

Leveraging Service Design for Circular Transformation in UK Fashion SMEs

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Summary

UK fashion small and medium-sized enterprises (SMEs) face increasing challenges adopting circular business models to transform into sustainable entities. For example, very few circular design strategies, especially ones considering customers' views on circular fashion services, are developed with SMEs in mind. This study investigates how service design can support the move to circular model through focusing on the post-consumption phase and optimisation of the customer journey. A systematic literature review and semi-structured interviews with SME business managers were carried out to identify current challenges and potential opportunities for leveraging circular service design strategies. The findings provide practical insights into how SMEs can incorporate circular economy principles into their strategies to foster service-led innovation.

Keywords: Circular economy; Service design; Fashion business; SMEs

Intended Track

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1. Introduction

Companies in the fashion business are moving towards sustainable and circular economy concepts, a significant transformation that may require new business models (Ghisellini et al., 2016). In the UK, SMEs make up 90% of retail businesses, 85% of wholesale businesses, and 80% of manufacturing businesses in the fashion sector (UK Fashion & Textile Association, 2021). As some of the most important players within the sector, they can determine the future of sustainable fashion (Sholihah et al., 2023). Their omnipresence also highlights the need for them to focus more closely on their collective actions to minimise waste production and pollution (Dey et al., 2020; Bassi and Dias, 2020).

SMEs urgent need transformative strategies to shift towards more sustainable and innovative business models (Sharma et al., 2021). Circular business model innovation offers a viable path for SMEs to reduce waste, optimize resource efficiency, and develop long-term economic resilience (Prieto-Sandoval et al., 2021; Sharma et al., 2021). Through service-based business models like repair, leasing, and others, SMEs can become more competitive and lead the way in sustainable growth (Weck et al., 2024).

Service design can help enable the creation of sustainable and cutting-edge systems (Yang and Sung, 2016; Sultan and Qaed, 2020). Such system, in turn, enhances the ability of fashion business models to dematerialise by selling fewer raw materials or carry out more services to support their products (Armstrong and Lang, 2013). Cao et al. (2024) emphasised the importance of service design for circular business models, finding the service design itself can reduce negative environmental impacts. In other words, service design can support the achievement of a circular economy, which can cut down on waste and boost economic growth (Kjaer et al., 2019). It can also help SMEs deal with major problems like limited resources, technology gaps, and changing consumer behaviour to make sure that their transformation is successful and sustainable (Dey et al., 2020; Brendzel-Skowera, 2021). This is because service design considers the needs of all stakeholders, improves the supply chain and customer experience, and balances ecological and economic value in the efficient use of resources (Prendeville and Bocken, 2017; Foglieni et al., 2018).

Service design is now recognised not only as an enabler of business model innovation (Roos and Agarwal, 2015), but also as a powerful approach of advancing systems towards sustainability (Chowdhury and Quaddus, 2016). However, existing research on integrating service design approaches specifically tailored to the needs of fashion SMEs, particularly from a consumer perspective, remains limited (Kongelf and Camacho-Otero, 2020; Pinheiro et al., 2021). Most present research focuses on optimising production or operations and ignores the post-consumption phase, where consumer interaction is essential for enabling circular practices (Gomes et al., 2022; Pasqualotto et al., 2023). There is also a lack of empirical research on how to use service design strategically to improve the consumer journey in circular fashion models, which is an

important factor for encouraging consumers to engage with circular fashion offerings (Pasqualotto et al., 2023).

This paper explores how service design might help UK fashion SMEs make the switch to circular model by focussing on the post-consumption journey. In so doing, it adds to the extant body of knowledge by suggesting a structured, consumer-centred framework for circular business models, created by combining a comprehensive examination of the literature with qualitative interviews with fashion SME practitioners. Furthermore, the study has real-world applications for fashion entrepreneurs, legislators, and service designers who want to make circularity work in more inclusive and successful ways.

2. Literature Review

The circular economy is now a key tool for SMEs to reach their aims for sustainable development (Geissdoerfer et al., 2018; Ki et al., 2020). One of the most common ways to put circular economy principles into action is to create circular business models. This helps SMEs move away from linear economy systems and towards more sustainable ones (Ghisellini et al., 2016; Rudnicka, 2018). These enterprises can gain a lot from using circular business models, such as getting into new segmented markets, using fewer raw materials, and making their businesses more competitive (Lacy et al., 2020; Tunn, 2020; Wells and Skeete, 2023). Also, circular business models can offer various service-oriented opportunities for brands, including leasing products or offering repair services, which makes their long-term financial health even stronger (Oghazi and Mostaghel, 2018; Kanda et al., 2021).

A thorough review of the literature on the potential of service design to help transition for fashion SMEs found 24 important circular design tools for circular business innovation. It is noticeable that existing approaches predominantly focus on industry- and business-oriented applications, with limited consideration of customers' perspectives. In particular, they tend to neglect the challenges and pain points that customers have when they use circular fashion business models. The results provide an opportunity for the use of service design, which is known to have several benefits for improving service usability and the customer experience (Katzan, 2011; Istanti et al., 2024). Also, previous research shows that the consumption element of business practices, especially the post-consumption phase, is very important for the circularity of business models (Rexfelt and Hiort Af Ornäs, 2009; Rexfelt and Selvefors, 2021). There are three stages of consumption: pre-consumption, consumption, and post-consumption (Jiang et al., 2018; Karimzadeh and Boström, 2024). This concept attempts to place the consumption process in the middle to distinguish between the different elements covered by the three stages. Although Zarley Watson and Yan (2013) believe that in fashion industry, the post consumption phase is described as including consumer behaviours such as ongoing satisfaction evaluation and decisions related to product disposal, the usage process and potential after-sale services should also be parts in this phase (Kim et al., 2015; Ferraz et al., 2023). Accordingly, this study then leveraged service design approaches to analyse the post consumption phase and

categorised it into four stages: (1) Usage, (2) Evaluation, (3) After-sale service, (4) Disposal. This classification was based on the identification of service touchpoints and customer pain points at each stage, driven by findings from the systematic literature review, as illustrated in Figure 2-1. Overall, this study demonstrated that service design can help the sustainable transformation of SMEs and enhance their organisational competitiveness by focusing on the customer journey and providing customer-centred strategies in the post consumption phase of circular fashion business.

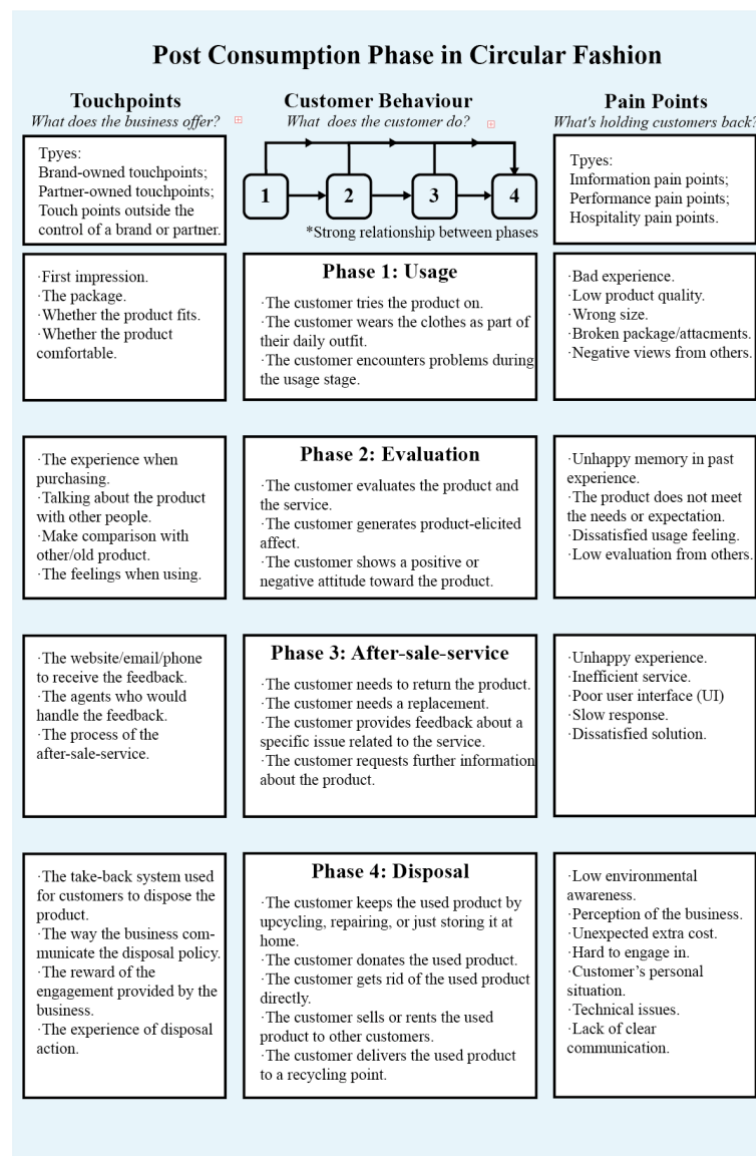


Figure 2-1 The post consumption phase in circular fashion business

3. Methodology

To better understand how SMEs can leverage service design to make sustainable transition and implement circular business models, a qualitative research approach is adopted through semi-structured interviews with business managers and designers from various fashion SMEs in the UK. This study chooses to focus on UK fashion SMEs since they are the most important and strategically important businesses in the UK's

fashion sector. These companies are the backbone of the industry, and impose a big impact on how the supply chain works and helping to make long-lasting changes (Ciccullo et al., 2023; Carissimi et al., 2023). According to previous research, the development and innovation practices of SMEs can help set industrial norms and standards, which can then change how larger businesses act and plan (Ormazabal et al., 2018; Ferasso et al., 2024). Examining UK SMEs therefore provides a significant perspective for investigating scalable and transferable service design strategies for circular transformation. The primary objective of this study is to acquire insights into how fashion SMEs deliver circular service to their customers and manage touchpoints during the post consumption phase within their business models to address the negative factors identified in the previous study, and further investigate the potential of service design strategies for SMEs to improve circularity and attain their business goals.

The study follows a purposive sampling strategy, selecting SMEs that are actively implementing three of the most popular circular fashion business models, including rental service, second-hand sales, and repair service. All of these business models are trying to use the “slowing” strategy which aims to reduce the usage of raw materials and prolong the lifecycle of the products (Richter et al., 2021; Caldera et al., 2022). This study aims to engage 12-15 fashion SMEs in the UK, and the initial selection of the targeted companies through could be seen in Table 3-1.

Table 3-1 Initial selected companies for interview research

Company's Name	Date of Incorporation	Location	Business Model
AndReal Design	2020	Leeds, England	Repair services
SOJO	2020	London, England	Repair services
The Seam	2019	London, England	Repair services
The Boot Repair Company	2011	Leeds, England	Repair services
Preworn	2019	Llangollen, Wales	Second-hand sales
Revivo	2018	London, England	Second-hand sales
BEEN London	2018	London, England	Second-hand sales
Beyond Retro	2001	London, England	Second-hand sales
Fling Fashion Rental	2025	Leeds, England	Rental services
My Wardrobe HQ	2018	London, England	Rental services
HURR	2017	London, England	Rental services
ACS Clothing	2012	London, England	Circular Solution Provider

The design of the questions for the interview is shown in Figure 3-1. The interview questions consist of five main sections and aim to explore the potential of service design for fashion SMEs aiming for circular transformation. The first part collects background information about the companies, including its establishment, business activities, philosophy, market positioning, and development stage. The second part focuses on the company's approach to circular business development, assessing its understanding of the circular economy, its sustainable goals, and strategies to achieve them. The third

part delves into the identification and management of companies' services and touchpoints, particularly in the post-consumption phase, while investigating challenges and improvements in service management. The fourth part explores strategies to improve customer pain points in the post-consumption phase, evaluates the effectiveness of existing approaches, and identifies key influencing factors such as customer awareness, financial incentives, and technical support. Finally, the fifth section explores the potential uses of service design strategies, assesses the company's efforts to optimise services, and identifies the challenges and support needed for further implementation in circular fashion practices. Once the data is obtained from these companies, thematic analysis is used to interpret the data and extract insights about common challenges and possible improvements for fashion SMEs. In addition, the findings will be validated by cross-comparing interview data with secondary sources, including policy reports and academic publications.

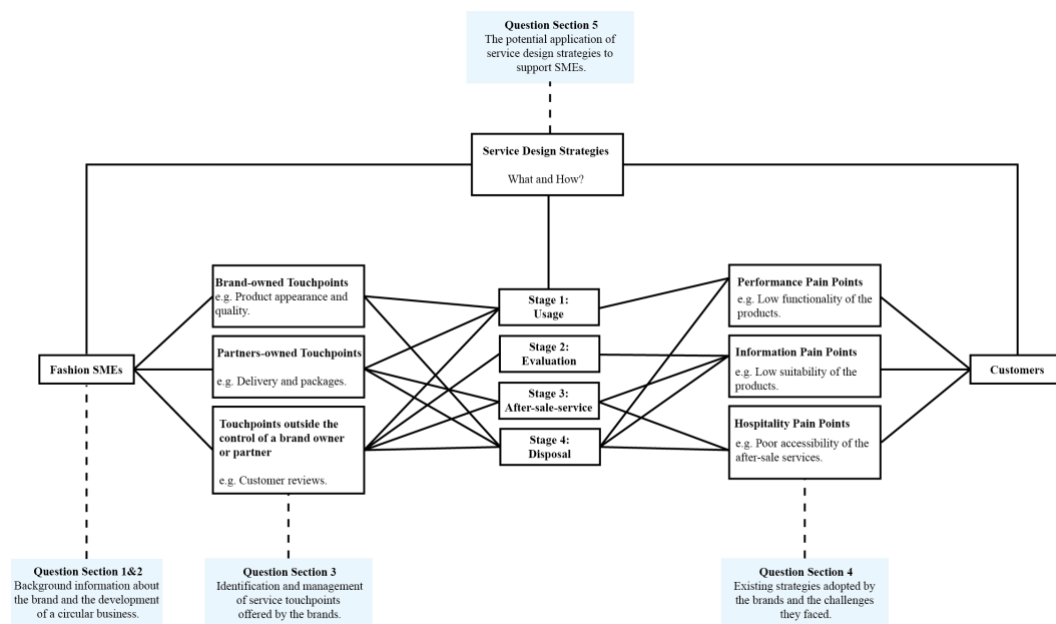


Figure 3-1 Interview design (adapted from Towers and Towers, 2021 and Ahmed et al., 2022)

4. Discussion

The initial findings suggest that service design plays a crucial role in shaping consumer behaviours with circularity by influencing awareness and enhancing their experience with the businesses. This highlights the potential of service-driven approaches in facilitating behavioural shifts towards more sustainable consumption patterns. SMEs that provide seamless and integrated service experiences are more likely to build long-term customer relationships and encourage repeat usage of circular products. Research show that tailored incentives, subscription-based models, and loyalty programs are potential ways to persuade people to participate in circular business models (e.g. Lacy et al., 2020). And businesses that utilise AI to analyse consumer data and provide insights to improve the customer experience will be helpful, although they may not have enough resources to use this service (Okeke et al., 2024; Iyelolu et al., 2024). It is

expected that SMEs adopting well-structured service design strategies can have higher customer retention rates and better brand recognition. Service design has been shown to be advantageous in facilitating stakeholder collaboration, which allows SMEs to better connect with policy makers, industry stakeholders to develop targeted incentives and support mechanisms (Vink et al., 2021), and therefore SMEs are expected to address their challenges including financial, technological difficulties and low consumer awareness through service design strategies.

Based on the conceptualization the service design and existing circular fashion practices of SMEs, this study purposes three focus points for subsequent research: customer experience, service optimisation and ecosystem cooperation. Customer experience represents their overall perception of the products and services provided by businesses (Zhong et al., 2021), and therefore organisations not only need to use service design to avoid negative factors for their customers but also need to consider the clear communication with them. Service optimisation, on the other hand, can be achieved through two ways, including new service offering and existing service alteration, both of which are supported by technological innovation. This means that companies may need to consider the incorporation of digital innovation when facilitating the touchpoint management of their services. Furthermore, the advantage of ecosystem collaboration is that it enhances the access to resources and increases the breadth as well as depth of brands' service network through cross-industry connection (Adner, 2017). This approach to addressing service pain points is consistent with the systems perspective in the core principles of the circular economy mentioned above, focusing on co-operation and collaborative innovation among all stakeholders.

Furthermore, theories that already exist about how to make circular services, such as Product-Service Systems (PSS), tend to focus on making models and putting strategies into action at the product and operational levels. This study presents a consumer-oriented strategy that connects actors in the service system to create value by using service design methods. This study also discusses how to use different service design concepts to create a circular business, with a focus on the service ecosystem point of view. It shows that using different service design theories and approaches together can help businesses come up with new ideas that are positive for the environment, and it gives useful tips for how to do this across disciplines. This study therefore will make contribution on circular economy and service design by providing real-world examples of how service-led interventions might help sustainable fashion enterprises. It will give policymakers, SMEs' practitioners, and other stakeholders useful information that they can use to make the UK fashion industry more circular. By strategically managing customer journey and service touchpoints, SMEs are more likely to achieve their business and sustainable objectives. The results of this study will serve as a valuable resource for SMEs aiming to integrate circular economy principles through effective service design strategies.

5. Conclusion

In conclusion, service design plays a key role in facilitating circular transition for fashion SMEs. By strategically managing customer journey and service touchpoints, SMEs can drive sustainable consumer behaviour, reduce environmental impact, and improve business resilience. The integration of service design strategies and ecosystem perspective is essential for SMEs seeking to transition toward circular business models successfully.

While this study offers valuable insights into how service design can support circular transformation in fashion SMEs, there are still some limitations. The study only focuses on SMEs in the UK fashion industry, which has its own unique industrial conditions and consumption behaviours. Thus, the results may not be applicable to SMEs in other cultural or national settings as business realities can be very different in other countries. This could change how service design is understood and used in circular business models. Future research should pay attention on whether the suggested outcome may be used in a variety of cultural settings, such as developing countries or areas with differing levels of environmental consciousness and service infrastructure. Comparative studies could offer deeper insights into how local conditions mediate the effectiveness of service design in enabling circular economy transitions. Furthermore, the scalability of these strategies and investigate their long-term impact on both business sustainability and consumer behaviour should also be analysed continuously, to further understand the impact of these strategies on the entire life cycle of company's operations.

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