
OPPORTUNITIES AND CHALLENGES OF CIRCULAR BUSINESS MODEL GROWTH

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ABSTRACT

Circular economy is an important tool in the effort to reduce the impact of humanity on the environment, which involves designing business models and products that aim to keep materials in circulation. There are many different kinds of innovative business models that try to create as much circularity in products as possible, with some opting to try and increase product life spans and others attempting to close resource loops entirely so that no materials go to waste. For circularity to further develop, circular business models need to be analysed to understand how companies can harness the potential of circularity and manage the challenges. This research project accomplishes this by using a qualitative approach to compare and contrast businesses that represent the major business models in the circular fashion industry across Europe and North America. Representatives from companies that operate within circular business models were

interviewed and results helped to better understand the unique challenges that each type of circular business model has as well as make recommendations on how to address them. Major findings include the role of third party collaborators in outsourcing parts of the circular model, the role of pricing incentives and the emerging effects of COVID-19 on the industry as a whole.

INTRODUCTION

The fashion industry is a big contributor to humanity's collective waste stream, not only consuming a substantial amount of natural resources in order to be produced but experts also value the amount of annually discarded clothing at \$400 billion (Shirvanimoghaddam, K, Motamed, B, Ramakrishna, S & Naebe, M, 2020). Of the discarded clothing, two-thirds are man-made textiles, which can take decades to decay (K, Shirvanimoghaddam, et al, 2020). One of the main reasons for the increase in textile production and disposal is the rise of fast fashion culture, as the production and consumption rate of clothing has doubled in the last two decades (K, Shirvanimoghaddam, et al, 2020).

In the face of a clothing industry defined by a take-make-dispose model, attention has increasingly focused on circular business models as a way to overcome the problem (Fraccascia, L, Giannoccaro, I, Agarwal, A, Hansen, E, 2019). Circular economy models aim to slow or entirely close resource cycles in the lifespan of a product in order to reduce the number of natural resources used, waste disposed of in landfills, and pollution generated in production (Lüdeke-Freund, Gold, & Bocken, 2019). Fashion circularity and product lifespan extension models exist in many different forms. Apart from designing clothes that last longer, companies are also implementing circular strategies such as using textile waste to make new marketable products, encouraging and offering repair services, and leasing or renting products (Diddi & Yan, 2019). Circular economy is a well-established concept in entrepreneurship and supply chain

management literature, yet there are a number of important gaps, which this research project aims to address.

Firstly, scholars have pointed to the lack of case studies and associated empirical evidence, making it difficult for companies to understand how to adopt circularity into their existing business models or entrepreneurs to begin new circular ventures (Fraccascia, L, et al, 2019). Fraccasia et al (2019) adds that case studies in this field tend to only incorporate the perspective of a single company, without taking into account the diversity of alternative business models and how they fit into a wider value chain. Secondly, reports have also been published on the economic, productivity and employment benefits being created by ‘circular economy’ as a broad field yet do not focus on any industry or sector in particular (WRAP, 2015). This gap echoes Fraccasia et al’s (2019) call for industry-specific research that highlights existing business model innovation with regards to extending the lifespan of products. Thirdly, almost all of the existing research on circular fashion innovation focuses on consumer and behavioral aspects of product life extension (Diddi et al, 2019; Norum, 2013; Gwozdz, Steensen Nielsen & Müller, 2017; McLaren et al, 2017), meaning there is a research gap in the literature of product life extension that examines the pros and cons of business models that are actually being practically applied.

Examples of business models are mentioned throughout much of the aforementioned literature but there is an analysis lacking that examines the circular fashion industry as a whole and that goes beyond broad characterisation and also reviews the unique challenges and opportunities inherent to the different models of circularity. Finally, this research project takes place during the global pandemic of COVID-19, and the effects of the crisis is only beginning to be understood. This research project will also reveal what many of the world's major circular fashion brands predict will happen to the industry as a result. The industry is going through an unprecedented change, which also coincides with an enormous opportunity for brands to evolve and develop their sustainable practices.

Thus, by bringing these research gaps together, this project sets out to examine the circular landscape of the fashion industry and evaluate the barriers and growth opportunities of circular business models by answering the question ***“How can circular fashion companies and entrepreneurs overcome the challenges of circular business models?”***. A qualitative approach will be taken to answer this question, by interviewing case study firms that represent the diversity of circular business models in companies both big and small, international and local. The practical implications of the report will be that companies aspiring to implement circularity within their business model will have a practically useful overview of proven and applicable circular options to evaluate, as well as an idea of how to manage the unique challenges and opportunities to succeed in a changing marketplace. Theoretically this research will bring together the literature on circular fashion, present a collection of insights from real brands working to implement circularity into their businesses and develop a launching point for further research.

First, in the theory section the concept of circular economy will be explored further. The main business models will be discussed as well as the distinction between slowing and closing resource loops. Finally, the state of the fashion industry will be touched upon as it relates to the COVID-19 circumstances, and how that will affect the findings of this research. In the methodology section, the qualitative approach to answering the research question will be extensively elaborated on, covering the data collection approach, case study selection process and interview guide.

THEORY

CIRCULAR ECONOMY

Waste has been deemed a new “commodity frontier” (Berry & Isenhour, 2019, pg. 113) as interest has increased in recycling and creating new products out of used ones. Waste is defined as any non-value added process or excess material, generally seen as an inevitable burden on resource efficiency (Perey, Benn, Agarwal, Edwards, 2017). These traditional linear systems of produce-consume-dispose are what circularity logics are trying to challenge by designing systems that keep products in circulation (Berry et al, 2019). Reconceptualising waste not as something to be disposed of but as a valuable resource that can be reused, refurbished or repaired is the central idea behind circular economy (Fischer, O’Brien, Wilts, Steger, Schepelmann, David Jordan, Rademacher, 2015). Linder & Mats (2017) suggest that the energy and material savings can be as high as 80% when incorporating circularity through repair and remanufacturing into a products life-cycle, as it doesn’t require producing new products from scratch. Naturally, it also lifts profits for businesses as they are able to re-market old products (Linder et al, 2017).

73% of clothing is landfilled or incinerated while less than 1% is currently being circularly recycled (Ellen McArthur Foundation, 2020), a significant gap that opens an opportunity for new circular systems. Research by McLaren & McLauchlan (2015) shows that the single most significant intervention that can be made to reduce the impact of the clothing industry on the environment is to extend the useful life of clothes. By increasing the use and lifespan of an item of clothing, the potential reduction in emissions can be as high as 90% (Corstena, M, Worrell, E, Rouwb, M, Van Duin, A, 2013). Other research confirms this by proving that there is a 20–30% annual reduction in the Co2 emissions, water, and waste footprints of a fashion garment on average by extending its life by only 9 months (Cooper, Claxton, Hill, Holbrook, Hughes, Knox, Oxborrow, 2019). Therefore, the potential reduction in environmental impact is highly significant. The business case for extending the useful life of products is also positive. This is because increasing the use of products and product components can increase net value creation

throughout the value chain, as refurbish-able or reusable products can be reincorporated as inputs in remanufacturing, leading to savings in the overall manufacturing process (Linder et al, 2017).

The identification of barriers and opportunities is said to be an important step in developing sustainable supply chains and business models (Narimissa, Kangarani-Farahani, Molla-Alizadeh-Zavardehi, 2020). This research project aims to apply this to the implementation and operation of circular business models in the fashion industry. Additionally, Narimissa et al (2020) points out that challenges and opportunities can also be separated into internal and external. Internal challenges and opportunities refers to factors at a firm or organisational structure level, things that are directly controlled by the firm (Connell, 2010). External, in contrast, refers to factors that are out of the firm's control, which are shaped by the wider context in which the firm operates. Examples of external factors that can influence companies include social institutions, economic forces and customer behaviour (Connell, 2010).

Scholars have already pointed to a number of challenges identified with implementing circular business models. These challenges include that only a certain niche of customers is deemed suitable for remanufactured products, that the remanufacturing process can be difficult, labour intensive and requires significant expertise of the product and finally that the predictability and reliability of the return flow can also be a challenge as it creates uncertainties in supply and capacity planning (Pearce, 2009). Fortunately, scholars have also highlighted some of the opportunities inherent to circular business models, which include enhanced customer relationships and loyalty, unique value propositions, increasing access to high quality durable goods, the reduction of waste and the potential for mutually beneficial collaborations (Todeschini, B. V., Cortimiglia, M. N., Callegaro-de-Menezes, D., & Ghezzi, A, 2017). Barriers and opportunities cannot be fit uniformly across the entire range of circular business models in the fashion industry, which is what this research project is trying to capture with an analysis of the unique barriers and opportunities that different business model approaches have.

THE 3 MAIN CIRCULAR BUSINESS MODELS

These strategies of closing and slowing resource loops make up a number of real-world business models that companies have adopted. Business model innovations for circularity go further than changing the products and services that a company offers, it changes how the company does business altogether. (Bocken, Short, Rana, Evans, 2014). Business models for sustainability are defined as innovations that generate significant positive and/or reduced negative impacts for the environment and/or society, through organisational and value-network changes. The 'Future of Circular Fashion Report' of 2019 outlines two of the most common and established circular business models in operation today.

The first is a rental model, facilitating access to fashion rather than ownership (Accenture, Fashion for Good, 2019). Rental models can also vary, most often split into either rental or subscription. Standard rental or leasing is most common in the luxury segment, and is characterised by renting products that are normally expensive at a more accessible price for short periods of time. Rental models are largely online-based, allowing customers to rent items with one-off costs. In this way, they are similar to traditional suit hire companies for weddings or university graduations, but instead with a focus on sustainability and fashion rather than event utility.

The other main variation of rental is the subscription rental model. This model has been growing in popularity, with growth rates of over 100% in the 5 years prior to 2019. This model is similar to rental in that it emphasises access over ownership, yet differs in that it centers on monthly payments rather than one-off leases. Subscriptions to fashion means that customers do not pay for short term use once but receive ongoing benefits with regular payments (Accenture et al, 2019).

The other main circular model, which has its own variations, is the recommerce model. At its core, recommerce is about the resale of previously sold products. In the Circular Fashion Report (Accenture et al, 2019) recommerce is characterised by a one-off payment to a retailer to buy a previously owned garment, which has gone through recycling, refurbishment or some sort of processing between being sold the first time and resold to a new customer. Recommerce models in fashion have grown 21 times faster than traditional retail in the past three years (Accenture et al, 2019)). Technology and ecommerce platforms have also allowed recommerce to grow from primarily being the model of local second-hand retailers to scalable businesses.

A CHANGING INDUSTRY

This research took place in the months of March-May 2020, in the middle of the global pandemic of COVID-19. Industries all around the world were suffering through prolonged periods of shutdown, unemployment was soaring, and widespread recessions were forecast (IMF, 2020). Approximately 80% of publicly listed fashion companies in Europe and North America are in financial distress, and a large number of bankruptcies are expected in the months to follow. Halts on production alongside freezes on consumer spending has created a crisis of both supply and demand and put companies under unprecedented strain, exaggerated by the highly integrated global economy and complex supply chains of fashion companies.

Industry experts at McKinsey predict that the COVID-19 crisis will force the fashion industry to reevaluate its value chains and respond to consumer shifts in new ways, which presents an opportunity for circular economy business models in a post-COVID world (McKinsey & Co, 2020). In Europe and the US, more than 65% of people expect to decrease their spending on clothing, disproportionately more than the 40% of people that expect to decrease total household spending. In a similar survey, 15% of people in the US and Europe expect to purchase more environmentally and socially sustainable clothing. At a theoretical level, this international crisis

and prolonged period of instability may pose a fundamental threat to the ‘linear economy’ to which we have grown accustomed (Jonker, Faber, & Stegeman, 2017).

A linear economy involves the conscious planned obsolescence of products and a production model that does not take into account the environmental and social costs of production and externalities, instead passing them down onto society (Jonker et al, 2017). A pandemic such as COVID-19 puts a halt to the linear transactional nature of much of our consumption, forcing the discourse into new territories where circular business models begin to make much more sense. Circular business models are based on value creation across entire value chains and networks, where cooperation becomes of mutual interest and the environmental and social costs of production decrease, as a wider group of stakeholders are taken into account. In this process, the nature of consumption linearity and the question of ‘who counts as a stakeholder?’ may all develop as a result of the pandemic.

The focus of this research project is to understand the unique challenges and benefits of circular fashion business models. Naturally, interviewing brands during a pandemic about the challenges of the business model focused in large part on the effects of COVID-19. This paper then becomes an insightful reflection of many of the world’s pioneering sustainable brands on how this crisis will create opportunities for circularity and how challenges can be addressed to accelerate the transition to a sustainable future.

METHODOLOGY

In this research a qualitative approach was used where a total of 10 companies were interviewed that represent differing circular business models across the rental and recommerce categories. These businesses were *Patagonia*, *Jack Wolfskin*, *Eileen Fisher*, *Nudie Jeans*, *Nike*, *MUD Jeans*, *Filippa K*, *El Tote*, *Reebok* and *The Renewal Workshop*. These case studies were not only chosen for their business model diversity, but also their fashion segment diversity. Patagonia and Jack Wolfskin are both outdoor apparel companies, Eileen Fisher and Filippa K are premium

everyday-wear, Nudie and MUD Jeans are both mid-market everyday-wear, Nike and Reebok are both footwear specialists and El Tote is unique in that it has both private label and other brands in its subscription model. This diversity allows insights to be compared across business models, price segment, customer type and apparel type.

Case studies allow for in-depth analysis of a topic with specific actors involved, as opposed to a generalized view of a wide problem (Lapan et al., 2012). To study complex phenomena and investigate reasons how and why people interact with them, case studies are the best approach to use, according to Lapan, Quartaroli, & Riemer (2012). However, case study interviewees will only be able to provide detail and insights on a specific company and their particular business model, leaving out a more generalised perspective of circular fashion at an industry level. To account for this and by recognising that a generalised view of a wider context can add value in a different way, an additional set of 4 circular fashion industry-experts were also interviewed.

These circular fashion industry experts provided generalised insights with regards to the context as a whole, including contrasting and comparing business models, commenting on industry-trends and sharing insights on the contextual challenges and opportunities of circular fashion in a post-COVID world. The industry experts that were interviewed all had their expertise and working experience in the circular fashion space specifically. This interview group was selected for their detailed knowledge of circular fashion as it would be the most relevant to the research question and also the most closely related to the insights gathered from the business representatives. The interviewees chosen were analysts and consultants in high profile organisations across Europe and North America, with exposure to a wide range of businesses. The experts preferred that their names and the names of their organisations were kept anonymous for public relations reasons.

An intrinsic approach to interview data collection was used, meaning the research will focus on targeted and specific case studies and business models to aim for the extension of knowledge and richness of data (Stake, 1995). For the circular business model representative cases, interviewees

were selected that operated different kinds of fashion businesses and had different stakeholders. The aim was to draw comparable and contrastable insights between organisations that all have circularity in common but operate from different perspectives and with different business models, leading to different outcomes and outputs. Some case studies were companies that had implemented rental or rental-subscription models like *Le Tote*, *MUD Jeans* and *Filippa K*. The other case studies of *Patagonia*, *Jack Wolfskin*, *Elieen Fisher*, *Nudie Jeans*, *Reebok* and *Nike* and operated varying kinds of recommerce models and did so either on their own or alongside third party companies like *The Renewal Workshop* that helped them manage their circular models. Third party collaborator *Renewal Workshop* was also interviewed, helping to build insights regarding the role of third parties alongside information from the industry experts.

Audio recordings and transcripts of each interview was conducted, with written consent by the interviewees. All interviewees had the opportunity to withdraw at any time and were mentioned with their company only, for ethical and privacy reasons. For this research, an inductive coding method of analysis will be used. Inductive coding is when substantial knowledge and concepts are already known about a subject (Stuckey, 2015). New information generated will come in the form of insights that build on top of existing knowledge of each company's business model. Interview codes were drawn from the aforementioned theory of barriers and opportunities laid out by Narmissa et al (2020). Interviews were coded according to barriers and opportunities at an internal and an external (contextual) level, which ends up being 4 primary coding categories. From these 4 main categories, separate coding trees were generated for each theme, separating each coding category into groups of primary insights.

The interview structure was semi-structured. Each interview covered the topics of why that business chose that particular circular business model, the internal and external benefits of the business model, the downsides and challenges that the company has faced with the business model and how they foresee adapting or changing the business model. The full question guide can be found in the appendix. For the industry experts, the questions were different and instead emphasised the unique value that they can add as experts of the circular fashion context as a

whole. The interviews covered various topics, including trends in the circular fashion industry as a whole, organisational and contextual challenges and opportunities for rental and recommerce models and how the expert would advise solving some of these issues.

In short, the business model specifics came from the case study brands and the insights were contextualised within a larger industry and value chain by the industry experts. All interviews took place between April 27th and May 12th 2020, taking between 21 minutes and 52 minutes. Most interviews centered around 30-35 minutes. The results from each interview group will be discussed next, followed by a discussion on how they relate together and implications for aspiring circular fashion entrepreneurs.

Interview Table

Company/Role	Interview Time
Patagonia	00:33:16
Le Tote	00:26:53
MUD Jeans	00:52:11
Eileen Fisher	00:28:12
Jack Wolfskin	00:42:34
Reebok	00:20:55
Nudie Jeans	00:28:55
Nike	00:52:03
Renewal Workshop	00:41:52
Filippa K	00:39:40
Industry Expert 1	00:39:12
Industry Expert 2	00:32:28
Industry Expert 3	00:42:50
Industry Expert 4	00:27:032

RESULTS

The results will be split into the 4 main categories from which the interviews were coded. From these main 4 coding groups, code trees were established that grouped the main themes and then the individual factors within these themes. For each group, the coding tree will be listed first, followed by elaboration on the different individual insights.

First, results of internal challenges will be discussed for both models of recommerce and rental. Then, results will be discussed of the contextual challenges that companies face when implementing or operating rental or recommerce business models. Following that, opportunities

and positives at an internal level will be discussed, with the final section covering the opportunities and positives of the context surrounding the company.

INTERNAL CHALLENGES/BARRIERS

Table 1: Coding tree for circular business model internal challenges



The majority of challenges that companies in the recommerce and rental space had were logistical, however the nature of the logistical challenge was different for recommerce and rental business models. For rental, the most significant challenge reported was inventory management. Two of the three rental companies interviewed reported that managing stock capacity proved difficult, as social media could boost the popularity of certain garments quickly and in many cases this would result in much-sought after items being unavailable for lease. Compared to

traditional retailers that are unidirectional in their sales, items being unreliably and unpredictably returned to a rental company means that supply capacity planning is difficult when trends come and go.

Managing inventory is reported to be even more difficult in models that are seasonal and aim to swap out large sections of the lease stock throughout the year. For recommerce models, inventory management challenges were more about managing the take-back collection, cleaning and repair schemes of clothing so that they could be resold. This is an expensive, time-consuming and precise process that often requires large centers dedicated to this upcycling expertise.

Another major logical challenge for rental business models was managing quality assurance in design. Designing for a rental model means using materials that are as long lasting as possible.

“The whole intention here is to maintain the integrity of the original piece as long as possible” -
Eileen Fisher Interview

This proved difficult with certain kinds of garments or materials, like fine silks or fine sweaters, which damaged easily. For recommerce, quality standards on items that were returned damaged was also a challenge, as well as how to price varying degrees of wear and tear on used garments for resale. As the collection and upcycling model scales up, recommerce companies need to divide the post consumer garments into different streams of fiber recycling at differing levels of material degradation, which also requires substantial and expensive machinery, and staff.

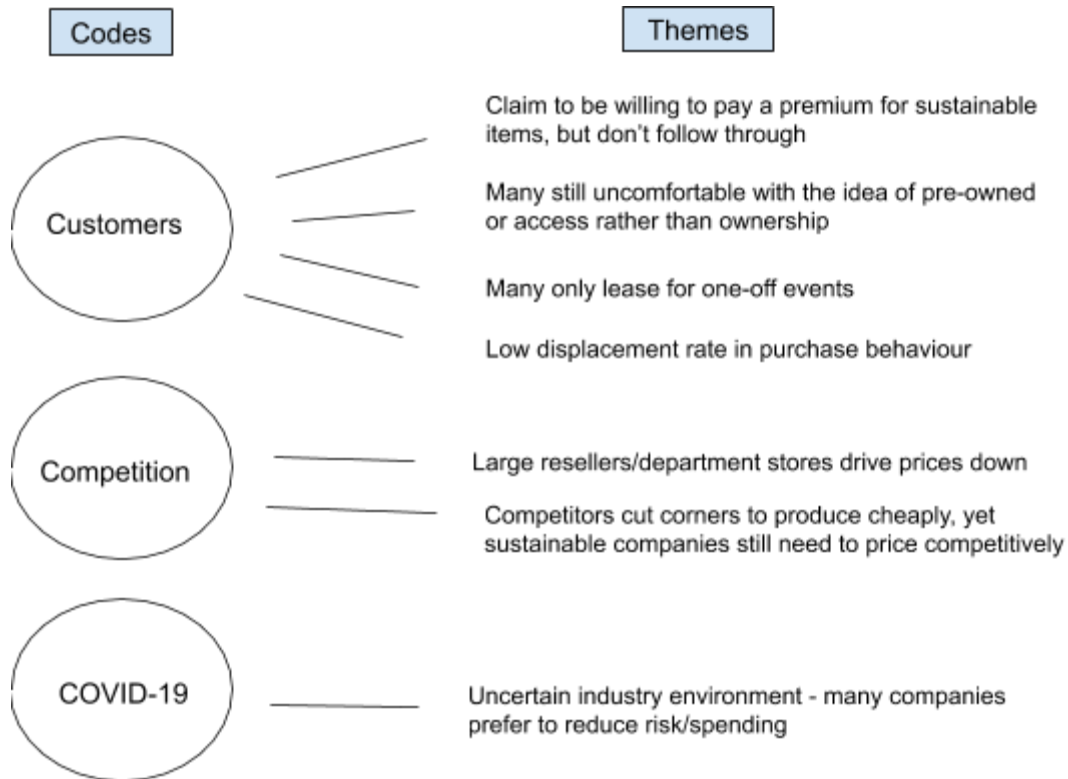
The final major logistical challenge for both rental recommerce companies at an internal level was how to manage garments once they had passed their use-by date. Rental companies worked with products that had certain amounts of lease cycles that they could go through before the garment was in too bad a state to be leased out again. For example, in one subscription based rental company, the average estimated amount of cycles was 8-10 cycles. What to do with these

used garments was a struggle, with some opting to sell them in bulk to organisations or charities that could still use them, or others working with specialised factories in a downgrading process to grind down the yarn to its most basic form so that it could be upcycled into new garments. Processes like these can also be costly, yet ultimately ensure that nothing goes to waste. For recommerce companies, managing products at the end of their life was also difficult, but easier when the initial input was already high-quality materials.

There were also some internal challenges that brands faced that were not logistical, across both rental and recommerce alike. For example, the extra consideration that needs to be placed on product durability in the design process means that non-durable materials are more difficult to implement, giving designers less creative control to differentiate private label brands. This also unfortunately means that many natural materials cannot be used due to their fragility and lack of durability, forcing designers to opt for more synthetic materials. Multiple brands in both rental and recommerce also reported their organisation to be risk-averse, preferring to let other brands make bold investments and prove that something works before they would consider adopting it. Having a management team on-board with pushing the circularity mission and dedicated roles towards developing it within an organisation was said to be crucial in making sure the business model evolves.

EXTERNAL CHALLENGES/BARRIERS

Table 2: External Challenges for circular business models



The most common theme across both recommerce and rental brands as it relates to contextual challenges related to customers, but especially for rental brands. Brands perceive the proportion of customers in North America and Europe that are comfortable buying a preowned garment or paying for a lease model is still low. Multiple brands cited studies or discussed their own in-house research where they discovered that despite customers increasingly claiming that they are willing to pay more for sustainable clothing, few of those well-intentioned people actually paid more for sustainable garments when their shopping behaviour was examined.

“That you say one thing, but you do another. It's easy to say something in a survey, but it's a lot more difficult to take that action in your real life” - Jack Wolfskin Interview

This divide between customers claiming to be more invested in sustainable or circular clothing and actually paying for it means that many brands felt they needed to price competitively

alongside traditional brands that were not investing in sustainability, resulting in sustainable brands needing to lower margins or cut costs elsewhere.

Another important contextual challenge that primarily affected rental brands related to customers not using the circular aspect of the business model the way that it was designed. Despite offering staple-wardrobe garments and every-day wear, multiple rental brands reported that customers tended to use the leasing services for one-off events. Instead of the circular clothing becoming a central part of their wardrobe, it became something that customers could tap into when they needed a particular item for a short term occasion. This also leads to an important disjunct between intended circular business model and reality - the product displacement rate¹. Ideally, a circular model would cause a customer to buy less brand new clothes from elsewhere. This displacement rate that leasing models stimulate is in many cases actually surprisingly low.

“A lot of brands assume a one on one displacement rate, so if I rent one garment, I will buy one garment less, which is a displacement rate of one. There are still a lot of very big research groups working on this, and the most favorable is likely only half or 0.3 with a recommerce model. So if I buy one secondhand garment, it means that I only buy 0.3 less new garments, which completely shifts the environmental impact” - Industry Expert 2

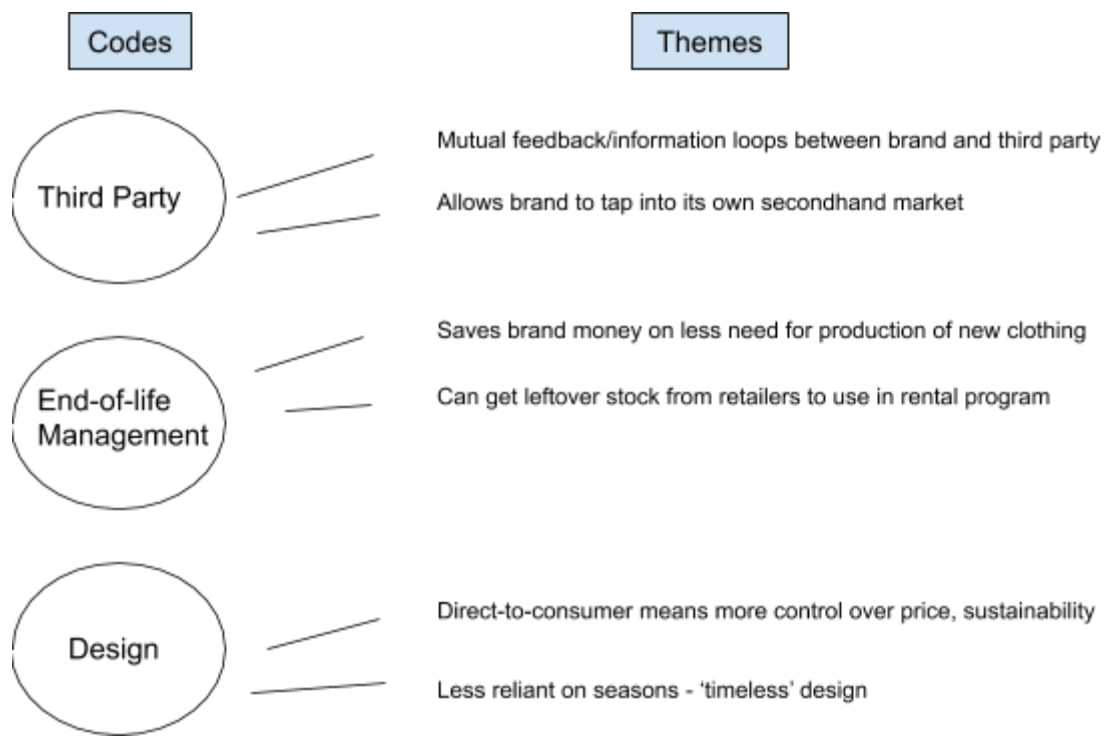
Low displacement rates are not standard across the rental industry as a whole, but it is something that companies need to be aware of, as it speaks to how much of an impact they are really having on the production of clothing with their circular model. Other contextual barriers for recommerce companies included the use of retail resellers driving prices down. One recommerce company sells in large competitive department stores, which negotiate prices down or else could easily refuse to stock further products. Selling through big retailers such as this alongside many other brands gives recommerce companies less control and also less margin from which to further invest in sustainability and circularity.

¹ The displacement is the rate at which investing in a circular business model directly replaces the purchase of new clothing in the existing system (Rinaldi, 2019).

Finally, one of the most discussed contextual challenges across the board was the ongoing COVID-19 situation. The overall uncertainty of the industry can cause firms to focus on what will get them through the crisis, and lessen the priority of investments into sustainable innovations or major risky changes to the business model. Reducing risk and reducing firm-level spending is much higher on the list of priorities these days for many firms than taking bold leaps forward in circular business practices, even though brands saying this are simultaneously aware of a need to re-evaluate and innovate out of this crisis, that ‘business as usual’ may not be enough to weather the storm.

INTERNAL OPPORTUNITIES/POSITIVES

Table 3: Coding tree for internal opportunities/positives



The three main themes from the organisational benefits and opportunities within rental and recommerce models were end of life management, design, and working with third parties. For end of life, the most obvious benefit of a recommerce or rental model is that it lessens the need for new clothing to be produced, as used garments can be refurbished and re-incorporated into the business model. If done through a streamlined process, this can also be cost-saving. Companies interviewed have found inventive ways to deal with garments once they are too badly worn to be able to be refurbished and resold. Some use complex machinery to break garments down to their most basic materials, which can either be used as patches for clothing, or as non-clothing items like decorative works or art installations.

One other way that a couple of interviewed brands were working on to try and better manage product stewardship was working with other brands. In one case, a rental brand was planning to work with a large traditional retailer to buy cheaply in bulk the clothes that were leftover. The rental company would be able to take these and incorporate them into their rental program. Likewise, some brands were also experimenting with taking back clothing from branded garments that were not their own. For example, taking back denim from selected quality verified labels to upcycle into new jeans, not only denim that was produced by the company itself.

Design is also an area where circular models have great benefits and opportunities. Firstly, multiple brands reported that investing in high quality collections that remain in a circular system means that rental and recommerce brands can focus on making ‘timeless’ clothing and not seasonal clothing that needs to follow fashion trends and be routinely swapped out. Better control over design was also done by brands foregoing the competitive price-pressure and negotiations of large resellers and focusing more on direct-to-consumer sales. Recommerce brands benefit the most from this because they are the ones that tend to sell through department stores and resellers. Brands insisted that a far greater percentage of direct-to-consumer was worth

aiming for, giving brands better control over prices, manufacturing planning, logistics and higher margins.

Finally, when it comes to control over design or end-of-life management, one crucial opportunity is collaboration with third parties. There are many third parties that circular companies work with for their product collection, processing, repair and resale, including the *Renewal Workshop*, *Trove and Style Lend*. There are numerous benefits to working alongside a third party to help manage a circular aspect of a business model, yet it is also important to flag that this can be a costly endeavor and may not be suitable for all kinds of companies. Industry experts reported that for small brands and start-ups, investing initially in their own circular management can help them grow organically within this circular framework, as long as they have the investment capital initially to grow their inventory. Collaboration with third parties can be more useful, in some cases, for brands that are already established and want to begin to develop their circular business model.

There are numerous other reported benefits from working with third party collaborators. Firstly, brands appreciate the two-way feedback mechanisms that take place when circular brands outsource all or parts of their circular operations. As well as brands educating and growing the expertise of their collaborators, brands also receive data on damage rates, feedback on different materials in the upcycling process and other design tips. This feedback cycle allows brands to continue to develop and refine their products, getting insight into what works and what doesn't work for their circular model. Experiments and pilots can all be directed through third party organisations like Fashion for Good and Circular Economy, allowing for valuable innovation projects to flourish and become scalable. Organisations like these do not directly take care of circular operations but provide platforms for collaboration between brands and conduct valuable research for circular innovation.

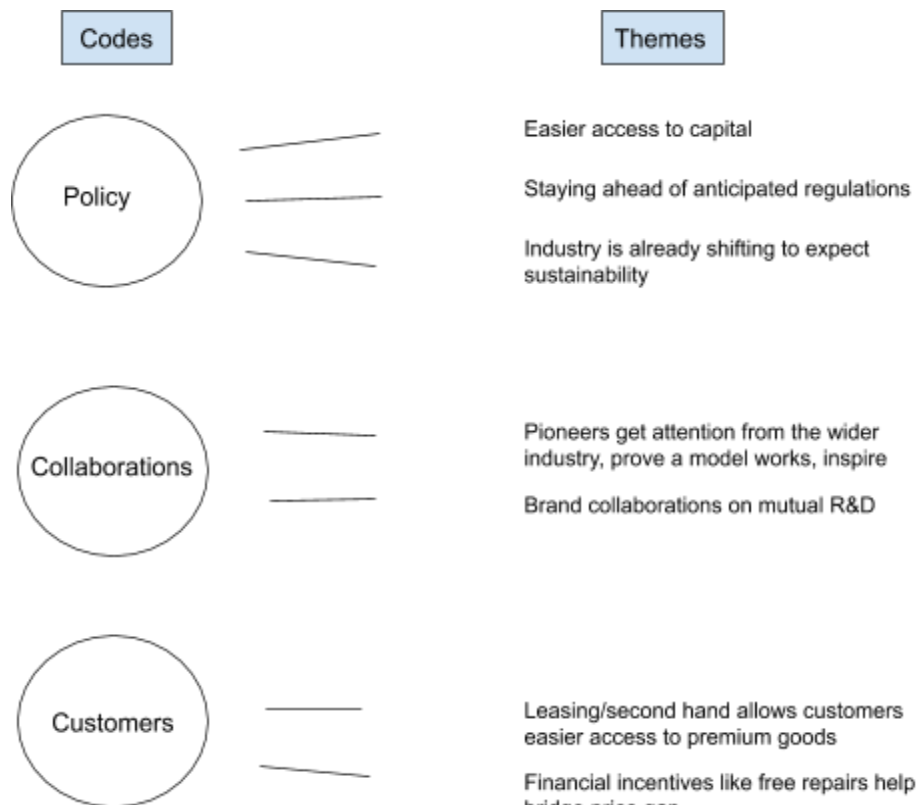
Finally, as Renewal Workshop points out, a lot of brands - especially those in the mid-market to premium segment - have a lot of their clothing being sold in the second hand market. The used

garments of a popular brand can be found in vintage stores or on online peer-to-peer resale platforms, in which the brand itself sees no slice of the revenue.

“Regardless of where brands end up, they’ve produced something and it has to end up somewhere so let’s generate revenue off of it. This also leads to extracting value from a product at multiple points across its lifecycle”

Joining forces with certain third parties that organise collection, refurbishment and resale allows fashion brands to tap into their already existing secondhand market, with the added benefit of being able to certify to customers the authenticity and quality of refurbishment of each garment.

EXTERNAL POSITIVES/OPPORTUNITIES



The main contextual benefits and opportunities of rental and recommerce circular business were related to customers, collaborations, and policies. The central benefit for customers, according to the brands, is that it gives them access to high quality goods at a more accessible price. This is especially relevant in these times, as COVID-19 is causing high levels of unemployment and financial strain. Recommerce, too, is often cheaper than a brand new garment equivalent. At least one brand that was interviewed for this research project employed a ‘lifetime guarantee’ of free repairs on its main line of garments. Customers could have their clothing repaired for free in store or even have a free self-repair kit sent to their house. This kind of financial incentive makes the higher initial cost of purchasing the item a lot cheaper in the long term when numerous free repairs are taken into account.

Policy opportunities reported by the interviewed brands included that it is far easier today than ever before to get venture capital and investment if your business is related to sustainability or circular economy.

“And on the investor side...circularity is actually the easiest, the most fundable and the most financeable” - Industry Expert 3

Another opportunity for circular business models is that by investing now, companies may get ahead of potential future regulations and norms. By the time certain product or manufacturing standards become law or at least normalised, brands with embedded circular or sustainable business models can spare any negative consequences as well as being able to claim they have already been doing the ‘right thing’ long before it was expected of them.

Finally, collaboration was the final contextual benefit that was mentioned by the interviewed brands. Apart from the aforementioned benefits of working with a third party on the circular

model, companies also have opportunities to seize on collaborations elsewhere. Firstly, multiple interviewed brands spoke of the influence that they had on the wider industry. By taking a bold, often pioneering approach to circular business, the interviewed brands proved that the business model is effective and profitable to larger fashion companies. Multiple brands also received positive and helpful media coverage for their sustainable innovations and circular business model. This is a clear example of how circularity and sustainability at the core of a business can have a ripple effect on the surrounding industry in a positive way.

The other opportunity with a great deal of potential is collaboration between circular-oriented brands, not just between brands and third parties. Brands, especially those in similar segments such as outdoor wear, sports wear or footwear, tend to have similar innovation and R&D problems that they are trying to solve independently. It was reported that there is great potential for mutual gain among brands if peer organisations agree on what to prioritise and which problems need solving. An example that was given was that a common struggle is how to make every component of a jacket recyclable, all the way down to the zipper.

“The one thing we all need to agree on is that we're continuing to go for circularity in similar pursuits... if there's a technology that I think could benefit all brands, I certainly share that with the other brands that I am familiar with and the people I know at those other brands. Because first of all, they're going to find out about it anyway. And two, you kind of have to ask yourself the moral question of "why am I in this industry?" - Jack Wolfskin Interview

By ‘picking a lane’, brands aren’t sharing commercially sensitive information but they are agreeing to invest together in areas that will eventually make the entire industry better off, as well as saving costs and creating a higher quality product for the customer. Brands admitted that competitors consulting is something that can make management nervous, so a cautious approach will be needed that balances mutual gain with sharing too much.

One final important emerging insight is the inevitable effect of the COVID-19 pandemic. Without COVID-19 being explicitly in the question lists for the brands during this research project, the topic naturally became front and center in many of the interviews because the research took place as the pandemic was unfolding across Europe and North America. Responses were two sided. On the one hand, many brands spoke of the financial strain and uncertainty that the situation was causing, and how reducing risk and spending was of the most urgent priority. Other brands focused on how the industry will change as a result, opting to predict that customers will shift their mindset about sustainability and fashion.

Many brands and industry experts predict that the pandemic will cause a shift in the minds of customers that will cause them to reflect on their fast fashion buying habits and increasingly opt for sustainable alternatives. Brands forecasted that people will buy less frequently, buy increasingly online, begin mending their own clothing more often, and demand more sustainability practices from major brands. Multiple interviewed brands admitted that they will need to evolve to meet the needs of the post-COVID industry and customers, yet were still in the process of figuring out what that would look like.

A SIGN OF CHANGE?

In the final day before submitting this research project (28/05/2020), an important and highly relevant news story broke. Adidas, one of the worlds largest footwear companies, announced a groundbreaking partnership with emerging sustainable shoe company Allbirds (Farra, 2020). Echoing the results already mentioned in this research about the opportunities of collaboration between brands on mutual R&D endeavours, these two companies are joining forces across the supply chain of a particular line of shoes which aims to have the lowest emissions of any shoe ever produced, and will sport both companies logos. Each company is bringing its unique capabilities to make the collaboration better than the sum of its parts, including Adidas' recycling tools and infrastructure alongside Allbirds' carbon rating system and innovative materials like sugarcane foam (Farra, 2020). This announcement, while the industry is still

reeling from an international pandemic, will hopefully inspire others to follow and re-write the rules of competition.

“We hope more companies will think... and realize that if you work together and one of you wins, then you all win.” - Patagonia Interview

DISCUSSION

The purpose of this research was to highlight how circular fashion companies can overcome some of the major challenges associated with their circular business models. To do this, both rental and recommerce companies were consulted to discover the unique challenges they had experienced and what opportunities they saw for growth and success. To compliment this, and to bring in a wider industry perspective, industry experts and a third party fashion collaborator were also consulted. This extra perspective helped to contextualise the insights from individual brands as well as provide insight into opportunities for collaboration. The overall results point to a few key areas as having the greatest opportunities.

Firstly, the most important finding is that almost all of the internal challenges that circular companies face and even some of the external ones, can be addressed to a large extent by a brand joining forces with a third party. This is especially true of logistical challenges, which is what third parties like The Renewal Workshop specialise in. The primary logistical challenges that both rental and recommerce companies face include managing the collection and processing of clothing, managing end-of-life, payment systems, quality assurance and damages and inventory management. In the discussions with industry experts and the third party collaborator, these are all elements of what a third party can do on behalf of a brand, effectively outsourcing the challenging logistics and expensive need for processing facilities to a specialist collaborator that can take over and provide essential feedback on design and circularity. Aside from logistical issues, outsourcing to a dedicated circularity third party can also address a risk-averse

management which no longer has to think about investing in clothing processing facilities and special factories that can break garments down to upcycle.

External challenges that collaborations can also help to address include giving customers access to more accessible priced second-hand garments, allowing sustainability brands to tap into a new base of customers that were previously not willing to pay a premium for the brand new garment. However, collaborators cannot convince customers to be more comfortable with the idea of second hand, or change public policy, or have a substantial impact on the displacement rate. What they can do is allow brands to extract revenue out of their own secondhand market, saving money on less of a need to produce new clothing, support innovative ways to manage garments past their use-by date, focus less on large resellers and more on direct-to-consumer and foster mutual gain with other brands by investing in shared R&D challenges and innovations. Industry experts were clear that a collaborative approach with a third party is not the best option for everyone, with established fashion companies being better suited to outsource while startups would be in many cases better off investing early in their own capacity and scaling up organically.

An important element and secondary finding from this result is that not only is there a lot to gain by working with third parties, this extends also to organisations like ‘Fashion For Good’ or ‘Circle Economy’ which don’t manage the operations of circular business models but instead provide a number of important outlined services, like providing a platform that facilitates collaboration between brands on shared R&D goals, a place to trial business model pilots and to work alongside startups on pioneering circular innovations. Inside these collaborative organisations, innovation teams, established brand partners and startups alike work together on innovations in areas like processing, manufacturing, end-of-use, waste management and packaging.

Another major insight is that many brands in the circular space feel that most people either aren’t willing to pay a premium for sustainable goods, or remain uncomfortable with the concept of

wearing used clothing or leasing clothing without actually owning it. While some brands were expressing this challenge, others were pointing out opportunities for growth. For example, that circular models based on access or used clothing tend to reduce the average cost for the customer to obtain high quality goods, bridging the traditional price gap between standard and sustainable clothing. Patagonia's *Worn Wear* collection, for example, which works alongside third party Trove and features refurbished Patagonia goods at a substantial discount. Secondly, there were innovative incentive and marketing techniques proposed that would not outright reduce the initial cost but instead provide customers with free repairs, keeping the garment in circulation longer while reducing the cost over time for customers.

The effect of the COVID-19 pandemic was the last most discussed and important emerging insight. The numerous predictions, expectations and forecasts by brands on the future state of the industry and of customers is only beginning to be understood. Expectations from one brand to the next were varied, speaking to the unknowable nature of the consequences of COVID-19. These discussions and insights can also therefore not be reliably used as data, as they are at best only educated guesses. The implications of the pandemic instead present the largest and most significant opportunity for future research.

The research project aimed to address a number of research gaps, including the calls for more case studies on circular business models, industry-specific research and more insight into practically applied business models that can be critically evaluated. By focusing on businesses that have successfully implemented circularity into their business models and only those within the fashion industry, these research gaps were addressed. However, no individual research gap was addressed in any great depth. The case studies were not as comprehensive of the 11 interviewed brands as other case study research, nor was the interview set of 11 companies able to capture the degree of variation and business model diversity that exists.

There were a number of other limitations to this study. The limited selection of interviewed brands was relatively geographically balanced between Europe and the United States, but not at

all beyond these two contexts. This makes business model evaluation difficult to generalise for other countries, especially with contextual variable factors like customer type. Finally, a third limitation was that the role of the person that was interviewed at each brand was not always the same, so their bases of knowledge came from slightly different perspectives. Some were sustainability managers, innovation department leads, advisors, members of the board or members of the executive team. Future research could aim to interview either people with the same role across companies or multiple people at each company to account for this.

CONCLUSION

The purpose of this research was to be able and highlight solutions or pathways that circular brands can take to address some of the most common issues associated with the operation or implementation of a circular business model, as well as assisting aspiring circular fashion entrepreneurs design their own models. The research question was answered by outlining the main challenges and opportunities of circular rental and recommerce models and then providing insights from brands and industry experts on how these challenges could be addressed, with particular attention given to the role of third parties, inter-brand collaboration, pricing incentives and the effects of COVID-19.

The implications on theory from this research is that some of the aforementioned theoretical gaps were addressed, specifically the aforementioned lack of case studies within circular business model literature, the lack of industry-specific analysis (in this case fashion) and finally the call for evaluations of circular business models that go beyond just characterisation and inspect the unique challenges and opportunities. By separating rental and recommerce and analysing real-life circular business models this project was able to add rich qualitative insights to existing theoretical understanding of circular business models, and in an updated context that examines the state of the industry in 2020.. However, the nature of the context in which the research took place has thrown up new questions that form an urgent need for further research. The uncertainty

of the COVID-19 aftermath and subsequent industry transformations will need to be analysed at more depth and over a longer period of time in order to crucially understand how the industry develops as a result.

Practically, this research has given practitioners a valuable glimpse into what it takes to implement a circular business model, what the common challenges are and some recommendations on how to manage these challenges to succeed. The diversity of case study businesses gives an overview of the fashion industry across segments, allowing researchers and practitioners alike to find insights most relevant to their own ventures. Instead of delving deep into one or two challenges or opportunities, this research project aimed to be an industry scan with topical suggestions from which further research should be conducted to grasp the nuance within each of the mentioned insights. This could be accomplished by delving much deeper into the nuances of the individual case studies, interviewing a larger set of companies and by interviewing more experts and circular solution providers on issues they have experienced when developing circularity with brands. The business case for circular fashion business models has never been clearer, yet more work needs to be done to make these opportunities more salient to the brands that are still hesitant to embrace the circular transition.

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APPENDIX: Interview Guide

Question Set 1 (Brands)

- *How does your organisation incorporate circularity into the overall business model?*
- *Why do you think your organisation decided to implement this kind of circularity into your overall business model?*
- *Benefits to the particular business model that you've chosen?*
- *Challenges/downsides to the business model that you've chosen?*

- *Why do you think this type of circularity was chosen for your business model, given that there are so many ways to be circular?*
- *How do you think your business model could be improved or changed in the future to address any current limitations or challenges?*
- *What do you think is the best way to shift consumer thinking around new circular business models like renting/leasing/rebuying used products?*

Question Set 2 (Industry Experts)

- *Could you tell me a bit about yourself and your experience in circular fashion?*
- *Could you talk about what kinds of trends you see happening in the fashion space with regards to companies adopting circularity into their business models?*
- *What would you advise circular fashion entrepreneurs to **avoid** doing when designing a circular business model?*
- *What do you think are the primary barriers or challenges that firms face when they try to develop a **rental** business model?*
- *What do you think are the primary barriers or challenges that firms face when they try to develop a **recommerce** business model?*
- *How do you think the two business models could be improved or changed in the future to address any current limitations or challenges?*

- *What do you think is the best way to shift consumer thinking around new circular business models like renting/leasing/rebuying used products?*
- *How do you see COVID-19 changing the industry?*