

## **New sustainable business models in the fashion industry: an explorative research on rental and repair models**

Ophelia Bostyn, PhD Candidate, University of Antwerp  
Nathalie Verboven, PhD Candidate, University of Antwerp  
Annick Schramme, Professor, University of Antwerp

Ophelia Bostyn is a PhD student at the University of Antwerp (Faculty of Business and Economics). Her research focuses on the business and legal aspects of the viability of craftership and new business models.

Nathalie Verboven is a PhD student at the University of Antwerp (Faculty of Business and Economics). Her research focuses on fashion and sustainability and the impact of turbulences on organisations in the cultural sector.

Prof dr. Annick Schramme is a professor at the University of Antwerp (Faculty of Business and Economics), responsible for the Master's programme in Cultural Management and international Masters' in Fashion Management at Antwerp Management School. Her research focuses on cultural policy, governance and entrepreneurship in the CCSI.

### **Abstract**

Over the last decades, fast fashion has grown substantially through globalisation. In 2020, a report on showed that major fast fashion companies – such as H&M, Zara, and Forever 21 – release more than 1 collection per month (Social Responsibility of China's Textile and Apparel Industry). Over recent years Temu and Shein produce even collections on a weekly basis. The growth of online shopping, flexible return practices, changed consumer preferences and fast-fashion business strategies have resulted in increased shares of returned and unsold textiles. In Europe, an estimated 5.8 million tonnes of textiles waste is generated each year, approximately 11 kg per person per year (EU Strategy for Sustainable and Circular Textiles, 2022). Waste management is thus also a significant issue for the fashion and clothing industry. Recent research indicates that only 1% of used clothing is recycled (Riemens et. al 2021). As a consequence fashion is seen now as part of the top three most polluting industries (Niinimäki, et al, 2020). This is due to the fact that fashion, and especially fast fashion, still has a persistent linear character (take-make-waste) (Clube & Tennant, 2020; Chi et al., 2023), which produces a lot of waste throughout value chains.

As a response, policymakers and society are advocating for a transition to a more circular economy, in order to produce less and to reduce fashion waste. With the European Green Deal (2020) the EC wants to stimulate economic growth that is smart and sustainable (lower carbon, resource efficient (circular) and socially inclusive). This has opened the door for many fashion companies within Europe to critically rethink their business models as well as look into more partnerships and changes in their supply chain. In this context, rental, resale and repair models have gained increased attention as practices adding towards a broader sustainable and circular strategy. In this paper we seek to identify the thresholds and opportunities for SME's and entrepreneurs in the fashion industry to adopt circular business models, with a specific focus on fashion rental and repair. We focus specifically on SME's because they usually have a flexible structure and often are willing to adapt their business model to a more circular one. So through the analysis of several cases of pioneering fashion companies, we explore the challenges of repair and rental models that SME's in the fashion industry are facing, sharing some initial insights that can be inspirefull for other companies to implement as well..

## **1 The need for Circularity in the Fashion Industry**

More and more fashion items are being bought and kept for shorter periods of time, shortening the lifespan of clothing and contributing to environmental issues. It is estimated that on average we wear our clothing only a limited 7 times before discarding the item. As a result, global fashion sales have doubled (Ellen MacArthur Foundation, 2017). Expecting this trend to continue, the fashion industry is projected to be among the most polluting industries by 2050, accounting for 25% of global carbon emissions (Ellen MacArthur Foundation, 2017). The fashion industry's effect on the environment is problematic, as the sector emits 10% of the world's carbon (i.e. more than aviation and shipping industries combined), using 25% of the chemicals, 20% of the plastics produced globally, and accounts for 20% of industrial waste water pollution annually (Choudhury, 2014). Furthermore, there is a significant amount of waste produced by the current global and linear production and supply chain (Fernandes et al., 2019). In Europe, an estimated 5.8 million tonnes of textiles waste is generated each year, approximately 11 kg per person per year (EU Strategy for Sustainable and Circular Textiles, 2022). By 2030, it is expected that more than 134 million tonnes of textiles will be discarded globally per year (EMF 2021). Unsustainable consumption, censored by 'fast fashion', further adds to the environmental issues, increasing fashion purchases and waste volumes (Fernandes et al., 2019).

As a response to the negative environmental impact of the fashion industry, policy makers at different levels (the UN and the EC are at the forefront) are advocating for a transition to a more circular economy, in order to decrease fashion waste and to maximize garment and accessory usages (Coscieme et al., 2022). A more sustainable and circular fashion industry is also a policy priority for Europe. Textiles and fast fashion are already highlighted as focus areas in the European Circular Economy Action Plan (2020). Furthermore, the European Strategy for a Sustainable and Circular Textile (2022) highlights with reason the importance of technological developments such as the Digital Product Passport as well as the urge for new business models (stimulating the acceleration of which via EPR). A need for more standardisation, transparency and efficiency in the product development is not only stressed in this strategy (with the introduction of a set of mandatory Ecodesign requirements), but also the development of the PEFCR (Product Environmental Category Rules) for Apparel and Footwear. With the #ReFashionNow campaign, the European Commission stresses the importance of a systematic shift, addressing that 'fast fashion should be out of fashion'.

To make sure these targets and goals are met, government support, in addition to new legislation, is also of the utmost importance, as many innovative fashion companies and technology startups are currently struggling to scale. And it is this innovation that will be necessary in leading change. Take as an example the recent bankruptcy of Swedish recycler Renewcell. The company was at the vanguard of a rising generation of material innovators positioned to bring lower-impact textiles to market — a shift widely viewed as critical to fashion's ambitions to curb its impact on climate and nature.

## **2 New Business models in the fashion industry**

The traditional business model in the fashion industry consists of a four-step process: designing and creating new collections, presenting them in showrooms, sourcing and producing orders, and finally distributing and selling products through wholesale channels like multi-brand stores and department stores (Perlacia et al., 2017). In contrast to the traditional business model in the fashion industry, circular business models emerge, as part of the shift towards a circular economy integrating environmental concerns while meeting consumers demands, and fosters more sustainable business models. (Fernandes et al., 2019). These business models focus on keeping products and materials in use for longer through practices such as repair, reuse, repurposing, and recycling. In some countries the approach is even wider, such as in the Netherlands where circularity goals are based on the 10R model by Jacqueline Cramer (Cramer, 2022), ranking initiatives based on a scale of one to 10 in terms of priority: Recover: Incinerate waste with energy recovery, Recycle: Salvage material streams with highest possible value, Re-purpose: Reuse product but with other function, Remanufacture: Make new from second hand product,



rental services and at the same time, they can also offer repair services. Additionally, the brand can establish a resale platform and partner with a local textile recycling company for take-back programmes.

However, there are not yet that many companies working with these new business models. Most of them are quite young and are still struggling to survive financially. There is also still a lot of uncertainty on how circular business models can be implemented effectively in the fashion industry (Perlacia et al., 2017). Certainly, most of these young companies are SME's with strong ethical and sustainable values. They are willing to change the fashion system but face difficulties in finding the right and viable business model in this high competitive environment. Therefore, sharing insights and knowledge on these new business models is crucial. With this paper we want to gain a deeper understanding about the thresholds and challenges that these SME's are facing in finding the right business model.

### 3 Rental and Repair models for SME's in the Fashion Industry

An increasing number of studies focus on consumer's attitudes towards sustainable fashion as the industry is characterized by rapidly changing trends and consumer preferences (Berg, 2022). However only a few research examine the wadaptation/implementation of sustainable business models in the fashion industry (Perlacia et al., 2017). Both however can also go hand in hand, as was the case for the Tetra project in Flanders called "Size Zero Waste", on which this research paper is based.

Furthermore, circular practices in the fashion industry have predominantly concentrated on the development of sustainable materials, establishment of take-back programs, and enhancement of recycling infrastructure (Fashion for good & Accenture's strategy, 2019). However, there's a necessity to explore further other circular business models in order to change radically the fashion system. Repair, resale and rental services are the most common new models with a high potential for the future. By 2025, the fashion rental market is expected to be valued \$2.1 billion (McKinsey&Company, 2023). Furthermore, repair services can extend the usage phase of a garment by 9 months, reducing environmental footprint of the item by approximately 20 to 30% (Case & Krönert, 2022). Unlike models centred on garment resale, rental and repair models remain underutilized. Fashion Revolution (2022) reports that only approximately 18% of all fashion brands offer repair services. The underutilization these models persists due to lingering uncertainty among SME's on how to successfully implement them. An important barrier in this regard for example is that the use of rental and repair models can lead to a cannibalization of their own sales (Feng et al., 2020). Despite this, rental and resale platforms are becoming more accepted within the fashion world and there are SME's that start experimenting with these models (Feng et al., 2020).

In this study we seek to identify viable pathways for SME's and entrepreneurs in the fashion industry to adopt circular models, with a specific focus on fashion rental and repair models.

**Repair** entails the activity of returning a faulty or broken product or component back to a usable state (Case & Krönert, 2022). Repairing fashion items can include darning or patching holes or replacing functional components such as buttons and zippers. **Rental** services have emerged in the last years, entailing the temporary transfer of ownership (Perlacia et al., 2017). In a traditional retailer model, the retailer acquires garments and accessories from an external or in- house manufacturer and maintains ownership over those items until they are sold. (Perlacia et al., 2017). In a fashion **rental** model, fashion is rented out for a specific period of time, entailing a temporary transfer of ownership (Fashion for good & Accenture's strategy, 2019).

In this paper we specifically focus on these business models for SME's because of different reasons: a lot of them are willing to adapt their business model to a more sustainable/circular one, but they often lack the knowledge, the capacities and the resources for this sustainable transformation. Especially business model innovation is important here, as it can be argued that resale, rental an repair models redefine the core logic of how companies in the fashion industry operate. SME's offering these services have not necessarily introduced new clothing items or technologies. However they have significantly

changed how retailers generate, distribute, and retain value (e.g. by renting out clothes on a subscription basis or offering repair services (Perlacia et al., 2017)).

#### 4 Methodology

As mentioned, this exploratory paper is based on the first results of a deep dive study into circular models in the fashion industry (TETRA-project<sup>1</sup> ‘Size Zero Waste’). As a first step of our research project, we investigated the way of working of existing circular business models within the fashion industry. This knowledge was gained by conducting desk research, a literature review and qualitative data from circular fashion companies offering rental and/or repair services outside Flanders. This qualitative part of the research was based on case study research (Yin, 2003;2014) by conducting in depth interviews with the pioneers or CEO’s of these SME’s. These SME’s, strongly focus on sustainability in their value proposition, and serve as cases that can inspire other SME’s wanting to incorporate rental and/or repair services into their business model. The insights of this qualitative study will be discussed in section four.

We selected 7 SME’s that offer either online or offline repair or rental services based on their headquarters being located in different European countries (overview in **Fout! Verwijzingsbron niet gevonden.**). Via desk research and in depth interviews, we were able to analyze the case studies, by describing their activities and by gaining a deeper understanding of the factors that characterise each business model; such as value creation through cost structure (resources, activities) and revenue streams, sourcing of the goods, the inventory system of the goods, pricing, process flow, communication points and sales channels of their business models and interviewees’ experiences, their customers and the problems they were/are facing when implementing these models. Finding cases proved to be challenging due to low response rates. Moreover, during interviews with these SME’s, they were reluctant to divulge information regarding their financials, making it difficult to fully comprehend their revenue streams and cost structures.

*Table 1: Overview of analysed case studies*

SME	Headquarters	Provides rental or repair services	Date foundation
By Rotation	UK	Rental	2019
Cocoon	UK	Rental	2019
EDYMA	Germany	Rental & Repair	2014
Hirestreet	UK	Rental	2018
MUD Jeans	Netherlands	Rental & Repair	2012
Nudea	UK	Repair	2018
United Repair Centre	Netherlands	Repair	2022

In a later phase, in depth interviews were also coded and cast into a Business Model Canvas, along Osterwalder and Pigneur’s nine business model dimensions, to gain more insight into the operability and cost/revenue structure of the cases, as well as challenges and pitfalls that they (have) experienced in practice when implementing a rental and/or repair model.

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<sup>1</sup> TETRA-projects, funded by the Flemish government, involve Flemish Universities and/or College Universities working in co-creation with the target group to translate knowledge into concrete, useful.

## 5 Business models in fashion

Business models have become a buzzword within the cultural and creative industries. But what does it mean? “A business model is a logical story explaining who your customers are, what they value, and how you will make economic returns in providing them that value (Prof. Joan Magretta, Harvard Business School)”. This is just one definition, as there are many. Most importantly is that it relates to value. The role of a business model is to unlock the value potentially embedded in (new) technologies / products / innovations and convert it into market outcomes. Business models are not merely about money-making; rather, business modelling is about understanding how an organisation creates and captures value - be it social, artistic, environmental or financial.

Also for a fashion company, finding the right business model and entailing strategies on how to create, deliver and capture value, is key. In a rapidly changing economic environment (because of new technologies, a pandemic or other crises... ) SME’s must constantly reassess and refine their business model to remain competitive. As mentioned in the first section of this paper sustainability considerations are playing more and more an important role in how an organisation in the fashion industry should operate. This requires integrating sustainability into the core of the business model, from sourcing, design and production to marketing and distribution. In the past decades, interest in the concept of the business model has increased, as business models are seen both by academics and practitioners as a solution to innovation challenges across various sectors, including the fashion industry (Andel, 2020). In the academic literature, various definitions have been proposed. Despite the term being widely adopted there is a lack of consensus on the definition of the concept. Amit and Zott (2001) and Teece (2010) are focusing on value creation: “a business model depicts the design of transaction content, structure, and governance to create value through the exploitation of business opportunities”. They put emphasis on the content, structure, and governance to exploit business opportunities. Conversely, Gassmann et al. (2014), Johnson et al. (2008), and Lindgardt et al. (2009), are focusing on the key components of a business model such as value proposition, value chains and customer segments (Rauhut et al., 2020). The variety in definitions reflect the complex and multifaced nature of a business model, and the various perspectives on its fundamentals. (Van Andel, 2020)

One notable framework is Osterwalder and Pigneur’s Business Model Canvas (2010), outlining nine critical components for a business model, including value proposition, customer segments, channels, customer relationships, revenue streams, key resources, key activities, key partners, and cost structure. This framework is widely embraced as it offers structured and comprehensive framework for analysing various components of a business model. In the context of fashion rental and repair models, which often involve multiple stakeholders and complex value chains, the canvas provides a systematic approach allowing cases to be compared. For this reasons the paper makes use of Osterwalder and Pigneur’s Business Model Canvas, to analyse the repair and rental models. Nevertheless, critically reflection remains necessary as its application is not without limits. While the idea of choosing a model is an attractive proposition, any notion of a fixed menu of models that could be packaged up and replicated by organisations working in different social, political, economic and cultural contexts is not practically viable.

Demil and Lecocq (2010) highlight the dynamic nature that is inherent in the development of a business model, indicating the intricate reciprocity between the resources and competencies, organizational structure, and propositions for value delivery. Others are using an “activity-centered” approach in which the business model has been defined as the bundle of specific interdependent activities that are conducted to satisfy perceived external needs, including the specification of the parties that conduct these activities, and how these activities are linked to each other (Zott & Amit, 2010).

## 6 Initial findings

## 6.1 Business models for Fashion Rental Services

Below we analyse the studied rental cases utilising the nine dimensions of the Osterwalder and Pigneur Business Model Canvas.

### Value proposition

The value proposition within a rental model is to maximise the number of wears of a garment or accessory by allowing it to be shared among multiple individuals through rental services. While conducting desk research and interviews, we found that the cases provide rental services either through a business to consumer (B2C) model or a customer to customer (C2C) model. A first way of providing rental services, is through a B2C model. In this model, the retailer provides rental options for costumers. Another way of providing rental services, is through a C2C model. Here, a platform on which individuals can list their fashion for others to rent, is provided by the business. In this sense, the company acts as a broker; the company does not own fashion items but solely provides a platform for renting pieces (Perlacia et al., 2017). Furthermore, a B2C fashion rental model can be based on a one-off rental or on subscription. In a B2C one-off rental model costumers rent a specific garment or accessory, whereas in a B2C subscription model a monthly fee is paid for access to a range of garments and accessories. The fashion items for rent can vary from luxury items to everyday wear fashion, but tend to lean more towards better quality garments. This because quality items typically have a longer lifespan and therefore stay longer in rotation.

We found that both in a B2C as in a C2C rental model, the value proposition frequently revolves around ecological and social values. With the **ecological mission**, SME's focus on making the fashion industry circular, countering overconsumption, and extending product sustainability through various means. This includes offering quality products that typically stay longer in rotation, encouraging customers to deliver the rented item in person instead of shipping (in a C2C model) and educating consumers about sustainability to drive behavioural change. Education can happen in different ways, for example by providing an impact scale where people can see what the environmental impact would be if they bought an item instead of renting it, but also by teaching clients to wash and store fashion pieces correctly. The **social mission** aims to financially enable individuals to wear luxury clothing through rental. Rental models increase accessibility to designer and luxury fashion by offering affordable rental options, ensuring that everyone can experience the joy of wearing high-end clothing, regardless of their purchasing power. Renting allows a customer to extend their wardrobe with new garments, new styles and high value retailers for a fraction of the normal price, and facilitates quick rotation of garments in one's closet in a more sustainable manner.

*“We aim to empower women to look and feel their best. Members can express themselves with the best brands and styles, and do so in a more responsible, less wasteful way. (Cocoon)”*

To what degree a rental model is more sustainable compared to a traditional fashion model is debatable and depends on several factors such as the amount of times an item is rented out and worn, what type of garments are offered, if garments are repaired when necessary and how often pieces are dry-cleaned. A rental model adds to a more sustainable fashion industry as it allows to extend the lifespan of a garment. Nevertheless, if items are only rented out a few times, rental models do not enhance sustainability. The type of garments up for rent influence also the amount of times it will be rented. Timeless pieces might be rented out more than fashion trend pieces, as they attract a broader cliental for a longer period of time. On the other hand, statement pieces might just be more interesting to rent than buy because they offer the opportunity for individuals to experiment with bold styles and trends. Furthermore, rental models can increase circularity by incorporating repairs in their rental model. Repairing can extend the lifespan of a fashion item when necessary to maintain pieces up to the rental standards, increases the number of wears and times an item can be rented out. Another factor to consider, is the frequency by which an item is being dry-cleaned, as garments need to be cleaned after

they have been rented out for hygienic reasons, adding to the environmental cost. The studied cases try to mitigate this cost by using more eco-friendly cleaning procedures. However, certain garments like coats, which might not be dry-cleaned as frequently when owned by an individual, might undergo more frequent cleaning in the rental context. When integrating rental services with the aim of enhancing the sustainability of the SME, it's crucial to consider all these factors.

### Customer Segment

Initial findings suggest that customers are typically young working professionals with a keen fashion sense, who possess some awareness of sustainable fashion but are primarily driven by the desire to wear high-quality brand clothing. Fashion rental companies are predominantly popular with women aged 25 to 40, who like to follow the latest fashion trends. The main reasons for renting clothing instead of buying, is that it allows customers to wear luxury brands and have quick rotation in their closet in a more affordable manner. During the interviews the business owners revealed that clients are often less concerned about the sustainable advantages of renting and are more inclined towards increasing rotation in their closets, the price and enjoying the experience of wearing luxury brands. However, interviewees also noted that clients want to receive the fashion items they rented as fast as possible. They do not have the time and/or patience to wait for more sustainable shipping methods, which typically involve longer delivery times.

*“A fashion-conscious female, aged between 25 and late 30s, with a desk job and who is quite conscious of sustainability but she cares a lot about saving money and having access to designer and quality fashion” (By Rotation)*

Moreover, C2C rental businessowners face challenges in finding individuals willing to rent out their garments. Despite the gradual acceptance of renting clothes, a perception persists that having others wear one's clothes is somewhat unconventional.

*“A lot of people still tell us they would find it weird for someone else to wear their clothes – which is totally understandable” (By Rotation)*

### Channels and Customer Relationships

Sustainability is often seen as an additional persuasion/sales element. Rental models primarily emphasise the financial benefits of renting in their communication to clients. Rental models increase accessibility to designer and luxury fashion by offering affordable rental options, empowering customers to wear clothing they might not be able to purchase. This affordability factor serves as a significant selling point for rental models.

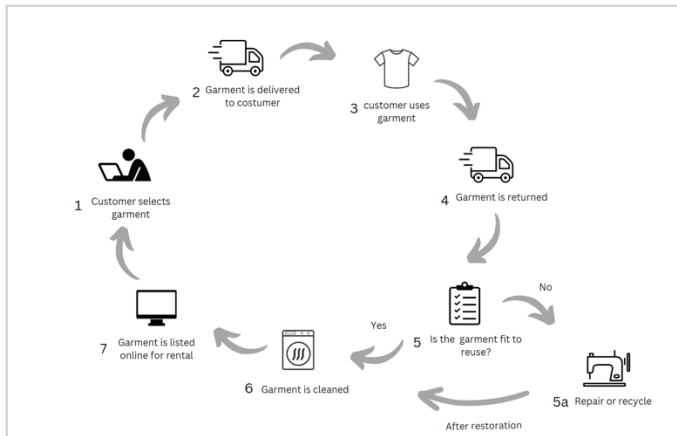
SME's use various communication channels to promote themselves and their values. Social media platforms such as Instagram, Facebook, LinkedIn, and YouTube, are commonly utilized for self-promotion. On their website, companies present their rental services, explaining the rental process and listing the items for rent. On the website of the examined SME's, we can also find the missions of the brand including discussions on sustainability and circularity. Furthermore, interviewees mentioned that they participate in events such as conferences and fashion weeks in order to promote their company and build a network. At last, mailing lists and newsletters are used to keep customers and investors informed about company updates.

### Key activities

The key activities of our rental cases usually consist of the following steps:

Figure 2: Process of a Business Model for Rental Services





When successfully repaired, the item will be cleaned and listed again online for rental. The rental process in a C2C model looks slightly different. In a B2C it is the rental platform that list the item for rent, whereas in a C2C model it is the renter that put his/her own garments and accessories up for rent.

### Key Resources and Key Partners

In a rental model, various resources are essential. The platform and software enabling customers to rent and rent out clothing are pivotal resources. These platforms can entail online channels such as software apps, websites, and social media but can also entail physical locations like shops, pop-ups, and events. In a B2C model, efficient storage and stock management play a vital role. In a C2C rental model, peers rent out their own clothing and the companies server merely as a broker, thus storage facilities are not necessary. Staffing requirements encompass a diverse range of roles, including administration, production (such as sorters and tailors), ICT specialists, shop assistants (for physical stores), and marketing professionals, all crucial for the smooth operation and growth of the rental business. Moreover, establishing partnerships with eco-friendly cleaning companies for detergents, dry cleaning services, repair services, and environmental friendly shipping methods, such as bicycle distribution are essential.

*“As part of our commitment to becoming a fully sustainable business we have partnered with the UK’s number one aftercare specialist BLANC, to offer our users a sustainable alternative to dry-cleaning and to encourage them to mend and restore items to lengthen their lifecycle.”*  
(By Rotation)

### Revenue Streams and Cost Structure

Within the rental model, revenue streams are coming from renting clothes but can also potentially be income from licensing rental software/platforms to other brands interested in offering such services. The biggest costs within the rental model are investments in app/software development and maintenance and expenses related to offering clothes in physical shops. Other expenses include personnel, marketing, and repair/cleaning costs. In a B2C model, storage facilities and stock management contribute significantly to the overall expenditure.

## **6.2 Business models for Repair Services**

While conducting desk research and interviews, we found that cases provide rental services either through a business to consumer (B2C) model or a business (B2B) model. In a B2C model, it is the brand itself that carries out the repairs, employees who repair the fashion pieces are thus directly employed by the brand. Whereas in a B2B model, repair services are carried out on behalf of other brands.

Below we analyse the different cases focussing on repair services utilising the nine dimensions of the Osterwalder and Pigneur Business Model Canvas.

### Value proposition

The value proposition within a rental model is to maximise the lifespan of a garment or accessory by offering repair services. We found that both in a B2C as in a B2B repair model, the value proposition frequently revolves around ecological and social values. Driven by a strong ecological mission, repair models aspire to foster a more circular fashion industry and mitigate overconsumption by enhancing product durability. Some of the companies we interviewed also commit to educate their clients and raise awareness of the environmental impact of the fashion industry, in order to make repair more common practice. But also by showing customers how they can prolong the lifespan of their clothing through correct storage. The social mission of repair models is twofold. On the one hand, reparation of fashion items empowers customers as the life of their favourites pieces is extended. On the other hand, several interviewees indicate that fair work is a key mission for them. Several of the SME's we interviewed focus on fair working conditions. Some SME's also pay special attention to inclusion and diversity of the workforce for repair services, including groups that face difficulties entering in the labour market.

### Customer segments

Interviewees indicated that mostly environmentally conscious clients make use of repair services. These are often loyal customers, who value their garments and accessories. While as a result of fast fashion consumers do not make use of repair services as they do not have the patience/time to wait until their pieces are repaired and rather quickly buy new pieces to replace the damaged items.

*“We don't get many requests for repairs, but when we do, it tends to be our loyal customers” (Nudea)*

During the interviews, SME's indicated that repair services are more popular for higher-quality clothing, as the cost of buying low-quality new items often outweighs the expenses of repairing the item. Companies offering repair services also lean towards providing quality clothing rather than aligning with fast fashion brands.

*“Those (the items being repaired) are often somewhat more expensive items” (United Repair Centre)*

The interviewed SME's also mentioned that periods of higher demand and lower demand may alternate depending on the items the brand or partners offer. For example, the United Repair Centre, who executes repairs for Patagonia among others and is specialised in complex reparations such as Gore-Tex jackets, see a peak in their demand in the winter and a drop during the summer period. To counter this, the United Repair Centre is looking for other partners that offer items that are worn all year round such as more general sport wear.

*“We have a huge winter peak and a huge summer dip. ” (United Repair Centre)*

### Channels and Customer Relationships

SME's use various communication channels to promote themselves and their values, such as social media platforms, Instagram, Facebook, LinkedIn, and YouTube. On their website, companies present their repair services, explaining the repair process. There is also space for discussions on sustainability and circularity. Furthermore, interviewees mentioned that they participate in events such as conferences

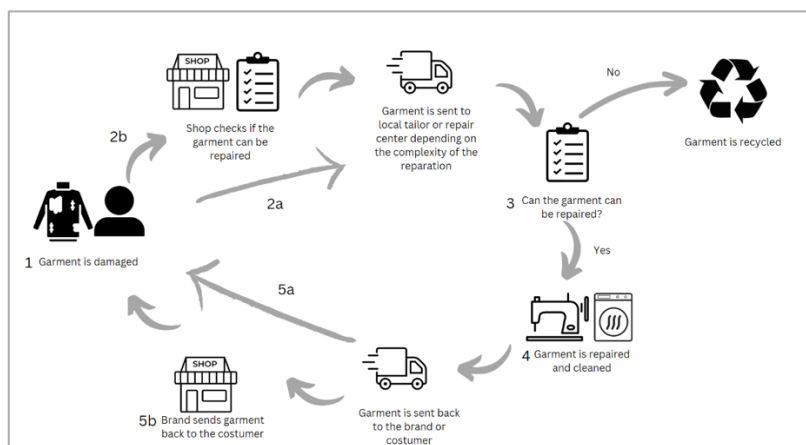
and fashion weeks in order to promote their company and build a network. Mailing lists and newsletters are used to keep customers and investors informed about company's updates. Finally, a B2B repair/rental company is often "invisible" to the end consumer, and communication and promotion of the services are often facilitated through fashion brands that are partners with the SME: developing a shared communication plan between partners is crucial.

*“We’ve been in publicity quite a lot and we do a lot of talks at different conferences, events and things like that. Uh, and then we attend those to network and promote ourselves.” (United Repair Centre)*

### Key activities

The key activities within a repair model usually entails several steps:

*Figure 3: Process of a Business Model for Repair Services*



### Key Resources and Key Partners

In a repair model, various resources are essential. First, personnel including tailors, IT professionals, administration, marketing. Interviewees indicated that finding good staff is sometimes hard, especially tailors that can handle difficult repairs. Moreover, infrastructure consisting of an atelier, machinery and storage facilities, is an important resource. Also materials to execute repairs such as zippers, textiles are key inputs.

Furthermore, establishing partnerships with providers of materials/textiles for repairs, eco-friendly cleaning companies offering detergent and dry cleaning services, eco-friendly shipping companies that for example distribute parcels by bicycle and partners for education on sustainability e.g. universities and experts with whom sustainability courses are jointly organised, is important. In a B2C model local tailors and specialised repair centres are key partners. In a B2B model SME's noted that you should always assess your partner beforehand in order to avoid greenwashing.

### Revenue Streams and Cost Structure

The main costs within a repair model are personnel costs. Especially the wages of tailors, as they are a key component of the repair process. Additional costs include production and material expenses, covering materials for repairs, workshop infrastructure, sewing machines and the storage facilities. Furthermore, shipping costs contribute to the overall expenditure. Marketing cost vary depending on the repair model. Marketing costs are obviously lower in a B2B model. During the interviews, it was mentioned that cost can be minimised when a protocol for assessing whether a garment or accessory is repairable is implemented.

## 7 Conclusion and discussion

As shown in this paper rental and repair models can complement each other and offer solutions to deal with the negative environmental impact of the fashion industry. However, SMEs in the fashion industry still underutilize these models due to uncertainty on how to implement them and make them financially viable. Our initial results give some insights for SME's who want to incorporate rental or repair services into their business model. However, it remains explorative. More research is required to fully understand how brands can develop these business models effectively. Furthermore, it is important to mention that an appropriate business model alone is not sufficient to make rental and repair services successful. During our research, several interviewees indicated that changing consumer behaviour towards more sustainable practices is the most critical success factor. From our previous research it became clear that the awareness on sustainable fashion and circularity is increasing. However their behaviour is still lacking behind. Therefore, there is a need for more critical education on circular fashion, including the economic and environmental advantages of extending the lifespan of fashion items, as well as training about repair skills and maintenance practices (such as suitable washing and storage guidelines).

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