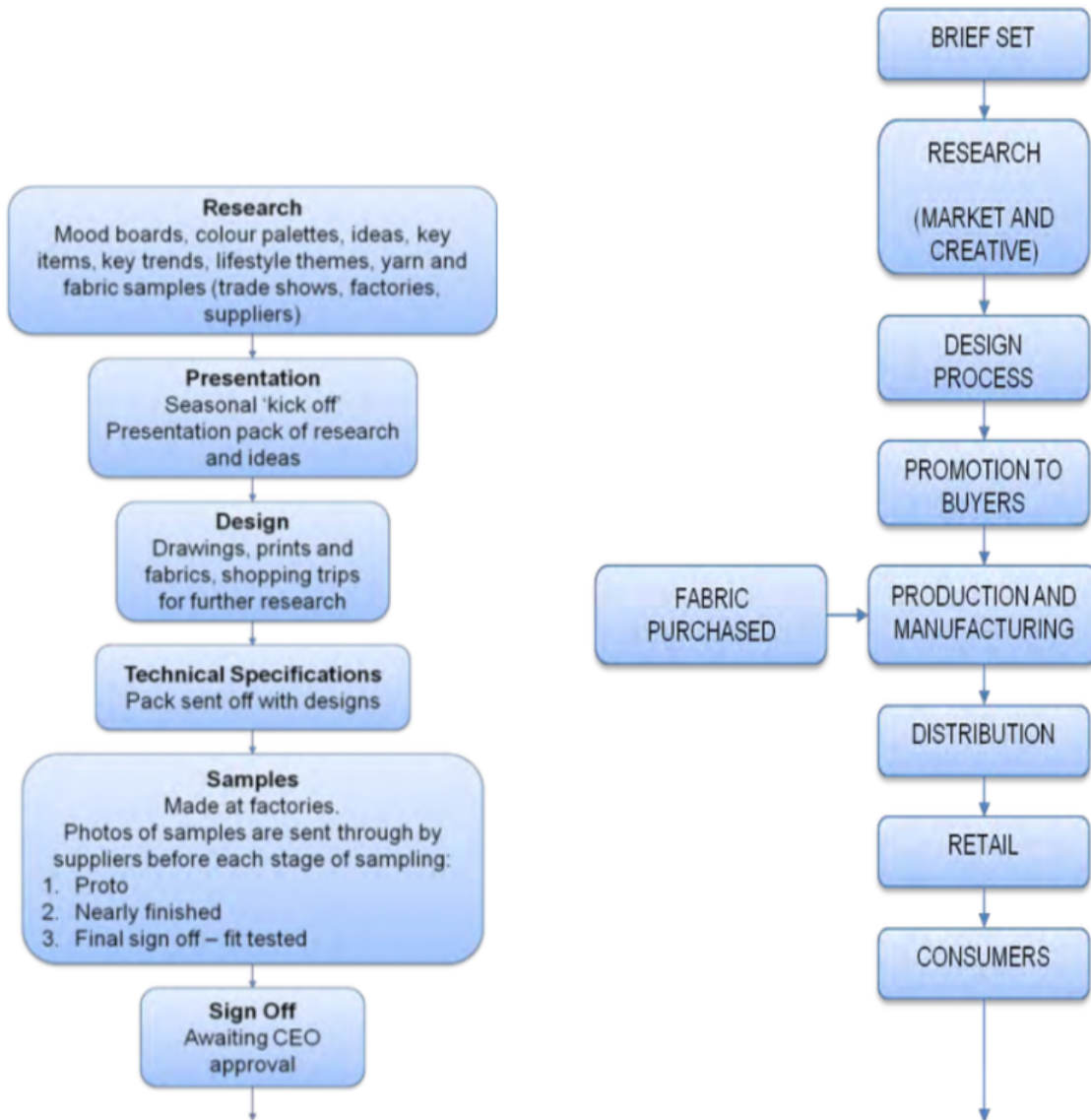
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Appendix A



The High Street Fashion design process, and the standard fashion design process model (Han, 2015).

## Appendix B

### Survey Questions

1. CONSENT STATEMENT: I am at least eighteen years of age. I have read this form and the research study has been explained to me. I am fully aware of the nature and extent of my participation in this research project and the possible risks as outlined above. I understand that I may withdraw my participation on this project at any time without prejudice or penalty of any kind. I hereby agree to participate in this research project.
2. How old are you?
3. Which gender do you identify with?
4. What platform(s) do you run your business on?
5. What part of the U.S. are you selling from?
6. How long have you been running your business for?
7. How many sales do you average per month?
8. Have you integrated any sustainable practices into your store?
9. If you answer yes to the previous question, what forms?
10. Where do your materials come from?
11. What kind of packaging do you use?
12. How much time have you devoted to integrating sustainable practices into your business?
13. Have you found it difficult to integrate sustainable practices into your business?
14. Where do you advertise your products?
15. How much are you spending, on average, on materials per month?
16. How much time, on average, do you spend making each product?
17. How much, on average, do your items sell for?

18. How much time, on average, do you dedicate to your business per week?
19. Do you have an occupation outside of your online store? (This includes being a student).
20. If you answered yes to the previous question, how many hours do you work per week?
21. How important is sustainability in your business?
22. How many items, on average, are you making per month?
23. Are you the only person running your business or do you work with someone else?
24. Micro-fashion designing is a process of fashion design produced on a micro-scale, typically run by one or two people. This mode of production is considered a sect of the sustainable fashion industry, utilizing ethical and socially responsible practices and materials. Would you consider yourself to be a micro-designer?
25. Would you consider yourself to be sustainable?
26. Would you like to expand your business in the future or do it full-time?
27. Would you be willing to do a short interview via phone or Zoom? Interviews will be confidential and no names or identifying information will be reported in the research.
28. Do you only sell handmade items?

## Appendix C

### Interview Questions

1. What is your role at your business? What are your tasks and responsibilities?
2. How long have you been in business for? When was your business started?
3. How long have you been selling on Depop?
4. How much do your items typically cost?
5. How long do your products, on average, take to make?
6. How many people are working for your business?
7. Where do your materials come from?
8. What kind of materials are you using?
9. What does marketing look like for your business?
10. What does shipping and distribution look like for your business? What kind of packaging are you using?
11. How are you integrating sustainability into your business practice? What modes of sustainable practices are you using (upcycling, zero-waste, slow fashion, etc.)?
12. What challenges do you find in this integration?
13. Why do you care about sustainability?
14. What sustainability practices would you like to implement?
15. What would make it easier for you to produce sustainably at this micro level?
16. Do you think similar sustainable practices could be applied to the larger [sustainable] fashion industry?
17. Do you think that your buyers want more ethical and sustainable buying options?
18. Would you consider yourself a micro-designer/micro-producer?



19. What are your goals for your business? Can you see your store/business expanding?

20. What would make it possible for you to practice sustainably while continuing to grow your business?

**Appendix D**

\*Results for question one and question 27 have been redacted to preserve participant anonymity.

**Q2 - How old are you?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How old are you?	1.00	3.00	1.75	0.61	0.38	32

#	Answer	%	Count
1	18-22	34.38%	11
2	23-29	56.25%	18
3	Over 30	9.38%	3
	Total	100%	32

**Q3 - Which gender do you identify with?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Which gender do you identify with?	1.00	3.00	2.09	0.38	0.15	32

#	Answer	%	Count
1	Male	3.13%	1
2	Female	84.38%	27
3	Non-binary / third gender	12.50%	4
4	Prefer not to say	0.00%	0
	Total	100%	32

**Q4 - What platform(s) do you run your business on?**

#	Answer	%	Count
1	Depop	50.00%	32
2	Etsy	20.31%	13
3	Independent Website/Domain	17.19%	11
4	Other(s):	12.50%	8
	Total	100%	64

Q4\_4\_TEXT - Other(s):

Other(s): - Text

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Mercari

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Nuuly, Instagram

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Objects Limited

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Instagram

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Poshmark, Facebook, Mercari, Grailed, Ebay

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instagram

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In person vintage/craft markets

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Instagram

**Q5 - What part of the U.S. are you selling from?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What part of the U.S. are you selling from? - Selected Choice	1.00	4.00	2.22	1.05	1.11	32

#	Answer	%	Count
1	West	34.38%	11
2	Midwest	21.88%	7
3	East	31.25%	10
4	South	12.50%	4

5	Other:	0.00%	0
	Total	100%	32

Q5\_5\_TEXT - Other:

Other: - Text

**Q6 - How long have you been running your business for?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How long have you been running your business for?	1.00	4.00	2.44	0.86	0.75	32

#	Answer	%	Count
1	Less than 6 months	15.63%	5
2	6 months - 1 year	34.38%	11
3	1 - 3 years	40.63%	13
4	More than 3 years	9.38%	3
	Total	100%	32

**Q7 - How many sales do you average per month?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How many sales do you average per month?	1.00	4.00	2.38	0.89	0.80	32

#	Answer	%	Count
1	< 5	15.63%	5
2	5-10	43.75%	14
3	11-24	28.13%	9
4	> 25	12.50%	4
	Total	100%	32

**Q8 - Have you integrated any sustainable practices into your store?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Have you integrated any sustainable practices into your store? - Selected Choice	1.00	4.00	1.09	0.52	0.27	32

#	Answer	%	Count
1	Yes	96.88%	31

2	Potentially	0.00%	0
3	No	0.00%	0
4	Other:	3.13%	1
	Total	100%	32

Q8\_4\_TEXT - Other:

Other: - Text

---

Not always but whenever I can! Like reworking old clothes or using thrifted fabric

**Q9 - If you answered yes to the previous question, what forms?**

#	Answer	%	Count
1	Zero-waste	11.65%	12
2	Upcycling	31.07%	32
3	Slow fashion	22.33%	23
4	Secondhand materials	30.10%	31
5	Other(s):	4.85%	5
	Total	100%	103

Q9\_5\_TEXT - Other(s):

Other(s): - Text

Natural dye

in addition to upcycling, I would like to add that I often gravitate towards clothing items that are not in perfect condition or have obvious blemish that may keep them from selling at thrift stores. this kind of item often ends up in the landfill. To help keep this from happening, I print my artwork over the stain to cover it up.

minimal waste - reusing boxes, bags, packing supplies and compostable mailers

Dumpster diving

I only use second hand materials and encourage my customers to send me their used clothes/materials to give them new life!

**Q10 - Where do your materials come from?**

#	Answer	%	Count
1	Secondhand stores	54.55%	30
2	Craft stores	18.18%	10
3	Other(s):	27.27%	15
	Total	100%	55

Q10\_3\_TEXT - Other(s):

Other(s): - Text

Online

Donations

Rag houses and auctions.

Inherited from my mom

some metal parts like grommets / rivets / chains come from larger distributors

Mostly from my own closet or friend's closets

Online

Fabric wear house

Family and friends

donations from family/friends

Online thrifting

My own old clothing

gifts, hand-me-downs, sometimes sourced from the buyer

Donations

Etsy and sometimes family members give me items to upcycle

**Q11 - What kind of packaging do you use?**

#	Answer	%	Count
1	Secondhand (ex.reusing old packaging,etc.)	43.90%	18
2	Biodegradable/Compostable	29.27%	12
3	Other(s):	26.83%	11



		Total	100%	41
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Q11\_3\_TEXT - Other(s):

Other(s): - Text

Paper

Plastic

Mailing envelopes

In the beginning, I only used recycled packaging material. As orders numbers grew, I had to purchase new mailer bags. Mailer bags can be recycled but have to be taken to a drop off point & cannot be recycled with the rest of the items your city accepts. This is because they jam up the sorting machine at the recycling plant. I am currently looking for a compostable mailer bag that is affordable. Compostable bags tend to be about 4x the price of non-compostable mailer bags. The rest of my packaging is paper and can be recycled.

I do get new polymailers

Store bought

Both new & reused packaging

Full recyclable down to the stickers we use and business cards that you can plant

Sadly, poly mailers also due to the cheaper cost

Polymailers from Amazon, tissue paper

**Q12 - How much time have you devoted to integrating sustainable practices into your business?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
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1	How much time have you devoted to integrating sustainable practices into your business?	1.00	5.00	4.52	1.07	1.15	31
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#	Answer	%	Count
1	Less than 1 hour	3.23%	1
2	1 - 3 hours	6.45%	2
3	3 - 5 hours	6.45%	2
4	5 - 8 hours	3.23%	1
5	More than 8 hours	80.65%	25
	Total	100%	31

**Q13 - Have you found it difficult to integrate sustainable practices into your business?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Have you found it difficult to integrate sustainable practices into your business?	1.00	5.00	1.84	1.35	1.82	32

#	Answer	%	Count
1	Definitely not	65.63%	21

2	Probably not	12.50%	4
4	Probably yes	15.63%	5
5	Definitely yes	6.25%	2
	Total	100%	32

**Q14 - Where do you advertise your products?**

#	Answer	%	Count
1	Instagram	53.06%	26
2	Other social media platform:	22.45%	11
3	Other(s):	12.24%	6
4	None. I don't advertise except for where my items are sold.	12.24%	6
	Total	100%	49

Q14\_3\_TEXT - Other(s):

Other(s): - Text

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Snapchat

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Pinterest

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through etsy & depop

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Tiktok

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Tiktok

**Q15 - How much are you spending, on average, on materials per month?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much are you spending, on average, on materials per month?	1.00	5.00	3.25	1.39	1.94	32

#	Answer	%	Count
1	Less than \$25	12.50%	4
2	\$25 - \$50	25.00%	8
3	\$51 - \$75	12.50%	4
4	\$75 - \$100	25.00%	8
5	More than \$100	25.00%	8
	Total	100%	32

**Q16 - How much time, on average, do you spend making each product?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much time, on average, do you spend making each product?	1.00	6.00	3.28	1.35	1.83	32

#	Answer	%	Count
1	Less than 1 hour	3.13%	1
2	1 - 3 hours	31.25%	10
3	3 - 5 hours	28.13%	9
4	5 - 7 hours	21.88%	7
5	7 - 10 hours	3.13%	1
6	More than 10 hours	12.50%	4
	Total	100%	32

**Q17 - How much, on average, do your items sell for?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much, on average, do your items sell for?	1.00	5.00	3.63	1.36	1.86	32

#	Answer	%	Count
1	Less than \$25	3.13%	1
2	\$26 - \$50	31.25%	10

3	\$51 - \$75	6.25%	2
4	\$76 - \$100	18.75%	6
5	Greater than \$100	40.63%	13
	Total	100%	32

**Q18 - How much time, on average, do you dedicate to your business per week?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much time, on average, do you dedicate to your business per week?	2.00	5.00	3.75	1.03	1.06	32

#	Answer	%	Count
1	None at all	0.00%	0
2	A little	12.50%	4
3	A moderate amount	31.25%	10
4	A lot	25.00%	8
5	A great deal	31.25%	10
	Total	100%	32

**Q19 - Do you have an occupation outside of your online store? (This includes being a student).**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have an occupation outside of your online store? (This includes being a student).	1.00	2.00	1.30	0.46	0.21	30

#	Answer	%	Count
1	Yes	70.00%	21
2	No	30.00%	9
	Total	100%	30

**Q20 - If you answered yes to the previous question, how many hours do you work per week?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If you answered yes to the previous question, how many hours do you work per week?	2.00	5.00	3.48	1.02	1.03	23

#	Answer	%	Count
1	Less than 10	0.00%	0
2	11 - 20	21.74%	5

3	21 - 30	26.09%	6
4	31 - 40	34.78%	8
5	More than 40	17.39%	4
	Total	100%	23

**Q21 - How important is sustainability in your business?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How important is sustainability in your business?	3.00	5.00	4.31	0.73	0.53	32

#	Answer	%	Count
1	Not at all important	0.00%	0
2	Slightly important	0.00%	0
3	Moderately important	15.63%	5
4	Very important	37.50%	12
5	Extremely important	46.88%	15
	Total	100%	32

**Q22 - How many items, on average, are you making per month?**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How many items, on average, are you making per month?	1.00	4.00	2.41	0.86	0.74	32

#	Answer	%	Count
1	Less than 5	12.50%	4
2	5 - 15	46.88%	15
3	16 - 25	28.13%	9
4	Greater than 25	12.50%	4
	Total	100%	32

**Q23 - Are you the only person running your business or do you work with someone else?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Are you the only person running your business or do you work with someone else?	1.00	2.00	1.03	0.17	0.03	32

#	Answer	%	Count
1	Yes	96.88%	31

2	No, I work with one or more other people	3.13%	1
	Total	100%	32

**Q24 - Micro-fashion designing is a process of fashion design produced on a micro-scale, typically run by one or two people. This mode of production is considered a sect of the sustainable fashion industry, utilizing ethical and socially responsible materials and practices. Would you consider yourself to be a micro-designer?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Micro-fashion designing is a process of fashion design produced on a micro-scale, typically run by one or two people. This mode of production is considered a sect of the sustainable fashion industry, utilizing ethical and socially responsible materials and practices. Would you consider yourself to be a micro-designer? - Selected Choice	1.00	4.00	1.09	0.52	0.27	32

#	Answer	%	Count
1	Yes	96.88%	31
2	No	0.00%	0
3	N/A	0.00%	0
4	Other:	3.13%	1
	Total	100%	32

Q24\_4\_TEXT - Other:

Other: - Text

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 i guess! yes and no
**Q25 - Would you consider your business to be sustainable?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you consider your business to be sustainable? - Selected Choice	1.00	4.00	1.38	0.65	0.42	32

#	Answer	%	Count
1	Definitely yes	68.75%	22
2	Probably yes	28.13%	9
3	N/A	0.00%	0
4	Probably not	3.13%	1
5	Definitely not	0.00%	0
6	Other:	0.00%	0
	Total	100%	32

**Q26 - Would you like to expand your business in the future or do it full-time?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you like to expand your business in the future or do it full-time? - Selected Choice	1.00	5.00	1.78	1.22	1.48	32

#	Answer	%	Count
1	Yes	62.50%	20
2	Potentially	18.75%	6
3	No	0.00%	0
4	This is already my full-time employment.	15.63%	5
5	Other:	3.13%	1
	Total	100%	32

Q26\_5\_TEXT - Other:

Other: - Text

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It's a lot of fun but sales are inconsistent so would be too stressful for me to do full time. Would definitely consider going full time one day in the future, and this is great practice for now!

**Q28 - Do you only sell handmade items?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you only sell handmade items? - Selected Choice	1.00	3.00	1.72	0.72	0.51	32

#	Answer	%	Count
1	Yes, I only sell items I make myself.	43.75%	14
2	No, I sell a combination of items I make myself as well as other products I don't make.	40.63%	13
3	Other:	15.63%	5
	Total	100%	32

Q28\_3\_TEXT - Other:

Other: - Text

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Vast majority I make. Sometimes with a bit of vintage.

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I sell items I make but also sell some personal items on my depop. I don't count those items as Studio of One items though

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Some items don't require upcycling

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Combo- I sell my handmade items online and a combo of handmade/ and secondhand clothes at in person markets

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I also sell my old clothes on Depop, but don't consider it part of my business