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## Drivers and barriers to fashion rental for everyday garments: an empirical analysis of a former fashion-rental company

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### ABSTRACT

We analyze the business models of online business-to-consumer (B2C) fashion rental and share challenges and lessons learned from an in-depth case study of a former German fashion-rental company. The firm focused on renting everyday, rather than special occasion, clothing, thus increasing the potential sustainability impact of its offer significantly. We also examine drivers and barriers of both an everyday children's wear and a women's wear rental model by incorporating both retailer and consumer perspectives through business data, manager interviews, and consumer surveys with customer and target groups. All data were merged into a single, in-depth analysis of the business models. By combining the complementary viewpoints of retailer and consumers, we were able to more precisely pinpoint the locations of the difficulties in the business models. The main barriers to success were the worsening quality of the company's inventory and its difficulty acquiring and retaining customers, due both to a lack of familiarity with the concept of fashion rental and the poorly perceived price-performance ratio of fashion rental. These issues suggest that online-fashion rental should begin by focusing on special occasion rentals with more high-end fashion options and should plan a sizeable budget for marketing to raise consumer awareness of alternatives to traditional retail models and alleviate customer concerns. If such a rental model is successful and establishes a stable customer base, everyday fashion-rental options could be explored as a supplement. The article demonstrates the importance of integrating different data sources to obtain a comprehensive understanding of why online-rental models fail or succeed.

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Fashion rental; business model; collaborative consumption; sharing economy; sustainable fashion; circular economy


### Introduction

The European Union has recently estimated that between 2% and 10% of the negative environmental impacts of consumption by member states is associated with the fashion industry (Sajn 2019), partly due to the sheer quantities of clothing that are produced and consumed each year. At the same time, the potential for resource savings in this sector is substantial, since on average one in three garments is never worn or is worn less than once in three months (Wahnbaeck, Brodde, and Groth 2015). Moreover, "less than half of used clothes are collected for reuse or recycling when they are no longer needed" (Sajn 2019, 1). To address these issues, solutions are needed that increase the number of uses per item of clothing; in other words, there is a requirement to intensify the use of each garment and thus reduce the demand for further production. This requires either that a single user wears a piece

of clothing longer (and buys fewer of them) – in other words an uptake of "slow fashion" – or that the item is used by multiple users consecutively. This is the case with fashion rental-business models where consumers rent clothes for short periods and these same items are then rented out to other consumers, thereby intensifying the use of garments. Reaching greater sustainability in the fashion industry will likely require a combination of all of these approaches, since each strategy has its unique appeal to consumers and thus different use cases.

In this article, we analyze the business model of online business-to-consumer (B2C) fashion rental and share specific challenges and lessons learned from an in-depth case study of a former German fashion-rental company, Relenda. The company offered several linked fashion rental-business models that were on the market in Germany from 2014–until 2020, including both subscription models and single-item rentals for children's clothing

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(“Kilenda”) and a subscription model with or without curation for women (“Stay Awhile”).<sup>1</sup> The focus was on everyday fashion rather than special occasion couture, which made the business models particularly relevant from a sustainability perspective. This study summarizes the results of extensive interviews with the company’s managing director, two surveys that recruited active and former customers as well as two non-customer target-group surveys representative for the German population.

An overview of prior studies can be found in Supplemental Material A. This work has focused extensively on consumer acceptance of circular fashion consumption, including fashion rental (e.g., Armstrong et al. 2016; Borg, Mont, and Schoonover 2020; Camacho-Otero, Boks, and Pettersen 2019; Clube and Tennant 2020; Lang, Seo, and Liu 2019; Lee and Chow 2020; McNeill and Venter 2019), and to a much smaller degree on business perspectives pertaining to this type of business model (e.g., Adam, Strähle, and Freise 2018; Arrigo 2021; Jin and Shin 2020; Pedersen and Netter 2015; Gyde and McNeill 2021). However, to our knowledge there have not been any studies incorporating primary empirical data from both the retailer and consumers of a single specific business model. Moreover, many prior studies have focused on rental models that offer primarily high-end, luxury, or special occasion wear (Adam, Strähle, and Freise 2018; Arrigo 2021; Gyde and McNeill 2021; Jin and Shin 2020; Lang, Seo, and Liu 2019) rather than everyday fashion, even though from a sustainability perspective, the rental of everyday clothing would likely have a larger impact (Gyde and McNeill 2021). In fact, some researchers have found that consumers explicitly see rental fashion as being less ideal for everyday clothing (Armstrong et al. 2016; McNeill and Venter 2019). We seek to close these two gaps in the literature by combining empirical data from both the complementary business and consumer perspectives into a single study. Moreover, we use this data to examine the applicability and relevance of the drivers and barriers of fashion-rental models that have been considered in prior studies to a model focusing exclusively on everyday fashion.

The outline of the article is as follows. The next section reviews prior literature and is followed by a brief overview of our data and methodology. Thereafter we first present and then further discuss our results before concluding.

## **Fashion rental as a business model**

In contrast to traditional fashion-sales models that are product-centered and follow a take-make-waste logic, B2C fashion rental is instead a use-oriented

product-service system (Mont 2002) that follows a “service logic of consumption” (Todeschini et al. 2017, 764). Depending on the precise logistics of the model, customers can either rent clothing items individually for a period of time (usually a week or a month) or enroll in a monthly subscription or membership that entitles them to the rental of a specific number of fashion items per rental period (e.g., three items per month). Some models offer the option to buy favorite items at the end of the rental period for a reduced price (rent-to-own). Additionally, some companies regularly sell off past rentals or items from older collections to generate additional income and to make space for updated inventory (Arrigo 2021). Most fashion-rental companies target young (25–35) or middle-aged (30–50) women (Arrigo 2021; Pedersen and Netter 2015) and a few also focus on children’s clothing (Pedersen and Riisberg 2017). Other characteristics, such as income, style, and sustainability preferences vary strongly based on each model. Fashion rental requires a complex set of in-house or third-party services to provide the associated support, including two-way distribution logistics, cleaning, and repair (Gyde and McNeill 2021). Numerous studies have examined specific drivers and barriers to fashion-rental models both from a consumer and business perspective and we survey some of this work in the following sections.

## **Consumer perspective**

### **Drivers**

In prior studies, the most commonly cited driver from the consumer perspective is the ability to experiment with new styles or brands and to frequently change one’s wardrobe without guilt (Armstrong et al. 2016; Becker-Leifhold and Iran 2018; Borg, Mont, and Schoonover 2020; Camacho-Otero, Boks, and Pettersen 2019; Lang, Seo, and Liu 2019; McNeill and Venter 2019; Mukendi and Henninger 2020). These activities are commonly associated with fun, pleasure, and enjoyment. The second-most popular driver is saving money (Adam, Strähle, and Freise 2018; Armstrong et al. 2016; Arrigo 2021; Borg, Mont, and Schoonover 2020; Camacho-Otero, Boks, and Pettersen 2019; Lee and Chow 2020; Mukendi and Henninger 2020), which is particularly relevant in the context of rental for special occasions or one-time use, including high-end or luxury fashion items that users would not normally be able to afford if acquired on a purchased basis (Armstrong et al. 2016; McNeill and Venter 2019; Mukendi and Henninger 2020).

While some authors mention sustainability and the reduction of resource consumption as drivers

(Borg, Mont, and Schoonover 2020; Lang, Seo, and Liu 2019; Lee and Chow 2020; Mukendi and Henninger 2020) and such claims are often deployed for marketing and promotional purposes, sustainable consumption and its social consequences tend to be a rather weak motivator for consumers to opt for fashion-rental models (McNeill and Venter 2019). As Todeschini et al. (2017, 767) point out, “many sustainable and innovative business models have failed to convince consumers about the benefits of sustainable fashion products.”

The clear communication of a rental company's service offer and associated conditions is generally not a driver to partake in fashion rental per se, but does serve an important role in alleviating consumer concerns, especially regarding product quality and issues of liability (Adam, Strähle, and Freise 2018; Camacho-Otero, Boks, and Pettersen 2019).

### **Barriers**

While a wide variety of new, digitally-based fashion rental-business models have arisen on the supply side, the uptake from the demand-side so far has been slow (Clube and Tennant 2020). Consumers' reluctance may be in part due to inertia in adopting new ways of consumption and overcoming routines (Catulli, Cook, and Potter 2017), but also can be attributed to a number of specific concerns about rental models. Most case studies have found that fashion rental requires a different approach to customer relationships than traditional retail and in fact comes with a number of challenges.

The most commonly cited consumer concerns relate to hygiene and health, with customers mistrusting the overall cleanliness of rented garments and worrying about disease transmission or unpleasant odors (e.g., Adam, Strähle, and Freise 2018; Clube and Tennant 2020; Lang, Seo, and Liu 2019; Roux 2010). Some studies describe an overall lack of trust in rental providers, with consumers uneasy not just about hygiene, but also about the quality of rented clothing and the reliability and continuity of service delivery (e.g., Adam, Strähle, and Freise 2018; Lang, Seo, and Liu 2019; Mukendi and Henninger 2020). A particularly strong point of concern is the question of consumer liability in case of loss or damage. Another issue is the lack of ownership in access-based models as the desire to own is still strong for many customers (e.g., Armstrong et al. 2016; Becker-Leifhold and Iran 2018; Borg, Mont, and Schoonover 2020; McNeill and Venter 2019). Likewise, many prospective clients are concerned about the ease of use of such services, including whether styles and sizes will be readily available when they are needed and the added effort and transaction costs involved in renting rather

than buying (e.g., Becker-Leifhold and Iran 2018; Camacho-Otero, Boks, and Pettersen 2019; Mukendi and Henninger 2020).

Studies to date have furthermore found little willingness to pay extra for rental-based models (e.g., Armstrong et al. 2016; Borg, Mont, and Schoonover 2020; McNeill and Venter 2019). At the same price point, consumers prefer to purchase an item of clothing rather than rent it and many may dislike the continuous reminders about the cost of rental that take place through recurrent payments. It is also more difficult for customers to compare prices between items for sale and items for rent.

Less common barriers from the consumers' perspective include concerns about their personal image and social standing if their social contacts find out that they rent clothing (Becker-Leifhold and Iran 2018; Lang, Seo, and Liu 2019; McNeill and Venter 2019), a general lack of understanding of use-oriented product-service systems, and corresponding hesitation to try them out (Arrigo 2021; Borg, Mont, and Schoonover 2020; Todeschini et al. 2017). Moreover, there is some anxiety about the high speed of fashion cycles, which could lead to quickly outdated rental collections (Borg, Mont, and Schoonover 2020). Finally, several authors have stated that consumers cannot imagine using rental services for everyday clothing (Arrigo 2021; Borg, Mont, and Schoonover 2020; Todeschini et al. 2017; Armstrong et al. 2016).

### **Business perspective**

#### **Drivers**

Sustainability is increasingly considered one of the central drivers for fashion rental from a business perspective (Arrigo 2021; Borg, Mont, and Schoonover 2020; Todeschini et al. 2017). Increasing the intensity of use of a single garment through repeated rentals to a series of consumers reduces its environmental footprint, assuming the item is rented often enough to offset the increased emissions from transport. Some scholars also argue that rental businesses can reduce their stock requirements as compared to traditional retail and that excess inventory is therefore less of an issue for them (Jin and Shin 2020; Todeschini et al. 2017). Finally, procurement models of the fashion assortment for rental vary. Some fashion-rental platforms are able to put together a part of their collection with free clothes from young designers interested in generating publicity for their collection. Other service providers incorporate secondhand fashion items from their members so that only a part of the collection has to be paid for, often at wholesale or otherwise reduced prices (Arrigo 2021).

While not a driver for the business model per se, effective curation of the fashion assortment on offer is an essential prerequisite for success. Rental requires long-lasting, high-quality fashion items as profits in the system are generated by maximizing the number of rentals per single item before it has to be discarded (Gyde and McNeill 2021). This is generally easier to achieve with adult clothing than with children's garments.

### Barriers

The barriers to rental-business models from a business perspective relate to consumers' concerns, expectations, and behavior, on one hand, and to the products and services being offered on the other hand. With regard to consumers, rental companies must contend with all of the issues detailed above. These challenges include raising awareness for the terms and conditions of rental models and resolving misunderstandings (Arrigo 2021; Todeschini et al. 2017), as well as clearly communicating the benefit-for-cost service proposition and why it should outweigh the benefit of purchasing clothing for the same cost (Becker-Leifhold and Iran 2018). In turn, the elevated price sensitivity of customers leads to firms feeling pressure to keep their rental prices as low as possible, for example through low cost-inventory management or by cross-financing their rental business with the resale of secondhand garments (Gyde and McNeill 2021).

For rental companies that use the sustainability of their model as a selling point, some sustainability-minded customers may pose unrealistically high expectations toward the performance of such a business model (Todeschini et al. 2017). Conversely, studies show that customers generally take less care of rental items than those they own, which also holds for fashion rental (Gyde and McNeill 2021). This disparity may lead to a conflict of interest between business and consumer, especially with regard to luxury or special occasion rental. While these types of more expensive fashion items often include "delicate fabrics and complex treatments such as hand embellishments," they are generally less durable, harder to clean, and require particular care in handling (Gyde and McNeill 2021, 7). These characteristics are the opposite of what makes for an ideal form of rental.

The size and nature of the fashion assortment on offer by rental companies also poses certain challenges. Interest from consumers increases once the stock selection is large, but this requires significant investment at an early stage and consequently sizable amounts of starting capital. Further on, new stock can be financed with the profits from existing rentals, although the rapid pace of fashion cycles

can lead to ongoing short-term financial strains if a company's inventory is strongly trend-based (Gyde and McNeill 2021). Studies vary greatly in how they describe the relationship between rental companies and designer brands. While Arrigo (2021) describes up-and-coming designers that see rental offers as free marketing for their brand, Gyde and McNeill (2021) instead report that rental firms encounter resistance when trying to acquire garments from certain designers who refuse to sell to rental companies because they see their own sales-based business model as being threatened by rentals.

Finally, fashion rental entails complex two-way logistics including recollection and (re-) distribution, cleaning, repair, and finally disposal of clothing. Models vary in the extent to which these logistics are outsourced to third parties and how much they perform them in-house, although the collection of rented-out items from customers poses a challenge for all models. Likewise, the reliability and vulnerability of this complex set of logistics can be a barrier to such business models (Becker-Leifhold and Iran 2018; Gyde and McNeill 2021; Todeschini et al. 2017).

### Methodology

We used a mixed-methods case-study approach to explore different perspectives (business and consumer) of several linked business models in their real-life context (Simons 2009). We collected both quantitative and qualitative data and brought these together to craft our final analysis (Yin 2009). While we performed only a single case study, the generalizability of which may be called into question, we compare and contrast our findings in detail with the results reported by other researchers. This approach enables us to tease out similarities and differences between our case study – unique in its focus entirely on everyday garments – and other business models that focus on special occasion or luxury items.

The case study is centered on the Relenda GmbH in Germany, which we selected at the start of this research project because it was at the time the leading fashion-rental company for everyday clothing on the German market. Because the company was willing to cooperate with us on this three-year undertaking, the case study provided a unique opportunity to investigate the business model in great detail. In exchange for a well-founded assessment of the sustainability of its business model, the company gave us a detailed look at its finances, business practices, and customer base and used its own communication channels with customers to distribute and encourage participation in customer surveys. As a company that was strongly

sustainability-driven and rented out everyday garments, it also presented added value to prior case studies in the literature that mostly concentrate on special occasion or luxury fashion rentals. Our results come from three separate data sources.

### **Data from and interviews with Relenda**

Prior to its closure, Relenda was the primary industry partner in the research consortium underlying this article. We conducted in-depth interviews with the company's managing director during its routine operations in September 2019 (full-day) and again online immediately prior to the company's shutdown in September 2020 (approximately two hours). Additionally, Relenda provided us with detailed quantitative data in writing regarding company performance. Details on the interviews are provided in Supplemental Material B.

### **Customer surveys**

During August 2020, we conducted two customer surveys for the business models Kilenda and Stay Awhile. Participants were approached twice through email by Relenda and offered a 20% discount for the business models' online shop in return for participation in the online survey. Of the 277 Kilenda participants, 206 parents were using single rental, 46 had an active monthly subscription, 10 were at the time pausing their subscription, and 15 parents had ended their subscription. Of the 42 Stay Awhile subscription model participants, 18 were active customers, six had a subscription on hold, and 18 had ended their subscription. Customers in both surveys replied to questions regarding their acquisition of respective clothing and handling of garments, motives to use or not use the respective rental model, and sociodemographic information. It should be noted that participants selected themselves into the two customer surveys. This could possibly bias the results if the subgroup of customers completing the surveys differs systematically from all customers. Due to the small number of Stay Awhile respondents, these results should be interpreted with caution. More details on recruitment and sample selection can be found in Supplemental Material C.

### **Target-group surveys**

In addition to the customer surveys, we performed two target-group surveys for the same business models. While customer surveys offer insight on the user experience and satisfaction with the service, surveys directed at target groups can provide feedback on possible reasons (e.g., false beliefs, effort)

that hinder potential customers from using a service. In sum, both groups have different knowledge backgrounds (based on experience vs. based on description) and deliver different perspectives about the business model (customer satisfaction and experience vs. customer extension). For the Kilenda target group, survey responses were collected in September 2020 from 1,324 parents with children aged zero to eight who were involved in the acquisition and selection of their clothing. The target group was representative for the distribution of German household net income of families (see Supplemental Material D for subgroup distribution). From the aforementioned group, 64% reported to have one and 31% to have two children. Only 2% had already used a fashion-rental model for themselves or their children and 42% had previously heard of such business models. A total of 54% could imagine using a rental model for their children and 44% ( $N=583$ ) could envision not only using a rental model in general, but in addition, were predisposed to use a subscription-based rental model such as Kilenda. For the Stay Awhile target group, survey responses were collected in January 2020 from 1,171 female participants aged between 20 and 59 years. The target-group sample was representative of the German female population regarding both age and education (see Supplemental Material D for subgroup distribution). Among 1,171 participants, only 0.6% had already used some sort of fashion-rental model. However, 32% declared that they could imagine using a rental model in the future and 20% ( $N=233$ ) stated they could both anticipate using a rental model in general and, more specifically, signing up for a subscription-based rental model such as Stay Awhile.

Respondents in both surveys were asked about their attitudes on fashion-rental models, their fashion-acquisition behavior, personal consumption habits, and handling of garments. Furthermore, we asked for sociodemographic details and how much they would agree on several possible motives to use or not use rental models in the fashion sector. More details on recruitment, sample selection, and representativeness can be found in Supplemental Material D.

## **Results**

In this section, we provide a brief overview of Relenda's business model before integrating and analyzing the information from our company interviews with Relenda with the results of the customer and target surveys and comparing the resulting insights with previous research.

### Relenda's business model

Relenda offered several different fashion-rental models: a subscription model and single-item rentals for children's clothing ("Kilenda") and a subscription model with or without curation for women ("Stay Awhile") (Figure 1). We focus primarily on the subscription models. The children's fashion assortment was mostly mainstream brands and a small number of eco-fashion options, while the women's assortment offered exclusively brands certified to be sustainable.

In the children's subscription model, customers received a selection of seven items, were allowed to choose four to keep and exchange them whenever they wanted, but not more often than once a month. In the women's subscription model, customers received only four items, which they could either choose directly via the company's website or receive a box curated by a stylist based on their submitted preferences. All four items could be exchanged once a month. Packages were exclusively dispatched within Germany the day after the order was received using DHL Go Green, which led to average wait times of approximately 3–4 days. Based on company data shared during interviews, items were exchanged on average every 1½ months for both models, though customers had the option of keeping some items while exchanging others – always retaining a total of four items per month after the exchange. With regard to longevity, Relenda calculated that it could rent out children's clothing on average four times per item and women's clothing, which generally suffers less wear and tear, on average ten times per item.

Relenda's data further indicated average company costs of just under €5 per item to cover shipping and supplies as well as personnel costs for shipping and receiving, visual inspection of the returned items, laundering, and repackaging. Laundry was done in-house with industrial washing machines

and dryers to avoid an increased environmental footprint due to dry cleaning.

### Consumer perspective

In contrast to prior literature, our study includes data that allows us to compare sociodemographic factors between the total representative samples in Germany (the target groups), the interested subgroups within the target groups, and the actual Stay Awhile and Kilenda customers. A share of 20% of the total Stay Awhile target group of female participants aged between 20 and 59 years reported being able to imagine renting clothes and, more specifically, signing up for a subscription-based rental model (interested subgroup). A closer look at these interested potential customers who could be induced to use the business model showed no relevant differences in age compared to both the target group and current customers (see Table 1). However, the educational level of the Stay Awhile target group deviated quite substantially from those that were either interested or already customers. The latter groups were on average better educated, spent more money on clothing each month, and reported a higher net income than the target group consisting of German women between 20 and 59 years old. Regarding the business model, this means that the interested subgroup for subscription-based clothing rental models has a slightly higher socioeconomic status and is not limited to a certain stage of life. Regarding the customer segment of such a business model, this is advantageous, because it provides the benefit of a substantial share of potential customers (nearly 20% of the target group) with above average purchasing capacity.

For children's clothing, 44% of German parents with children below eight years of age could imagine using a subscription-based rental model. In contrast to the Stay Awhile subsample, a closer look reveals no substantial difference in number of children, net income, age, or share of participants living in urban areas compared to the entire target group (see Table 2). In other words, although the interested subgroup is slightly better educated and spends more on children's clothing, those interested in using a rental



Figure 1. Logos of the two Relenda business models.

Table 1. Comparison of sociodemographic factors between total sample and interested subgroup of potential Stay Awhile customers, as well as actual Stay Awhile customers.

|                       | Age (years) | Education (share of participants with higher education) | Clothing expenditure (in Euro per month) | Net income (in Euro per month) |
|-----------------------|-------------|---|--|--------------------------------|
| Target group          | 41.4        | 37%   | €75                                      | €2,200                         |
| Interested subgroup   | 39.4        | 47%   | €102                                     | €2,515                         |
| Stay Awhile customers | 40.7        | 86%   | €105                                     | €4,395                         |

Note: The total representative sample of German women between 20 and 59 years consisted of 1,171 participants, out of which 19.9% ( $N=233$ ) could imagine using a rental model in general as well as signing up for a subscription-based rental model such as Stay Awhile. This group of potential customers comprises the interested subgroup. "Education" indicates the percentage of respondents that have a university degree in the respective sample; for Stay Awhile customers, "Education" indicates the percentage of respondents that have at least a university-entrance qualification.

**Table 2.** Comparison of sociodemographic factors between total sample and interested subgroup of potential Kilenda customers, as well as actual Kilenda customers.

|                     | Number of children | Age (years) | Education (share of participants with higher education) (%) | Clothing expenditure (in Euro per month) | Net income (in Euro per month) | Living environment (share living in cities larger than 100,000) (%) |
|---------------------|--------------------|-------------|---|--|--------------------------------|---|
| Target group        | 1.43               | 37.2        | 39  | €8                                       | €3,145                         | 38  |
| Interested subgroup | 1.45               | 36.7        | 45  | €100                                     | €3,225                         | 42  |
| Kilenda customers   | 1.74               | 34.7        | 66  | €93                                      | €4,800                         | 44  |

Note: The total representative sample of German parents with children aged zero to eight that were involved in the acquisition and selection of their clothing consisted of 1,324 participants, out of which 44.0% ( $N=583$ ) could imagine using a rental model in general as well as signing up for a subscription-based rental model such as Kilenda. This group of potential customers comprises the interested subgroup. "Education" indicates the percentage of respondents that have obtained a university degree in the respective sample.

**Table 3.** Average rating of drivers for fashion rental among interested and not interested subgroups for Kilenda (children) and Stay Awhile (women), as well as active customers.

|   | Kilenda target group (mean) |                        | Kilenda customers ( $N=252$ ) | Stay Awhile target group (mean) |                        | Stay Awhile customers ( $N=18$ ) |
|---|-----------------------------|------------------------|-------------------------------|---------------------------------|------------------------|----------------------------------|
|   | Not interested ( $N=741$ )  | Interested ( $N=583$ ) |                               | Not interested ( $N=938$ )      | Interested ( $N=233$ ) |                                  |
| I would not need to buy clothes I only need once  | –                           | –                      | –                             | 3.98                            | 4.63                   | 3.72                             |
| I can try out new styles and brands without commitment                                    | 2.95                        | 3.67                   | 3.37                          | 3.37                            | 4.31                   | 4.22                             |
| Renting garments is better for the environment  | 3.19                        | 4.02                   | 4.39                          | 3.24                            | 4.25                   | 4.61                             |
| I avoid buying clothes that are hardly ever worn  | 3.16                        | 3.87                   | 3.96                          | 3.43                            | 4.21                   | 4.22                             |
| I have more variety in my closet  | –                           | –                      | –                             | 3.13                            | 4.17                   | 4.67                             |
| I save money in the long run  | 2.78                        | 3.62                   | 3.17                          | 2.13                            | 3.08                   | 2.89                             |
| By renting garments I can reduce the production of new garments under inhumane conditions | 3.10                        | 3.93                   | 4.14                          | –                               | –                      | –                                |

Note: Statements were rated on a 5-point scale from "completely disagree" (1) to "completely agree" (5).

model do not differ notably on specific sociodemographic characteristics. Current customers, however, generally have more children, are slightly younger, are better educated, and have a significantly higher income than the German average. Nevertheless, having 44% of parents who can imagine using a rental model for children's clothing lays the cornerstone for the economic viability of such a business model. In sum, our analysis shows that there are sufficient potentially interested customers for both Kilenda and Stay Awhile for the business model to be economically viable. While renting clothing for children has significant appeal for young parents across all socioeconomic levels, renting clothing for women specifically attracts a subgroup of women with higher income.

### Drivers

Table 3 shows the average rating of drivers for fashion rental among the three groups described above. Two of our findings are particularly interesting. Consistent with Mukendi and Henninger (2020), but contrary to other prior studies (e.g., Borg, Mont, and Schoonover 2020; McNeill and Venter 2019), we found that sustainability-related motives were highly rated both among actual and potential customers interested in using a rental model on a subscription basis for children's clothing and women's clothing. By contrast, saving money was

consistently rated as the attribute with the lowest relevance across all groups and offers. This contradicts findings from earlier research where saving money was deemed to be a strong motivator (Borg, Mont, and Schoonover 2020; Camacho-Otero, Boks, and Pettersen 2019; Mukendi and Henninger 2020). The disparity may stem from the fact that these studies focused more on luxury or special occasion wear, whereas our research spotlights everyday garments. In line with prior studies, those groups interested in rental, but that have not yet tried it out, value being able to rent clothing they only need once and are attracted to the idea of being able to try out new styles and brands, but these drivers play a much smaller role for actual customers.

### Barriers

Table 4 shows the average rating of barriers among the different survey groups. Customers who canceled or paused their subscription were asked for their reasons for doing so. The strongest barrier was clearly that renting (everyday) clothes is seen to be too expensive. The lack of trust described in prior literature can also be confirmed (e.g., Armstrong et al. 2016; Borg, Mont, and Schoonover 2020; Camacho-Otero, Boks, and Pettersen 2019), with a concern for liability in case of damages being the biggest hurdle for the interested subgroups both for women's and children's clothing. For those not

**Table 4.** Average rating of barriers to fashion rental by interested and not interested subgroups for Kilenda (children) and Stay Awhile (women), as well as inactive/former customers.

|  | Kilenda target group (mean) |                      | Kilenda customers (N = 25) | Stay Awhile target group (mean) |                      | Stay Awhile customers (N = 24) |
|--|-----------------------------|----------------------|----------------------------|---------------------------------|----------------------|--------------------------------|
|  | Not interested (N = 741)    | Interested (N = 583) |                            | Not interested (N = 938)        | Interested (N = 233) |                                |
| The garments could show signs of use                                     | 3.46                        | 3.04                 | 1.88                       | 3.60                            | 3.17                 | 1.87                           |
| I want to own the clothes, not just rent them temporarily                | 3.52                        | 2.70                 | 1.96                       | 4.03                            | 3.07                 | 2.46                           |
| I (my child) do (does) not want to wear clothes that strangers have worn | 2.70                        | 2.07                 | 1.20                       | 3.45                            | 2.47                 | 1.29                           |
| Renting clothes is too expensive in the long term                        | 3.59                        | 3.16                 | 3.48                       | 3.59                            | 3.25                 | 2.96                           |
| The rental system seems impractical to me                                | 3.35                        | 2.59                 | 2.28                       | 3.34                            | 2.36                 | 2.25                           |
| I am afraid of having to pay for possible damages to rented garments     | 3.65                        | 3.38                 | 1.76                       | 3.95                            | 3.70                 | 2.00                           |
| The price/performance ratio is not right for me                          | 3.61                        | 3.20                 | 3.12                       | –                               | –                    | –                              |

Note: Statements were rated on a 5-point scale from “completely disagree” (1) to “completely agree” (5).

interested in fashion rental, the desire to own clothes rather than to rent them temporarily was particularly strong, again supporting prior studies (e.g., Adam, Strähle, and Freise 2018; Arrigo 2021; Becker-Leifhold and Iran 2018). While our survey did not specifically ask about hygiene, it did include the item “I do not want to wear clothes that strangers have worn,” which addresses a similar point. For children’s clothing, this was the lowest ranked item across all groups and did not play a strong role for women’s clothing either. This is surprising, given that concerns regarding hygiene are the most frequently cited barrier in the literature. A mid-level barrier for former customers of both models was the perceived impracticality of the rental system.

Our survey also addressed the type of garments that women would like to rent for themselves and found that Stay Awhile’s business model does not necessarily meet consumers’ wishes.<sup>2</sup> Among those female consumers who could imagine using a rental model (N = 372), 94% would rent dresses or special occasion wear, 49% would access maternity wear, and 48% would use rental services for business clothing. However, only 32% stated an interest in renting everyday clothing. Although this share was slightly higher among respondents who could also imagine using subscription-based rental models (40%), this only amounts to 8% of the total female target group who would be interested in a model like Stay Awhile, where customers can rent everyday clothing via a subscription-based rental model.

In addition to the surveys, the interviews with Relenda’s managing director also included questions on why the company struggled with customer retention. Its own analyses likewise indicated that customers felt that renting clothes did not provide enough advantages to justify the additional costs or the change in habits. Additionally, customer feedback and survey comments revealed that customers often wanted more choices, more garments from current collections, more sustainable shipment, or

faster delivery. Concerns that clothing could have traces of prior use or doubts about the hygiene of rental items proved to be less relevant for customers. While sustainability-related drivers scored highly in the survey, interviews with the company indicated that the environmental benefits of rental models did not seem to be a driving force for use but were rather seen as a supplementary factor, which matches findings from prior studies. From the company’s perspective, convenience and possible savings were clearly the dominant motivation for most customers.

## Business perspective

### Drivers

As mentioned in prior studies (Arrigo 2021; Borg, Mont, and Schoonover 2020; Todeschini et al. 2017), company interviews revealed that the central driver for Relenda to rent out clothing was the intention to increase sustainability by making the fashion market more circular and increasing the intensity of use for each garment. From a business perspective, there did not appear to be any other drivers truly inherent to the business model itself.

In terms of factors that supported the business model, for Stay Awhile, which explicitly rented out sustainable fashion, the company was able to buy out dead stock (unsold items from previous collections). As a result, the company obtained more favorable conditions, paying only 50% of wholesale prices with payment due after six months – when the items had ideally already been rented out several times. However, this form of procurement is very labor-intensive and not scalable to higher volumes. Relenda purchased its children’s clothing entirely at trade fairs and at wholesale prices, sometimes with volume discounts, with mostly mainstream brands and only a smaller set of ecological and/or fair-trade items.

Also helpful for the fashion assortment for the Kilenda model was a relatively high churn rate of approximately 1.05 items per customer per year, with another 10% of rented items being bought by customers via rent-to-own at reduced sales prices.<sup>3</sup> Between replacements for defective and sold items, approximately two-thirds of the inventory of children's clothing was replaced each year, thus automatically helping to keep the collection up to date. For Stay Awhile, the churn rate was somewhat lower at 0.8 items per customer per year, whereas more items – 15% of those rented – were bought by customers via rent-to-own at reduced sales prices.

It is clear from the very brief list of drivers found both in prior studies and communicated to us during our interviews with the company that fashion rental as a business model, especially for everyday garments, is primarily motivated from an environmental standpoint and somewhat less so from a business perspective, though it is of course still a for-profit model.

### **Barriers**

The barriers described by Relenda during the in-depth interviews revealed that the company struggled with three overarching issues: customer acquisition and retention, inventory management, and making its business model profitable while still offering attractive rental prices to customers.

The customer-acquisition cost was extraordinarily high for the company even though a wide variety of different marketing channels had been tested throughout the startup phase. These costs ranged between €60 and €120 per customer depending on the marketing channels, and conversion rates indicating the proportion of Relenda's website visitors that turned into customers ranged between 0.3% and 0.5%. In other words, cold customer acquisition was often not successful. Moreover, customer retention was very difficult: only 20–30% of the new customers stayed longer than two to three months, thus not even leading to a return on the acquisition investment. These specific business aspects have not been discussed in prior research on clothes rental.

Part of the problem during acquisition is that the logic and procedure of rental models are barely known among potential consumers, a dilemma also cited by prior studies (Arrigo 2021; Borg, Mont, and Schoonover 2020; Todeschini et al. 2017). For example, 56% of the parents in the target-group survey had never heard about renting children's clothing before. Relenda would therefore have needed to significantly increase its investment in marketing to eliminate doubts about the model and to build up a solid customer base. When potential customers learned about the model through the survey, many

could imagine renting clothes once in a while (54% for Kilenda; 32% for Stay Awhile).

Relenda also faced significant challenges with regard to its inventory. First, to provide customers with a wide selection of rental items, the company had to overstock by about 20% at all times, an issue also cited by Gyde and McNeill (2021). Second, the rental of seasonal items, like winter coats or snow suits, is particularly attractive in the children's segment, because these items are usually only needed for a short period of time and can only be worn for one season when children are growing quickly. In the winter, such items therefore have to be in stock in sufficient quantities to cover demand, but then cannot be rented out again for 6–9 months, thus increasing carrying costs without generating revenue. In turn, if such items are out of stock when customers need them, this erodes their trust in and commitment to the rental model as a viable alternative to traditional shopping options. This aspect has to be factored into decisions regarding pricing and warehousing capacities for such items. Since few studies focus on the rental of everyday garments, such issues have not been discussed in earlier studies.

Finally, the most serious inventory problem was that the stock of clothing invariably became more unattractive over time. In Relenda's experience, between 15% and 30% of new additions to the inventory are "flops," meaning that customers neither want to rent nor purchase these pieces. Another 15–30% are "hot picks," in other words they are very popular among customers, which means that they are quickly rented out and then usually bought via rent-to-own and no longer available for re-rental to others. The difference between flops and hot picks can be minor – the same item with a different color or motif can be a hot pick in one season and a flop in the next. The remaining 40–70% of new additions are the "gray mass," often basic or less interesting pieces that are sometimes used to "fill up" an order, but are never attractive enough to motivate customers to begin renting fashion. With time, more and more of the existing stock inventory consists of flops and gray mass, which not only take up space but also generate additional costs: the few times these items are rented out, they then have to be washed and repaired again. Contrary to some prior studies (e.g., Arrigo 2021), Relenda was hesitant to sell these items off at a discount without prior rental, since they were afraid of being seen as a cheap retailer rather than a subscription-fashion service, thus undermining their own (intended) business model. In theory, this cost of item unpopularity would have had to be factored into the pricing strategy, but this would have made

subscriptions even more expensive and led to even fewer customers and rentals.

## Discussion

In contrast to most prior studies, our analysis focused on business models exclusively offering everyday garments, which is reflected to some degree in the drivers and barriers we identified from the consumer perspective. Contrary to most earlier research, sustainability was a more significant driver in this instance from the consumer perspective than saving money. This makes sense in context, as the financial savings for everyday clothing are much smaller than, for example, for luxury items or special occasion wear, while the sustainability impact is, in turn, much higher. In fact, the perception that renting clothing is too expensive in the long term was the most important barrier to renting clothes, even though the financial aspects were not paramount for the customers at the beginning. For those who have not yet tried fashion rental, lack of trust in the service provider and the importance of ownership were significant hurdles, as has also been described in prior studies.

Other research to date has presented detailed analysis of barriers to the business model of fashion rental from the retailer's perspective. Most barriers that are discussed are, in one way or another, related to consumers (Becker-Leifhold and Iran 2018). From our study, we can likewise confirm the difficulties resulting from a lack of consumer familiarity with and trust in the rental model. Only one prior study – Gyde and McNeill (2021) – discussed inventory issues as a problem, though they focused mostly on the need to overstock to ensure a wide selection. The inventory problems encountered by Relenda were much more extensive and may, again, have been related to the fact that the company offered everyday clothing and not special occasion wear, which is both more versatile and more seasonal.

Our results show that there is a potential market for fashion rental among German consumers. Both potentially interested and actual customers are better educated and have a higher income than the average and are more strongly motivated by sustainability than those not interested in the offer. These characteristics may explain why saving money was not as strong a driver for actual and potentially interested customers, although former customers who had paused or canceled their membership did cite cost as their primary motivation for leaving. Moreover, for women, fashion rental is particularly attractive for items they only need once or for a short period of time, such as maternity wear, while only a very

small percentage of the potential target group can imagine renting everyday garments. Interestingly, while potential customers are particularly concerned about liability in case of damages as well as garments that show signs of use, these factors hardly play a role in motivating former customers to stop renting. This shows that actual experience with the rental service largely helps to eliminate these concerns, which are so often cited in the literature.

From a business perspective, the excessively high customer-acquisition costs and difficulty retaining customers that Relenda encountered reflect both the lack of familiarity with fashion rental as a service and the overall customer reluctance to rent everyday garments. An offer that is more closely tailored to customer wishes – special occasion and perhaps maternity wear and business-professional clothing – would likely improve customer-retention rates. However, it would still require extensive marketing to make the offer known in the first place so that acquisition costs are unlikely to decline significantly, at least initially.

Nevertheless, such an offer would also be more attractive in terms of its cost structures: Kilenda's single item rentals were generally rented out for 1/6 of the item's sales price and the company estimated handling and shipping costs of approximately €5 for each item. For a mid-range dress with a sales price of €300, paying €50 for a one-time rental would therefore be a win-win situation for both sides: The customer saves €250 on a dress she only needs for a single event and the company receives enough money to cover all of the logistics associated with the rental with money left over to pay off the item's original cost, or later on, to generate profit. Even assuming that more high-end clothing would require more professional and more expensive (chemical) cleaning services, the handling costs are unlikely to scale proportionally. For an everyday item whose sales price is only €30, by contrast, a €5 rental is barely enough to cover the operational costs it generates and does not suffice to even begin covering the cost of acquisition.

As a result, Relenda's managing director listed the following characteristics for making product groups well suited to rental: (1) products should be expensive to purchase, so as to make rental for a fraction of the price attractive to consumers; (2) products should not be subject to frequently changing fashions, so that they can be rented out for an extended time; (3) products should have a clearly recognizable rental use-case for customers, such as a one-time special occasion; and (4) products should be long lasting and require little repair. This matches insights from prior studies and shows that fashion rental is most likely to be profitable for

high-end and/or event-based items, such as evening wear, traditional folk costumes, or wedding attire, which are rented out frequently and for a short period of time (1–2 weeks). It should be noted, however, that this type of business model is not ideal for the goal of increasing the circularity and sustainability of the fashion sector, which would require an upscaling of the rental models to everyday clothing.

## Conclusion

This article examined drivers and barriers of fashion-rental models. Its research contribution comes especially from three unique aspects. First, we incorporate primary empirical data related to the same business offering from both consumer and business perspectives rather than only focusing on one vantage point. Second, the article provides detailed quantitative survey results, including two target-group samples that are representative for the intended market in Germany. Finally, we analyze business models offering everyday garments rather than the much more common rental model for special occasion or luxury clothing.

By combining the complementary viewpoints of the rental-business together with feedback from both real customers and representative target groups, we were able to more precisely pinpoint where the difficulties in Relenda's business model were located and compare and contrast these problems with prior studies on fashion-rental models. The primary driver for the business model is in increasing the sustainability of the fashion sector, which matches findings from prior literature. While this is a key motivation from a social and ecological perspective, it cannot make up for the missing economic drivers in the business models. We could not confirm earlier suggestions that overstock and excess inventory are less of a problem for rental models (Jin and Shin 2020). Rather the opposite was true in Relenda's case, as one of the main barriers to success was the worsening quality of the company's inventory over time. Confirming findings by Arrigo (2021), Gyde and McNeill (2021), and Todeschini et al. (2017), Relenda faced significant difficulties acquiring and retaining new customers due both to their general unfamiliarity with the concept of fashion rental and a poorly perceived price-performance ratio.

All of these issues support the conclusion that future fashion-rental models (at least in Germany) should begin by focusing on special occasion rentals with more high-end fashion options. Regarding procurement, they should consider several strategies. First, fashion-rental entrepreneurs should create partnerships with upcoming designers and luxury

brands interested in showcasing their creations and increasing their visibility and thus potentially willing to sell their items at a reduced price or even donate a part of their collection for free, as has been done in Italy and Scandinavia (Arrigo 2021; Pedersen and Netter 2015). Second, prior season dead stock from high-end brands may be another source of procurement to reduce costs. Third, if the rental concept is still largely unknown in a country, significant funds should be budgeted for marketing and publicity campaigns to raise customer awareness of alternatives to traditional retail models and to alleviate consumer concerns regarding product quality and liability, as has previously been suggested by Arrigo (2021) and Todeschini et al. (2017). Fourth, if a special occasion rental model is successful and has an established and stable customer base, everyday fashion-rental options could be explored once again as a supplement with a view to increasing circularity and sustainability in the fashion sector. Fifth, we recommend that retailers and rental companies invest in critical infrastructure for cross-collaboration between retailers/rental companies and textile services, such as tailoring, dry cleaning, and repair. The wider availability of these services would make it easier for customers to access them (rather than always buying new clothing) and, when incorporated directly into rental-business models, would also help to reduce concerns regarding liability in case of damage. Given that we identified liability as one of the main obstacles in the target-group survey, trust is a major component in business models of the sharing economy and showing customers that the garments are well taken care of ensures confidence in the service.

This article has demonstrated the benefit of linking different sources of data and perspectives rather than analyzing rental platforms only from the consumers' or retailers' perspective (e.g., consumer acceptance of rental models). The discrepancies and contradictions provided valuable insights for our research, including how the rental of everyday garments as opposed to luxury or special occasion wear changes the challenges of the business model. In this vein, we would also emphasize the difference between interviewing target groups versus actual customers for new business models. While customers can provide an inside perspective that draws on first-hand experience with the product, potential customers from a target group can provide insight on concerns that hinder a business model's growth from niche to mainstream. We believe that research directed at upcoming business models should benefit from these different perspectives by using multi-data approaches wherever possible. In our research, we focused only on a single company, which limits

the implications that one can draw for similar business models and the whole rental market. Future research could examine whether the findings are also applicable to other rental models for everyday clothing, to fashion-rental companies for special occasions and to further product groups. Subsequent studies should be conducted with attention to the business perspective, especially its challenges and possible solutions, which has so far been underrepresented. Finally, in-depth cross-country comparisons of fashion-rental experiences, both among consumers and firms, could serve to better understand the role of cultural factors in determining the success of the business model.

## Notes

1. Prior to the outbreak of Covid-19, the company was already trying to reorganize and optimize its business models based on prior experience and overall lack of success on the market. During the first four weeks of the pandemic, Relenda lost 30–40% of its customers and did not recover during the following six months. The company chose to shut down in late 2020.
2. This question was not included in the Kilenda target survey, as categories such as special occasion, maternity wear, or business clothing play almost no role for children's clothing.
3. For example, the average number of clothing items that were beyond repair for the purpose of commercial rental, expressed on a per-customer basis.

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