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What does it take to buy in brick-and-mortar secondhand fashion stores? A non-user segmentation with recommendations considering current secondhand retail trends

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ABSTRACT

Secondhand fashion retail is a critical driver of the global fashion industry's pressing sustainability transition, while also offering substantial economic market potential. Yet, a key growth segment has been largely overlooked: Non-users and their barriers to brick-and-mortar secondhand fashion retail. This paper aims to support the fashion industry in effectively segmenting and targeting non-user groups, thereby considering recent trends in the sector. Drawing on in-depth semi-structured interviews and an exploratory follow-up online survey among 27 non-users of brick-and-mortar secondhand retail, a novel non-user segmentation is proposed, which indicates distinct barriers of four non-user groups (i.e., unaware supporters, disillusioned supporters, skeptic hedonists, and skeptic outsiders). Moreover, the paper develops recommendations and store concepts for specific non-user groups and assesses the appeal of recent retail trends (e.g., luxury secondhand, kilo stores, mixed assortments) in targeting non-user groups. This study makes several contributions to the literature on diffusion of innovation, consumer adoption, and customer segmentation both within and beyond the context of secondhand retailing. Specifically, it provides novel insight into relevant non-user groups, enabling managers to identify and target non-user groups, and advances future research avenues.

1. Introduction

The global fashion industry is a significant contributor to environmental degradation, causing approximately 8 % of all carbon emissions (Quantis, 2018). Secondhand retail can advance the pressing sustainability transition of the global fashion industry (e.g., Arrigo, 2021; Büttgen et al., 2023; Perry et al., 2025; Zechiel, 2024) owing to its immense economic and ecological potentials. It is expected to account for up to 10 % of the worldwide fashion market in 2025 (with a gross merchandise value of US \$264 billion) and double its market share within the next decade (ThredUp, 2024). This growth promotes reuse and lowers the consumption of new fashions, thereby reducing the environmental impact of the global fashion industry (e.g., Sandin and Peters, 2018; Trzepacz et al., 2023).

Brick-and-mortar secondhand retail plays a crucial role in unlocking this growth potential. As secondhand pieces are often unique and have been worn by others, customers tend to thoroughly inspect their quality and try them on before making a purchase. PricewaterhouseCoopers

(2023) recently showed that roughly 40 % of German customers, of whom 15 % use brick-and-mortar secondhand stores, seek such opportunities when buying secondhand clothes (e.g., in stores, flea markets, and clothing exchanges). As secondhand retail gains popularity, secondhand offerings in regular fashion stores (e.g., Globetrotter, n.d. Zalando, 2022), online secondhand retailers in brick-and-mortar stores (e.g., Depop and Sellpy; Schygulla, 2023; Young, 2023), and new secondhand boutiques or chains in city centers are increasing (e.g., PICKNWEIGHT and Think Twice; Bach and Römer, 2024; Teichert, 2024).

Extant research has mainly focused on the supply chains of second-hand business models (e.g., Turunen and Gossen, 2024) and on identifying regular secondhand shoppers' motivations (e.g., ecological and economic motives) to buy secondhand fashion, with earlier studies investigating barriers (e.g., hygiene and quality concerns) (e.g., Edbring et al., 2016; Ek Styvén and Mariani, 2020; Evans et al., 2022; Hur, 2020).

Both theory and practice in the interconnected fields of diffusion of

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innovation, consumer adoption, and customer segmentation suggest that *encouraging non-users* to buy secondhand has significant economic and ecological potential (e.g., Kristensson et al., 2020; Rogers, 2003; Talke and Heidenreich, 2014; Wind and Bell, 2008). More than a third of the global population is receptive to secondhand retail (YouGov, 2024). To effectively target relevant non-users, their systematic differences and similarities must first be identified and then used to segment them and classify their distinct barriers to shopping at brick-and-mortar secondhand retail stores (e.g., Ross et al., 2023; Wind and Bell, 2008). Second, retailers must understand how to target relevant non-user groups. Recent trends in brick-and-mortar secondhand retail, such as luxury secondhand or kilo stores, may attract new customers. However, research has not yet addressed their potential impact on non-users.

Hence, to design appealing secondhand offers and win over nonusers, a better understanding of non-users' perceptions of brick-andmortar secondhand retail and how to target them is necessary (e.g., Ross et al., 2023). To address this gap and put forth novel insights for secondhand retail research and practice, this study (1) develops a non-user segmentation, considering non-user barriers; (2) derives general and non-user group-specific recommendations, including concrete store concepts, for retailers according to the different dimensions of brick-and-mortar retail to target relevant non-user groups by overcoming their barriers; and (3) assesses the role of recent trends in secondhand fashion retail. To this end, it conducts in-depth, semistructured interviews and an exploratory follow-up online survey among 27 non-users of brick-and-mortar secondhand retail.

This paper contributes to the literature on diffusion of innovation, consumer adoption, and customer segmentation both within and beyond the context of secondhand retailing. First, drawing from and conflating theories of diffusion of innovation, consumer adoption, and customer segmentation frameworks for market analysis, our work offers a systematic approach for understanding non-adoption and non-user groups. Applying this approach to secondhand retail literature, we introduce a newly developed non-user segmentation that reveals differences among customers based on several segmentation criteria. Second, the additionally derived recommendations and store concepts enable more targeted approaches to win over these groups. Third, the paper explores current trends in the evolving brick-and-mortar retail environment. Although these trends have not yet been established in the retailing literature so far, they may help overcome barriers faced by specific non-user groups and improve the overall customer experience.

2. Literature review

2.1. User segmentation in secondhand retail

Investigating how and why different customers are adopting new products and services over time is rooted in theories of diffusion of innovation and consumer adoption (e.g., Kristensson et al., 2020; Rogers, 2003; Talke and Heidenreich, 2014). Diffusion of innovation theory suggests that there are distinct adopter groups (e.g., innovators, early adopters, early majority) with varying characteristics, who adopt a new product or service over time (Rogers, 2003). Furthermore, research emphasizes that these groups evaluate new products or services differently and that their adoption behavior is therefore not generalizable (e. g., Bohlmann et al., 2010; Wijekoon et al., 2021). Thus, applying customer segmentation approaches for new products and services is valuable to distinguish heterogeneous customer groups for effective and accurate targeting (e.g., Chen et al., 2025; Gilboa et al., 2024; Liu et al., 2024; Ozuem et al., 2024). Typical customer segmentation criteria include demographic information, general psychographics, and product or service-specific perceptions and behaviors (e.g., in this study, brick-and-mortar secondhand retail-related attitudes, behaviors, and barriers) (Wind and Bell, 2008). Customer segmentations in the context of general sustainable consumption (Guiot and Roux, 2010), including sustainable fashion behaviors (e.g., Haines and Lee, 2022), have already

been developed. Ferraro et al. (2016) identified four user segments based on demographic information, general psychographics, and secondhand retail-related behaviors and perceptions. Three user segments are more or less driven by fashionability motives, emphasizing that secondhand shopping is not only sustainability or economically driven (Ferraro et al., 2016). One user segment had no particularly high economic, sustainability, or fashionability motivations (Ferraro et al., 2016). The authors conclude that their segmentation offers opportunities to enhance shopping experiences and increase the frequency of secondhand shopping among the different segments. However, extant segmentation approaches predominantly focus on actual users, their motives and behaviors, while neglecting late or non-adopters and their respective barriers, leading to adoption resistance.

2.2. Barriers to secondhand retail

Research in the fields of diffusion of innovation and consumer adoption explores the reasons why certain groups of people (e.g., laggards) choose not to use or actively reject specific products or services (e. g., Hazée et al., 2017; Hur, 2020; Rogers, 2003; Talke and Heidenreich, 2014). A key insight from this body of work is the significant role that customer barriers play in shaping adoption behavior and that they are valuable to segment customers. Understanding the barriers of different customer groups is essential for developing strategies to encourage the acceptance and use of new products and services (e.g., Hazée et al., 2017; Talke and Heidenreich, 2014). In the context of secondhand fashion, research has already investigated different customer barriers, including hygiene, quality, fashionability, and social image concerns (e. g., the embarrassment of wearing secondhand clothes), lack of economic advantages (e.g., low price difference to new products), lack of stores and accessibility, unavailability of specific products and sizes, high shopping effort (e.g., time-consuming), and messy or unpleasant stores (e.g., Calvo-Porral et al., 2024; Das et al., 2024; Edbring et al., 2016; Frahm et al., 2025; Hur, 2020; Liu et al., 2023; Luo and Park, 2024; Rathi et al., 2023; Silva et al., 2021; Tangri and Yu, 2023; Wang et al., 2022). However, the literature also indicates that barriers appear customer-type specific and context-dependent. For example, younger customers have different barriers than older customers, there are differences in the online and offline context, and also between luxury and non-luxury secondhand shopping (e.g., Calvo-Porral et al., 2024; Evans et al., 2022; Luo and Park, 2024; Rathi et al., 2023; Tangri and Yu, 2023; Wang et al., 2022). In sum, secondhand studies have identified different current customer segments (Ferraro et al., 2016) and general motivations and barriers to online or offline secondhand shopping (e.g., Calvo-Porral et al., 2024; Edbring et al., 2016; Ek Styvén and Mariani, 2020) but have overlooked the potential of various non-user groups, their barriers, and provided no specific insights for brick-and-mortar retail (PricewaterhouseCoopers, 2023; YouGov, 2024). We provide a overview of the literature and its current gaps in Appendix A.

2.3. Non-user segmentation in secondhand retail

Building on established insights from the literature on diffusion of innovation theory and consumer adoption, examining customer barriers has proven to be a valuable method for understanding why potential users do not (yet) use a product or service, and accordingly segment customers into groups of different types and levels of non-adoption (e.g., Bohlmann et al., 2010; Hazée et al., 2017; Rogers, 2003; Talke and Heidenreich, 2014; Wijekoon et al., 2021; Wind and Bell, 2008). In the context of secondhand retail research, knowledge is scarce on why some customers do not adopt secondhand retail offers. Hence, there is a significant need to investigate non-users and their barriers in this context, to understand which barriers heterogeneous non-user groups distinguish and whether they might have certain barriers in common. Complemented by insights on how to overcome these barriers, retailers can be enabled to address these segments more effectively and unlock their

growth potential (PricewaterhouseCoopers, 2023; YouGov, 2024).

Starting to fill this gap, Hur (2020) offers insight into non-user segments of online and offline secondhand fashion retail by identifying four non-user groups based on secondhand retail-related behaviors and perceptions. These groups avoid secondhand fashion and shopping because of social embarrassment, dirty and low-quality clothing items, the perception that secondhand clothes are unfashionable and unattractive, and time-intensive searches for suitable clothes in unpleasant charity stores, respectively (Hur, 2020). Whether different groups can share the same barriers while differing in other segmentation criteria remains unclear. Hur's (2020) study also provides firsthand insights to optimize shopping for secondhand clothes, considering distribution, product sourcing, quality control, and marketing.

Our study builds on literature on the theories of diffusion of innovation and consumer adoption, as well as empirical insights from secondhand retail, to develop a more detailed segmentation with more actionable managerial implications (see Appendix A). First, it adds demographic information and general psychographics to the segmentation. Second, it employs a method to identify the barriers shared between the non-user groups and unique to each group. Third, it provides general and group-specific actionable recommendations, including concrete store concepts, on how to attract non-users and overcome the barriers according to the dimensions of brick-and-mortar secondhand retail. Fourth, it assesses recent trends in brick-and-mortar secondhand retail to provide concrete actions to win over current non-users

3. Methodology

3.1. Research design

To include demographic information, general psychographics, and brick-and-mortar secondhand retail-related attitudes, behaviors, and barriers as segmentation criteria (Wind and Bell, 2008), this study combined a qualitative exploratory approach, using in-depth interviews, and a quantitative follow-up online survey, following established literature (e.g., Braun and Clarke, 2006, 2012; Brinkmann and Kvale, 2015, 2018; Flick, 2018; Hazée et al., 2017). Ethical approval was obtained from the ethics committee.

3.2. Data collection

For sufficient diversity among interview participants to develop a non-user segmentation, we used demographic criteria to ensure, for example, an equal distribution of age and gender (following, e.g., Flick, 2018; Hazée et al., 2017; Suri, 2011). Participants were mainly recruited by sharing and forwarding an information slide on social media (especially LinkedIn and Instagram), as well as via email distribution lists and instant messaging groups. If any age or gender groups were found to be overrepresented, we paused recruitment for those groups. Finally, we interviewed 13 men and 14 women aged 18–71 years from Germany (reaching theoretical saturation at 27 interviews) who do not use brick-and-mortar secondhand retail stores (see Appendix B). The online and offline semi-structured interviews typically lasted between 30 and 60 minutes.

In the interview (see Appendix C), the participants were asked to identify barriers to brick-and-mortar secondhand shopping and ways to overcome them, first, generally and then with respect to different dimensions of brick-and-mortar stores (e.g., Purohit et al., 2021). Subsequently, they were asked to name their most critical barriers and assess five current secondhand retail trends: luxury secondhand, kilo stores, mixed assortments of new and secondhand clothing, secondhand shopping events and pop-up stores, and guarantees. The interviewer noted barriers and corresponding ideas on a whiteboard with sticky notes

(inspired by qualitative service design methods; e.g., Čaić et al., 2018) to visualize the interview results in real time and avoid misunderstandings.

The follow-up online survey included demographic information, general psychographics (i.e., general shopping motivations [Wesley et al., 2006], general ecological sustainability values [Buerke et al., 2017]), brick-and-mortar secondhand retail-related attitudes and behaviors (i.e., attitude toward secondhand shopping; [Mohammad et al., 2021], and secondhand shopping frequency [Hamilton et al., 2011]) variables measured on 7-point Likert scales, to add quantitative segmentation criteria and enrich the qualitative data concerning barriers to non-user segmentation, and further increase robustness through triangulation of methods and collected data (Natow, 2020). All interview participants took part in the follow-up survey, and there was no missing data.

3.3. Data analysis

All interviews were audio-recorded and transcribed. We employed a thematic analysis (TA) to examine the contents of the transcripts and whiteboards, starting with the lead author performing an initial coding of overarching topics related to barriers and recommendations to overcome these (Braun and Clarke, 2006, 2012). Afterward, concrete themes were identified within the topic codings (Braun and Clarke, 2006, 2012). The research team regularly discussed the coding process, the identified topics and themes, and corresponding codings to refine the TA and its results further (Braun and Clarke, 2006, 2012). In addition, we leveraged a large language model (LLM; i.e., a custom GPT by [Cardenas, n. d.], based on ChatGPT40), providing it with the anonymized transcripts and specific prompts, to identify and cluster barriers, develop recommendations to overcome them, and assess the secondhand retail trends, based on the interview transcripts (prompts are provided in Appendix D; adapted from Arora et al., 2025). This approach enhanced the reflexive character of TA (Braun and Clarke, 2019) and can lead to unique knowledge creation and coding advantages, including increased coder triangulation (Arora et al., 2025; Natow, 2020). It is important to note that LLMs can produce biased or misinforming content (Arora et al., 2025). Therefore, it is vital that content produced by LLMs is critically reviewed and that LLM output is aligned with human coding and data analysis. In our case, the LLM did not identify any problematic or new thematic perspectives, indicating that our TA was conclusive. For the trend assessment, the corresponding interview excerpts were coded by two authors into positive, neutral, and negative perceptions. Any ambiguities were discussed and resolved.

After analyzing the data, we combined the identified themes with the follow-up survey results for the non-user segmentation. In an initial step, the quantitative data from the follow-up survey were analyzed descriptively (e.g., in the form of scatter plots) and differences in the participants' demographics, attitudes toward secondhand shopping, sustainability values, and general shopping motives were identified; for example, we identified a group of people with comparatively higher means of sustainability values and a more positive attitude toward secondhand shopping (group 1a and b). To form the final segmentation, we conducted an iterative process combining insights from both the quantitative and qualitative data. First, we allocated the identified barriers from the qualitative TA to preliminary non-user groups based on the quantitative data. After that, we iteratively identified differences and similarities between non-users to define the final non-user groups considering both the quantitative and qualitative segmentation criteria. For instance, within group 1, the qualitative data revealed differences in barriers, leading to the formation of subgroups 1a and 1b. After that, recommendations, including potential store concepts, were made, and the role of recent trends in overcoming these barriers was determined. Finally, the authors discussed the results and made final adjustments.

4. Findings

4.1. Non-user segmentation

The first non-user group consists of two subgroups: 1a) unaware supporters and 1b) disillusioned supporters. The group has a balanced gender ratio and mean age of 39 years. This group tends to have higher sustainability values, lower recreational shopping motives, and average quality and trendiness shopping motives compared with the other interviewees. The group exhibits a positive attitude toward secondhand shopping and places importance on sustainability, although their specific motivations for shopping (i.e., recreational, quality, and trendiness shopping motives) are less pronounced. Concerning the main barriers to brick-and-mortar secondhand shopping, we found differences between subgroups a and b (see Fig. 1 for non-user groups and their associated barriers; for a detailed overview see Appendix E). While the subgroups share barriers concerning clothing selection and location and reachability, one barrier (feeling of not belonging to the target group) exclusively adheres to unaware supporters (group 1a).1 This barrier emerged because the participants were aware that they could afford more or because they were worried about taking from others.

... I've had scruples about that too. I don't want to take something away from someone who is in need ... (Interview 13)²

Moreover, group 1b (disillusioned supporters) faced more extensive barriers, as they actually entered and experienced the stores but were left disillusioned by the store presentation and offerings, as indicated by a corresponding question in the follow-up survey that asked participants how often they visit a brick-and-mortar secondhand shop without buying anything and corresponding statements in the interviews. Therefore, the following barriers additionally pertain to group 1b: clothing styles, disorder in the store, (time) effort, quality and condition of clothing, and store interior.

Non-users in the second group (*skeptic hedonists*) are younger (26 years old on average) and mostly women (in our study, 100 %). The group's sustainability values are average, and their recreational, quality, and trendiness shopping motives are higher than average. This group enjoys shopping and discovering high-quality, trendy fashion pieces. Their attitude toward secondhand shopping is generally more negative. Their main barriers are *clothing styles*, *cleanliness and odor of the store*, *disorder in the store*, *hygiene of clothing*, *price-to-value ratio*, *quality and condition of the clothing*, and *store interior* (see Fig. 1).

The third group (*skeptic outsiders*) is the most difficult to win over for brick-and-mortar secondhand retail. This group tends to include older individuals and more men. Moreover, it has lower sustainability values and holds a neutral attitude toward secondhand shopping. As shopping is generally perceived more as a duty than an enjoyable recreational activity, secondhand shopping is not viewed in a very positive light, and sustainability is relatively unimportant, making it difficult to reach this group. The remainder of the paper focuses on groups 1 and 2, as it is more realistic and cost-efficient to attract these groups to brick-and-mortar secondhand retail.

4.2. Recommendations for attracting non-users to brick-and-mortar secondhand retail

Our general and group-specific recommendations for secondhand retailers are organized according to seven dimensions of brick-and-mortar retail (inspired by service and retail marketing; e.g., Purohit et al., 2021): clothing assortment, store design, location, pricing, frontline

staff, marketing & communication, and store operations & customer service. We provide a rapid overview of the dimensions that have the potential to overcome which barrier, as indicated by "X" in the respective field in Appendix G. It emphasizes the relative importance of clothing assortment as well as marketing & communication to overcome the identified non-user barriers. Our general recommendations are summarized in Table 1. Finally, we present group-specific recommendations and developed targeted approaches to tailor secondhand store concepts to each group (see Figs. 2 and 3).

4.2.1. General recommendations

The general principles of visual merchandising must be improved (e. g., Basu et al., 2022). Secondhand stores follow store design rules other than those followed by regular fashion stores. For example, disorder is not necessarily a negative characteristic in secondhand stores, as it can evoke the positive effect of treasure hunting (Ross et al., 2023). However, current non-users prefer spacious, bright, minimalist decorations and a clear layout and selection (see Table 1).

... Space and selection are conditional, (...) if the store is kept minimalist, ceiling, walls, floor, for example, are in one color and that makes it look cleaner and there aren't a thousand things hanging on the wall, (...)[so] it's not such an overload of stimuli. (Interview 18)

Non-user groups prefer locations downtown or near other stores (e. g., shopping centers) or close to typical gathering places (see Table 1).

We recommend considering clear price differentiation based on clothing condition, quality, and brand price segments, as well as similar price levels for similar brands. If brick-and-mortar stores target nonusers, they should be cautious with very low prices, as this can fuel concerns about quality and the perception of taking from those in need. Moreover, while discount campaigns can be beneficial overall, they may also raise sustainability concerns (see Table 1).

... If the pricing was different so that I didn't feel like I was taking something away from someone. If I had to pay 15 euros for the pants now, it would be a lot cheaper than in a new clothes store but a lot more than buying used jeans from the Red Cross for a euro or so. (Interview 10)

Themes related to *frontline staff* emerged frequently in the interviews. Participants negatively perceived staff who were dressed and styled in a strikingly alternative and obtrusive way. Overall, staff should be friendly and discreet in providing an overview of the store's assortment and advice to customers (see Table 1).

- \dots I often have the feeling that they are a bit crazy in these stores \dots (Interview 14)
- ... That the employees, as I said, look good, look well-groomed ... (Interview 5)

Lastly, *store operations & customer service* provide different options to target non-users. These include clear guidelines for sorting and hygiene processes related to clothing. Clothing labels can underpin these processes. Furthermore, the store should be tidied and cleaned regularly (see Table 1).

- \dots Then you also need staff to clean up regularly. (Interview 1)
- ... (...) the things are just broken, or it's just no longer justifiable that this item of clothing can still hang in the store (...). (Interview 14)

4.2.2. Recommendations for unaware and disillusioned supporters

Our results suggest specific recommendations for group 1 regarding *clothing assortment* options. First, brick-and-mortar stores could focus on a selection of timeless, basic clothing, such as jeans and sweaters, with multiple options for similar pieces in a single size category. Worn-out, outdated, heavily printed, or overly fancy clothing should be sorted out. Second, stores could specialize their assortment in one specific clothing area (e.g., outdoor clothing) (see Fig. 2). Improvements in

 $^{^{-1}}$ For an overview of all barriers with a description, please refer to Appendix

 $^{^{2}}$ The following excerpts from the interview were smoothed and translated into English.

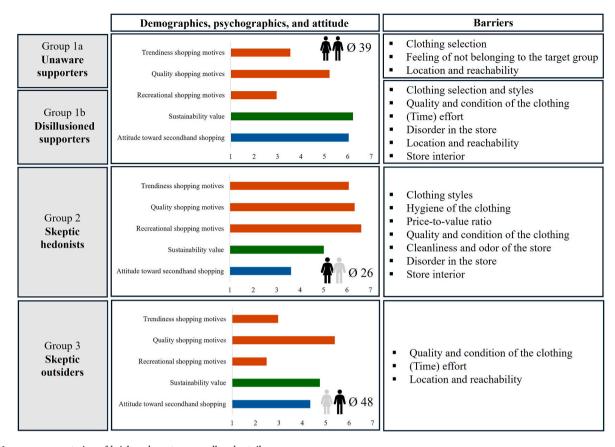


Fig. 1. Non-user segmentation of brick-and-mortar secondhand retail *Note.* The person icons indicate either an equal distribution of men and women within a segment (both icons in solid black) or a clear majority of one gender (only that gender's icon in solid black). The number shown represents the average age in each segment.

clothing assortment are particularly important for disillusioned supporters (group 1b), as this group can be persuaded to purchase by adaptations that reduce barriers, such as clothing selection and styles. On the other hand, unaware supporters (group 1a) must first be brought into the stores, which makes marketing & communication measures more essential.

Regarding *marketing & communication*, three options emerged for target group 1: focusing on the social or ecological purpose, assortment, or location. Especially the *unaware supporters* (group 1a) considered communicating location information, primarily through posters around the location and print media in regional outlets, to be helpful. Moreover, receiving information across various channels (e.g., websites, social media, and regional print advertising) about the current items and brands (i.e., assortment) before visiting the stores to determine whether a visit would be worthwhile was deemed beneficial.

Then you see something online, so simply having an online presence makes a difference. Then I don't even have to go into the store to see if the clothes I'm looking for are available. (Interview 22)

In contrast to group 1a, group 1b considered communication about the store location less relevant. Thus, the focus can be placed on the social and ecological benefits of secondhand clothing that are important to non-users in this group.

From these recommendations, two store concepts for targeting *unaware* and *disillusioned supporters* emerged (see Fig. 2). First, the *basics store* approach focuses on an assortment of basic clothing items that are timeless classics and regularly needed. Second, the *specialized store* focuses on specific clothing groups (e.g., outdoor or menswear). To effectively advertise these two concepts to target *unaware and disillusioned supporters*, we recommend employing omnichannel marketing for the assortment concept, with a strong emphasis on its social or ecological purpose, and measures to specifically target local customers (see Fig. 2).

4.2.3. Recommendations for skeptic hedonists

The recommendations for the *skeptic hedonists* (group 2) differ from those for the first group. This group preferred stores focused on either premium basic clothing or select items from specific high-quality, luxury brands (i.e., concept stores). Store design should then be adapted to suit these brands. Store hygiene and clothing cleanliness are important for non-users in this group and should be ensured.

... Every normal stationary retailer specializes in certain brands. So, for example, I have these ten brands, and then there are only these ten brands, not 50 different ones, you know, or five to ten brands would probably be enough. So, to position myself a bit better, I'd say, and then I would position them accordingly; of course, they have to be in the same price segment. (Interview 14)

Omnichannel marketing should reflect fashionability motives and emphasize an appealing shopping experience. Short video formats that showcase complete, fashionable outfits or the in-store shopping experience are recommended for targeting this group. Furthermore, *skeptic hedonists* value transparency regarding garment quality, hygiene, previous prices, and information on how long the item was worn. Again, prior easy-to-access information about current items and brands across channels could win over this group.

... So on Instagram, for example, all these reels, yes, how do I style the outfit, I think you can do a lot there, too (Interview 14)

Thus, to target *skeptic hedonists* (see Fig. 3), we recommend a *premium basics store* with high-quality basic items from known brands within a similar price segment and a *concept store* that sells high-quality clothes from selected well-known brands showcased in separate areas. For both, we recommend omnichannel marketing and communication measures with a strong focus on fashionability, the shopping experience, the

Table 1General recommendations for all non-user groups.

Dimension of brick-and- mortar retail	General recommendations
Store design	Spacious and bright stores No bold colors and floors Minimalist and not overly old-fashioned decoration Seating with possible coffee or drinks bar Sufficient fitting rooms Clear store layout, either by brand or type of clothing item (e.g., jeans or t-shirts) Sorted by size
Location	 Near popular places to stay and other stores Close to the city center or in shopping centers
Pricing	Clear price differences for different clothing conditions and quality levels and from the prices of new items (corresponding to the price segment of the brand) Avoiding too low prices, which can fuel quality concerns and the feeling of taking from those in need (not the target group) Offering discounts (as campaigns or in exchange for donated clothing)
Frontline staff	Friendly and discreet in giving advice, if necessary Can provide a good overview of the store and its clothing assortment Unobtrusive clothing and styling
Store operations & customer service	 Label for "degree of wear" (for different quality and condition levels) Hygiene label (disinfection label) Clear internal guidelines for sorting out clothing (according to style, condition, etc.) Regularly tidying and cleaning store Opportunities for customers to upcycle and repair (DIY or through the store) Clothing return options

current assortment, and high transparency on relevant clothing aspects.

4.3. Assessment of retail trends

We identified five trends in brick-and-mortar secondhand fashion retail based on their emerging appearance in practice: luxury secondhand, kilo stores, mixed assortment, events and pop-up stores, and guarantees. The interviewees assessments of these trends were qualitatively classified as either positive or non-positive (i.e., neutral or negative). Three trends were either positive or non-positive, while the other two provoked mixed reactions.

Luxury secondhand is a central trend in the secondhand retail environment (e.g., Luo and Park, 2024; Rathi et al., 2023). In recent years, several retailers focused on luxury items have been established (e.g., Vestiaire Collective; Wiebking, 2024). We found that non-users with high quality, trendiness, recreational shopping motives, and lower sustainability values assessed this trend more positively. Non-users with a more negative attitude toward secondhand shopping tended to favor luxury secondhand shopping. Consequently, 80 % of the skeptic hedonists (group 2) rated this trend positively, while the other non-user groups were mainly neutral about it. Luxury secondhand may help overcome several barriers to brick-and-mortar secondhand shopping, such as clothing styles, quality and condition of the clothing, hygiene of the clothing, and price-to-value ratio. Clothing from luxury brands may be perceived to be of higher quality and more fashionable, generally more expensive, and handled more carefully and hygienically by their original owners.

And if you sell such brands, the probability that they are not so worn is perhaps also higher. (Interview 22)

The second trend (*kilo stores*) pertains to stores that price secondhand clothes according to their weight in kilos. Well-known and growing secondhand chains use this trend (e.g., Vinokilo and PICKNWEIGHT; Heyer, 2019; Ströbele, 2024). In our non-user sample, this trend was

assessed positively only by one participant. Our exploratory follow-up survey results provided little indication of which general psychographics or brick-and-mortar secondhand retail-related perceptions could explain this. The respondents found the pricing system complicated and opaque, that such stores are usually somewhat disorganized, and that the quality of the clothing in these stores is generally poor. Therefore, this trend could reinforce existing barriers, such as *quality and condition* of the clothing, disorder in the store, and price-to-value ratio. Thus, kilo stores or kilo-related pricing seems unsuitable for attracting present non-users of secondhand retail stores.

It's just like shopping in the rummage box again. And I think that's cruel. (Interview 9)

... That is so "Primark" in secondhand actually. (Interview 14)

Third, we asked the participants to assess the trend of mixed assortments. This trend is relatively new but already used by major retailers both online and offline (e.g., Zalando, H&M; Rößer, 2022; Zalando, 2022). It was received positively by most (70 %) non-user groups, with the highest approval from the unaware (80 %; group 1a) and disillusioned supporters (87.50 %; group 1b). This trend is particularly well received by non-users with lower quality shopping motives and a more positive attitude toward secondhand shopping. By contrast, for people with high-quality shopping motives, integrating second-hand items into a store's main assortment may raise concerns about overall perceived product quality and reinforce the hygiene of the clothing barrier. Thus, separating new and secondhand assortments at different locations within the store might attract non-users. On the other hand, a mixed assortment could help overcome the clothing selection barrier to brick-and-mortar secondhand shopping, as it could help break previous shopping habits and decrease the need to search for secondhand stores, thereby reducing the location and reachability barriers.

I think that's good. Because then I have the opportunity, when I buy it new, to try it out and see what it looks like next to it. Is there something in there even for me? I think that's quite clever. (Interview 15)

Fourth, two further trends led to more mixed assessments. We asked the participants to assess *secondhand shopping events* and *pop-up stores* (e. g., Saloma and Gutenberg, 2025). This trend was positively assessed by the *unaware supporters* (60 %; group 1a) and *skeptic hedonists* (60 %; group 2), particularly by the interviewees with higher recreational and trendiness shopping motives. As such events often take place in unique locations, barriers such as *store interior* could be reduced, and the event characteristic may make it more attractive to visit even more remote locations, decreasing the *location and reachability* barrier.

Fifth, participants assessed *guarantees* (of authenticity or function) in secondhand retail, which can be highly beneficial in mitigating purchasing risks (Guiot and Roux, 2010). However, this trend was mostly neutrally assessed in the interviews. This trend may attract mostly non-users with a more negative attitude toward secondhand shopping. Some statements suggested that it may help address the *quality and condition of the clothing* barrier, as clothing that does not meet the customer's quality requirements can be returned, or a certificate can be provided to reduce the risk of counterfeits.

5. Discussion

5.1. Theoretical contributions

This paper contributes to the literature on diffusion of innovation, consumer adoption, and customer segmentation in and beyond the context of secondhand retail. First, the paper contributes to the literature by integrating theories of diffusion of innovation and consumer adoption with customer segmentation to analyze markets and identify market segments. While work on diffusion of innovation and consumer adoption focuses on why and when consumers adopt new products and

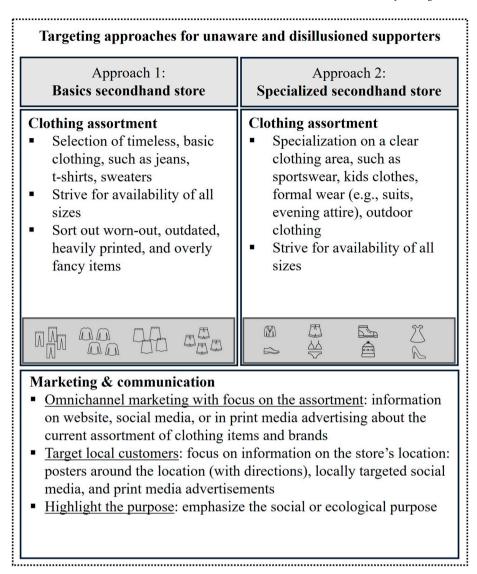


Fig. 2. Store concepts for unaware and disillusioned supporters.

services and introduces the notion of heterogeneous adoption barriers across consumer groups (e.g., Bohlmann et al., 2010; Hazée et al., 2017; Talke and Heidenreich, 2014; Wijekoon et al., 2021), segmentation has traditionally been used to tailor marketing strategies (Wind and Bell, 2008). With our approach, we demonstrate the conceptual value of bridging these theoretical approaches for market analysis. Our approach allows us to map non-user groups into classical groups from the diffusion of innovation theory. Specifically, groups 1a and 1b could be positioned as early majority, group 2 as part of the late majority, while group 3 aligns with laggards (Rogers, 2003). Building on this broad categorization, our in-depth analysis further identifies heterogeneous sub-segments within these broader adoption groups based on distinct adoption barriers and demographic characteristics. This is particularly evident in the differentiation between the non-user groups 1a and 1b, highlighting the nuanced diversity that exists even within the early majority, indicating the need to target them differently. Using this approach, our in-depth analysis of non-user groups of brick-and-mortar secondhand fashion retail makes a specific contribution to secondhand literature. We provide a detailed description of three distinct non-user groups, identifying group-specific barriers to brick-and-mortar secondhand retail. Going beyond extant work (Hur, 2020), we additionally segmented non-users according to their characteristics, demographics, and general psychographics, enabling a more detailed understanding of different non-user groups (Wind and Bell, 2008), which can be leveraged to build more targeted approaches to win these groups over.

Second, we contribute to the marketing and retailing literature by developing clear recommendations for go-to-market strategies that go beyond mere market segmentation. Applying segmentation to innovation diffusion research reveals how different consumer segments adopt innovations over time and under distinct conditions that speak to varying preferences (e.g., store design, clothing selection, communication). Based on this, our study contributes to secondhand literature by deriving explicitly general and group-specific recommendations and store concepts to address the relevant non-user groups and overcome their barriers with appropriate marketing mix approaches. Thereby, we bridge the gap between problem identification and solution, mapping the identified non-user groups and their barriers with tailored recommendations to overcome them, contributing to developing existing insights and frameworks (e.g., Calvo-Porral et al., 2024; Luo and Park, 2024; Tangri and Yu, 2023). Our approach in conducting non-user segmentation and deriving recommendations to target these groups can thus inform other contexts where barriers of non-users occur, such as with the adoption of novel retail technology or autonomous shopping systems (Bellis and Venkataramani Johar, 2020; Pantano et al., 2022).

Third, this paper contributes to literature by incorporating current trends from retail practices in the evolving brick-and-mortar retail

Targeting approaches for skeptic hedonists Approach 1: Premium basics Approach 2: secondhand store Concept secondhand store Clothing assortment **Clothing assortment** Selection of timeless, basic Focus on specific brands clothing, such as jeans, (e.g., premium, or luxury t-shirts, sweaters from wellbrands) Smaller selection of brands known brands Strive for availability of all Comparable price segment Similar price segment Sort out worn-out, outdated, heavily printed, and overly fancy items

Marketing & communication

- Omnichannel marketing with a focus on fashionability: present the current assortment but showcase fashionable outfits and items, particularly on social media
- Focus on whole shopping experience online and offline: provide information on the style options and in-store experience such as store layout and dressing room
- Highlight transparency: provide as much transparency as possible on the clothes (e.g., garment quality, hygiene, previous price, how long it has been worn)

Fig. 3. Store concepts for skeptic hedonists.

environment that have been previously overlooked and integrating them with our segmentation approach. Specifically, the paper examines current trends and integrates them with non-user characteristics and barriers to identify which trends help overcome the barriers faced by specific non-user groups. In doing so, we reflect current market developments against the characteristics of identified consumer segments (i.e., non-user groups) and reveal how specific trends resonate differently across those segments depending on their adoption barriers and characteristics. We also reveal the counterproductive effects of certain trends, further contributing to the secondhand retail literature. While trends are volatile and might not be fully established in retailing literature, they are important to consider for customer segmentations as they are in place in practice and have a significant impact on the overall customer experience, as they pertain to core elements of the shopping experience, such as the store design, assortment, and pricing.

5.2. Managerial implications

First, regarding market analysis, our non-user segmentation enables marketers to differentiate between three main non-user groups (*unaware* and *disillusioned supporters*, *skeptic hedonists*, and *skeptic outsiders*) to better understand their distinct characteristics and thus identify the most suitable target group for their retail offers. Our results indicate that

targeting non-user groups is likely to be most cost-efficient for different retailers with varying concepts.

Second, regarding go-to-market strategies, our recommendations can be used by marketing managers to tailor retail offers to different nonuser groups based on the recommendations and store concepts presented in our study. Furthermore, our recommendations for enhancing marketing and communication are useful for certain groups that are not receptive to or are not reached by traditional marketing and communication measures (see Figs. 2 and 3). Our derived store concepts offer concrete approaches to targeting various non-user groups, serving as blueprints and starting points for further adaptations. Specifically, suppose retailers want to target group 1 (unaware and disillusioned supporters), we recommend adjusting the clothing assortment by focusing on timeless, basic pieces rather than heavily printed or overly fancy items, or by specializing in a clear category such as sportswear or outdoor clothing. Regarding marketing and communication, retailers should highlight the assortment, including brands and types of items, via their website, in social media posts, or through print advertisements, and emphasize social and ecological purposes. Especially for group 1a, retailers should focus on location information in their communication. If retailers want to focus on group 2 (skeptic hedonists), our results suggest adapting the clothing assortment, focusing on premium clothing, and either concentrating on a selection of basics or implementing a concept

store with a handful of well-known brands. In terms of marketing and communication, there should be a clear focus on fashionability and shopping experience, as, for example, sustainability motives are significantly less important to this group in comparison. To do so, retailers could produce shopping stories and showcase full outfits on social media.

Third, we provide managers with an overview of current trends, assess non-users' perceptions of them, considering groups' characteristics and barriers. We show that non-users prefer mixed assortments of new and secondhand fashion. To mitigate sustainability concerns (e.g., greenwashing) and quality issues, mixed assortments should incorporate well-sorted secondhand items alongside high-quality, sustainable brands, rather than fast fashion brands. Moreover, we observed counterproductive effects of kilo stores or pricing by kilo on non-users.

5.3. Limitations and future research

The qualitative approach, which involved interviews and a follow-up survey with 27 participants from Germany, has its limitations. The small, purposively selected, and culturally homogeneous sample limits the interpretability of the quantitative follow-up survey results and generalizability. For instance, important cross-cultural or countryspecific variations in barriers might have been overlooked. Therefore, larger-scale quantitative research should validate the findings, estimate the size of non-user segments more precisely, and explore countryspecific or cultural differences to enhance generalizability. Moreover, we used an LLM as an additional coder, which did not yield new thematic perspectives for our results. However, LLMs can produce biased or misleading content (Arora et al., 2025), and despite critical review and cross-checking with human coding, some nuances may have been missed. Different models might have generated other insights. Future research should responsibly test LLMs to explore their potential for novel findings, compare model outputs, and establish best practices that preserve interpretive depth and validity for qualitative data analysis.

Our results lay the groundwork for further research by updating current barriers in the evolving brick-and-mortar secondhand retail environment. While previous research has identified social risks as important barriers (e.g., Liu et al., 2023), in our study they were only mentioned once, suggesting that some barriers may become irrelevant over time as the image of secondhand shopping and the retail environment evolve (Ek Styvén and Mariani, 2020). Hence, our qualitative insights call for further longitudinal research to investigate how barriers develop among users and non-users over time. To guide marketing campaigns, further research should confirm whether the changing brick-and-mortar retail landscape and shifting customer values have raised awareness among customers to take action against environmental problems by wearing secondhand clothing with pride. Moreover, established measurement models (e.g., on assortment or store design) may help refine our store concepts for specific non-user segments.

We highlight one promising avenue for future research: the negative impacts of store frontline staff's perception and behavior on certain non-user groups and their stereotypical perceptions of secondhand shoppers (e.g., alternative, not well-groomed). Moreover, other customers also influence store atmosphere, which can be curated to enhance experience and shop appeal (e.g., Basu et al., 2022). Virtual reality experiments (e.g., Pizzi et al., 2019) could further investigate how staff or service robot appearance and customer presence affect secondhand shopping experience.

CRediT authorship contribution statement

Felix Zechiel: Writing – review & editing, Writing – original draft, Visualization, Validation, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. Marah Blaurock: Writing – review & editing, Visualization, Validation, Methodology, Investigation, Formal analysis, Data curation,

Conceptualization. **Marion Büttgen:** Writing – review & editing, Validation, Supervision, Methodology, Investigation, Conceptualization.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jretconser.2025.104501.

Data availability

Data will be made available on request.

References

- Arora, N., Chakraborty, I., Nishimura, Y., 2025. AI-human hybrids for marketing research: leveraging LLMs as collaborators. J. Market. 89 (2), 43–70. https://doi. org/10.1177/00222429241276529.
- Arrigo, E., 2021. Collaborative consumption in the fashion industry: a systematic literature review and conceptual framework. J. Clean. Prod. 325, 129261. https://doi.org/10.1016/j.iclepro.2021.129261.
- Bach, S., Römer, F., 2024. Nach Aus von Modekette Pimkie in Heidelberg wer dort seine Klamotten jetzt kiloweise verkauft. Heidelberg24. https://www.heidelberg24. de/heidelberg/hauptstrasse-promod-pimkie-filiale-schliessung-picknweight-mode -kette-ladensterben-heidelberg-90183624.html. (Accessed 24 September 2024).
- Basu, R., Paul, J., Singh, K., 2022. Visual merchandising and store atmospherics: an integrated review and future research directions. J. Bus. Res. 151, 397–408. https:// doi.org/10.1016/j.jbusres.2022.07.019.
- Zechiel, F., 2024. Beyond Efficiency and Consistency Achieving Sustainability through Service-enabled Sufficiency. SMR -. Journal of Service Management Research 7 (4), 199–212. https://doi.org/10.5771/2511-8676-2023-4-199.
- Bellis, E. de, Venkataramani Johar, G., 2020. Autonomous shopping systems: identifying and overcoming barriers to consumer adoption. J. Retailing 96 (1), 74–87. https://doi.org/10.1016/j.jretai.2019.12.004.
- Bohlmann, J.D., Calantone, R.J., Zhao, M., 2010. The effects of market network heterogeneity on innovation diffusion: an agent-based modeling approach. J. Prod. Innovat. Manag. 27 (5), 741–760. https://doi.org/10.1111/j.1540-5885.2010.0074
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. Qual. Res. Psychol. 3 (2), 77–101. https://doi.org/10.1191/1478088706qp063oa.
- Braun, V., Clarke, V., 2012. Thematic analysis. In: Cooper, H., Camic, P.M., Long, D.L., Panter, A.T., Rindskopf, D., Sher, K.J. (Eds.), APA Handbook of Research Methods in Psychology, Vol 2: Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological. American Psychological Association, Washington, pp. 57–71. http s://doi.org/10.1037/13620-004.
- Braun, V., Clarke, V., 2019. Reflecting on reflexive thematic analysis. Qualitative Research in Sport. Exercise and Health 11 (4), 589–597. https://doi.org/10.1080/21 59676X.2019.1628806.
- Brinkmann, S., Kvale, S., 2015. InterViews: Learning the Craft of Qualitative Research Interviewing, third ed. ed. Sage, Los Angeles, London, New Delhi, Singapore, Washington DC, p. 405.
- Brinkmann, S., Kvale, S., 2018. Doing Interviews, second ed. ed. Sage, Los Angeles, London, New Dehli, Singapore, Washington DC, Melbourne, p. 186.
- Buerke, A., Straatmann, T., Lin-Hi, N., Müller, K., 2017. Consumer awareness and sustainability-focused value orientation as motivating factors of responsible consumer behavior. Rev Manag Sci 11 (4), 959–991. https://doi.org/10.100 7/s11846-016-0211-2.
- Büttgen, M., Hogreve, J., Zechiel, F., Bartsch, S., Lorz, T., Trischler, J., Westman Trischler, J., Kuusisto, J., Svensson, P., Keiningham, T., Aksoy, L., Porco, B., Hedley, T., Statuto, L.A., Dortignacq, B.F., 2023. Sustainability in Service Research. SMR - Journal of Service Management Research 7 (3), 147–173. https://doi.org /10.5771/2511.8676-2023-3-147.

- Čaić, M., Odekerken-Schröder, G., Mahr, D., 2018. Service robots: value co-creation and co-destruction in elderly care networks. J. Serv. Manag. 29 (2), 178–205. htt ps://doi.org/10.1108/JOSM-07-2017-0179.
- Calvo-Porral, C., Orosa-González, J., Viejo-Fernández, N., 2024. Barriers to online second-hand purchase behavior. MIP 42 (2), 213–233. https://doi.org/10.11 08/MIP-03-2023-0093.
- Cardenas, V., n.d. ChatGPT Qualitative Research Data Analysis https://chatgpt.com/g/g-hBb8iIFDc-qualitative-research-data-analysis(accessed 13 May 2025).
- Chen, Q., Choi, B.-J., Lee, S.-J., 2025. Tailoring customer segmentation strategies for luxury brands in the NFT market – the case of SUPERGUCCI. J. Retailing Consum. Serv. 82, 104121. https://doi.org/10.1016/j.jretconser.2024.104121.
- Das, M., Moons, I., Du Bois, E., 2024. Design strategies to facilitate second-hand clothing acquisition. Proc. Des. Soc. 4, 935–944. https://doi.org/10.1017/pds.2024.96.
- Edbring, E.G., Lehner, M., Mont, O., 2016. Exploring consumer attitudes to alternative models of consumption: motivations and barriers. J. Clean. Prod. 123, 5–15. https:// doi.org/10.1016/j.jclepro.2015.10.107.
- Ek Styvén, M., Mariani, M.M., 2020. Understanding the intention to buy secondhand clothing on sharing economy platforms: the influence of sustainability, distance from the consumption system, and economic motivations. Psychol. Market. 37 (5), 724–739. https://doi.org/10.1002/mar.21334.
- Evans, F., Grimmer, L., Grimmer, M., 2022. Consumer orientations of secondhand fashion shoppers: the role of shopping frequency and store type. J. Retailing Consum. Serv. 67, 102991. https://doi.org/10.1016/j.jretconser.2022.102991.
- Ferraro, C., Sands, S., Brace-Govan, J., 2016. The role of fashionability in second-hand shopping motivations. J. Retailing Consum. Serv. 32, 262–268. https://doi.org/10. 1016/j.jretconser.2016.07.006.
- Flick, U., 2018. Designing Qualitative Research, second ed. ed. Sage, Los Angeles, London, New Dehli, Singapore, Washington DC, Melbourne, p. 180.
- Frahm, L.B., Boks, C., Laursen, L.N., 2025. It's intertwined! Barriers and motivations for second-hand product consumption. Circ.Econ.Sust. 5, 653–674. https://doi. org/10.1007/s43615-024-00441-y.
- Gilboa, S., Vilnai-Yavetz, I., Mitchell, V., 2024. Shopping mall detachment: why do some consumers avoid malls? J. Retailing Consum. Serv. 78, 103740. https://doi.org/10. 1016/j.jretconser.2024.103740.
- Globetrotter, n.d. Secondhand Prozess in den Filialen bei Globetrotter Outdoor Blog für Beratung, Know How & Inspiration https://www.globetrotter.de/magazin/secondhand-filialen/>(accessed 24 September 2024).
- Guiot, D., Roux, D., 2010. A second-hand shoppers' motivation scale: antecedents, consequences, and implications for retailers. J. Retailing 86 (4), 355–371. https://doi.org/10.1016/j.iretai.2010.08.002.
- Haines, S., Lee, S.H., 2022. One size fits all? Segmenting consumers to predict sustainable fashion behavior. JFMM 26 (2), 383–398. https://doi.org/10.1108/JFMM-08-20 20.0161
- Hamilton, R.W., Ratner, R.K., Thompson, D.V., 2011. Outpacing others: when consumers value products based on relative usage frequency. J. Consum. Res. 37 (6), 1079–1094. https://doi.org/10.1086/656668.
- Hazée, S., Delcourt, C., van Vaerenbergh, Y., 2017. Burdens of access: understanding customer barriers and barrier-attenuating practices in access-based services. J. Serv. Res. 20 (4), 441–456. https://doi.org/10.1177/1094670517712877.
- Heyer, L., 2019. Secondhand Mode Zum Kilopreis: VinoKilo Will Secondhandmode Hip Machen. STERN.de. https://www.stern.de/neon/fei-erabend/style/secondhandmode-zum-kilopreis-vinokilo-will-secondhand-mode-hip-machen-8658270.html. (Accessed 13 May 2025)
- Hur, E., 2020. Rebirth fashion: secondhand clothing consumption values and perceived risks. J. Clean. Prod. 273, 122951. https://doi.org/10.1016/j.jclepro.2020.122951.
- Kristensson, P., Pedersen, P.E., Thorbjørnsen, H., 2020. New perspectives on consumer adoption and diffusion of innovations. J. Bus. Res. 116, 522–525. https://doi.org/ 10.1016/j.jbusres.2020.04.048
- Liu, B., Moyle, B., Kralj, A., Li, Y., 2024. Towards a typology of virtual tourists: efficacy of visual patterns and attentional cues. Tour. Manag. 105, 104943. https://doi.org/10. 1016/j.tourman.2024.104943.
- Liu, S., Lang, C., Liu, C., 2023. A systematic review and meta-analysis of Chinese online fashion resale: toward recipes to stimulate circular fashion. Sustain. Prod. Consum. 41, 334–347. https://doi.org/10.1016/j.spc.2023.08.016.
- Luo, H., Park, S.-Y., 2024. Exploring barriers to secondhand luxury consumption among Chinese consumers and changes during the COVID-19 pandemic. J. Bus. Res. 174, 114497. https://doi.org/10.1016/j.jbusres.2024.114497.
- Mohammad, J., Quoquab, F., Mohamed Sadom, N.Z., 2021. Mindful consumption of second-hand clothing: the role of eWOM, attitude and consumer engagement. JFMM 25 (3), 482–510. https://doi.org/10.1108/JFMM-05-2020-0080.
- Natow, R.S., 2020. The use of triangulation in qualitative studies employing elite interviews. Qual. Res. 20 (2), 160–173. https://doi.org/10.1177/146879411 9830077.
- Ozuem, W., Ranfagni, S., Willis, M., Salvietti, G., Howell, K., 2024. Exploring the relationship between chatbots, service failure recovery and customer loyalty: a frustration–aggression perspective. Psychol. Market. 41 (10), 2253–2273. https://doi.org/10.1002/mar.22051.
- Pantano, E., Viassone, M., Boardman, R., Dennis, C., 2022. Inclusive or exclusive? Investigating how retail technology can reduce old consumers' barriers to shopping. J. Retailing Consum. Serv. 68, 103074. https://doi.org/10.1016/j.jretconser.2022. 103074

- Perry, P., Osburg, V.-S., Huq, F.A., Diallo, M.F., 2025. Fashionable ethics: exploring ethical perspectives in the production, marketing, and consumption of fashion. J. Bus. Ethics 196 (4), 711–721. https://doi.org/10.1007/s10551-024-05913-7.
- Pizzi, G., Scarpi, D., Pichierri, M., Vannucci, V., 2019. Virtual reality, real reactions?: comparing consumers' perceptions and shopping orientation across physical and virtual-reality retail stores. Comput. Hum. Behav. 96, 1–12. https://doi.org/10.101 6/i.chb.2019.02.008.
- PricewaterhouseCoopers, 2023. Secondhand-Mode im Aufwind: Umsatz steigt bis 2025 auf bis zu 6 Milliarden Euro. https://www.pwc.de/de/pressemitteilungen/2023/secondhand-mode-im-aufwind-umsatz-steigt-bis-2025-auf-bis-zu-6-milliarden-euro. html. (Accessed 26 August 2024).
- Purohit, S., Paul, J., Mishra, R., 2021. Rethinking the bottom of the pyramid: towards a new marketing mix. J. Retailing Consum. Serv. 58, 102275. https://doi.org/10.10 16/j.jretconser.2020.102275.
- Quantis, 2018. Measuring fashion: insights from the environmental impact of the global apparel and footwear industries study. https://www.oneplanetnetwork.org/knowl edge-centre/resources/measuring-fashion-insights-environmental-impact-global-apparel-and.
- Rathi, R., Jain, S., Garg, R., 2023. Exploring young consumer's adoption of secondhand luxury: insights from a qualitative study. JFMM 28 (1), 117–138. https://doi.org/10. 1108/JFMM-11-2022-0236.
- Rogers, E.M., 2003. Diffusion of Innovations, fifth ed. ed Free. Press, New York, London, Toronto, Sydney, p. 551. https://ebookcentral.proquest.com/lib/kxp/detail.action? docID=4935198.
- Ross, G.R., Bolton, L.E., Meloy, M.G., 2023. Disorder in secondhand retail spaces: the countervailing forces of hidden treasure and risk. J. Retailing 99 (1), 136–148. https://doi.org/10.1016/j.jretai.2022.12.002.
- Rößer, M., 2022. H&M Startet Sein Second-Hand-Modell in Deutschland. Werben & Verkaufen August 29. https://www.wuv.de/Themen/Marke/H-M-startet-sein-Second-Hand-Modell-in-Deutschland. (Accessed 13 May 2025).
- Saloma, A., Gutenberg, P., 2025. Hier kauft die Generation Z Mode aus den 80ern. Tagesanzeiger. https://www.tagesanzeiger.ch/hier-kauft-die-ge-neration-z-mode-aus-den-80ern-877600647815. (Accessed 13 May 2025).
- Sandin, G., Peters, G.M., 2018. Environmental impact of textile reuse and recycling a review. J. Clean. Prod. 184, 353–365. https://doi.org/10.1016/j.jclepro.2018.02.
- Schygulla, J., 2023. Store des Tages Herbst 2023: Sellpy testet stationären Handel in Berlin. TextilWirtschaft. https://www.textilwirtschaft.de/business/stores/store-des-tages-herbst-2023-sellpy-in-berlin-242150. (Accessed 24 September 2024).
- Silva, S.C., Santos, A., Duarte, P., Vlačić, B., 2021. The role of social embarrassment, sustainability, familiarity and perception of hygiene in second-hand clothing purchase experience. Int. J. Retail Distrib. Manag. 49 (6), 717–734. https://doi. org/10.1108/JJRDM-09-2020-0356.
- Ströbele, T., 2024. Neuer Laden auf der Stuttgarter Königstraße Kleidung wird nach Kilopreis bezahlt. Stuttgarter Nachrichten. https://www.stuttgarter-nachrichten.de/inhalt.neuer-laden-in-stuttgart-kleidung-wird-nach-kilopreis-bezahlt.0c1d29e5-f52 a-4011-9365-4fd150c6977c.html. (Accessed 24 September 2024).
- Suri, H., 2011. Purposeful sampling in qualitative research synthesis. Qual. Res. J. 11 (2), 63–75. https://doi.org/10.3316/QRJ1102063.
- Talke, K., Heidenreich, S., 2014. How to overcome pro-change Bias: incorporating passive and active innovation resistance in innovation decision models. J. Prod. Innovat. Manag. 31 (5), 894–907. https://doi.org/10.1111/jpim.12130.
- Innovat. Manag. 31 (5), 894–907. https://doi.org/10.1111/jpim.12130.

 Tangri, K., Yu, H., 2023. Why buy used? Motivators and barriers for re-commerce luxury fashion. Int. J. Retail Distrib. Manag. 51 (9/10), 1095–1114. https://doi.org/10.1108/IJRDM-10-2022-0417.
- Teichert, M., 2024. "Stylisch, günstig und nachhaltig": Neuer Vintage-Store eröffnet in Dortmund. Ruhr Nachrichten. https://www.ruhrnachrichten.de/dortmund/stylischguenstig-nachhaltig-vintage-store-eroeffnet-dort-mund-retro-kleidung-think-twice-2-w826358-2001052778/. (Accessed 24 September 2024).
- ThredUp, 2024. Resale report. https://www.thredup.com/resale. (Accessed 26 August 2024).
- Trzepacz, S., Lingas, D.B., Asscherickx, L., Peeters, K., van Duijn, H., Akerboom, M., 2023. LCA-based assessment of the management of European used textiles. Norion Consulting, EuRIC European Recycling Industries' Association. https://circulareco.nomy.europa.eu/platform/en/knowledge/lca-based-assessment-management-european-used-textiles
- Turunen, L.L.M., Gossen, M., 2024. From preloved to reloved: how second-hand clothing companies facilitate the transaction of used garments. J. Sustain. Res. 6 (1), e240002. https://doi.org/10.20900/jsr20240002.
- Wang, B., Fu, Y., Li, Y., 2022. Young consumers' motivations and barriers to the purchase of second-hand clothes: an empirical study of China. Waste Management 143, 157–167. https://doi.org/10.1016/j.wasman.2022.02.019.
- Wesley, S., LeHew, M., Woodside, A.G., 2006. Consumer decision-making styles and mall shopping behavior: building theory using exploratory data analysis and the comparative method. J. Bus. Res. 59 (5), 535–548. https://doi.org/10.1016/j. jbusres.2006.01.005.
- Wiebking, J., 2024. Second-Hand-Mode: Wie Vestiaire Collective die Luxusbranche umkrempelt. Frankfurter Allgemeine Zeitung. https://www.faz.net/aktuell/stil/ mode-design/second-hand-mode-wie-vestia-ire-collective-die-luxusbranche-umkre mpelt-19993792.html. (Accessed 13 May 2025).
- Wijekoon, A., Salunke, S., Athaide, G.A., 2021. Customer heterogeneity and innovation-based competitive strategy: a review, synthesis, and research agenda. J. Prod. Innovat. Manag. 38 (3), 315–333. https://doi.org/10.1111/jpim.12576.

- Wind, Y.J., Bell, D.R., 2008. Market segmentation. In: Baker, M.J., Hart, S. (Eds.), The Marketing Book, sixth ed. ed. Butterworth-Heinemann, Oxford, Boston, pp. 222–244
- https://doi.org/10.1016/B978-0-7506-8566-5.50015-7.

 Young, L., 2023. Hugely Popular Second-Hand Website to Open High Street Stores before Christmas Check if Your Area Is G. The Sun. https://www.thesun.co.uk/money/24829449/popular-second-hand-website-open-stores/. (Accessed 24 September 2024)
- Zalando, 2022. Zalando bringt mit Pre-owned-Mode neue Vielfalt in die Outlets. https://corporate.zalando.com/de/fashion/zalando-bringt-mit-pre-owned-mode-neue-viel falt-die-outlets. (Accessed 24 September 2024).
- YouGov, (2024). Fashion on a budget: Exploring consumer willingness to buy secondhand clothing and shoes. https://business.yougov.com/content/49766-fashion-on-abudget-exploring-consumer-willingness-to-buy-second-hand-clothing-and-shoes. (Accessed 13 May 2025).