



# **second-hand and leasing of clothing to facilitate textile reuse**

identifying sources of value generation from  
the perspective of businesses and user

by  
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**Title:** Second-hand and leasing of clothing to facilitate textile reuse - Identifying sources of value generation from the perspective of businesses and users

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**Mistra Future Fashion deliverable:** D.2.3.3.1 & D.3.3.5.1

**Edition:** Only available as PDF for individual printing

**ISBN 978-91-89049-42-0**

**Mistra Future Fashion report number:** 2019:13

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pictures:unsplash  
layout: Malin Wennberg

#### A Mistra Future Fashion Report

Mistra Future Fashion is a cross-disciplinary research program, initiated and primarily funded by Mistra. It holds a total budget of SEK 110 millions and stretches over 8 years, from 2011 to 2019. It is hosted by RISE in collaboration with 15 research partners and involves more than 50 industry partners.

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# summary

Textile waste generation is a growing problem - on the global scale, clothing consumption is dominated by a fast fashion culture, consisting of underutilization, rapid disposal of products and minimal recycling. Extending the life of garments as much as possible can reduce the total quantity of textiles consumed and delay the rate of textile disposal, thereby reducing the negative environmental and social impact of textile consumption (Sandin et al, 2019; Roos et al, 2015; Elander et al, 2017).

Circular business models in the form of redistributed ownership (i.e. second-hand) and utility-based non-ownership (i.e. leasing/rental) have become increasingly common. This report summarizes new studies on how second-hand and leasing business models can be upscaled and promoted, by identifying and analyzing the areas of value generation from the perspective of businesses and users. It is based on the findings of three masters and bachelor studies made as part of two deliveries of Mistra Future Fashion: 'D2.3.3.1 Report with recommendations for the (Swedish) fashion industry on how to engage in and work with supply chain commitment for circular textile flows', and 'D3.3.5.1 Report Analysis of instruments, actions and initiatives for making reuse of textiles and textile fibers more mainstream'.

The studies show that there is a growing market of second-hand and leasing users, which is relatively untapped. The perceptions, preferences and desires of these users differ between each other, as well as from conventional first-hand users, which should be considered by the fashion industry (Sweet et al 2019; Gwozdz et al 2017). Nevertheless, one common aspect shared amongst all user types is that the desire for novelty remains. This is likely to present an ongoing challenge for environmental wellbeing as it encourages rapid consumption cycles, but it also presents opportunities for the fashion industry to market, trend-set and shift its offerings to fulfil the desire for novelty, while facilitating textile reuse to reduce waste. The good news is that given the rise of fast fashion and growth of the clothing industry, the supply of used clothing is enormous and growing. By understanding these trends and perceptions, the fashion industry can be empowered to make collaborative consumption a familiar concept and shift the consumption paradigm from a linear model to a circular one.

Based on the findings of the papers, this report makes the following recommendations for the fashion industry in second-hand and leasing systems:

## **recommendations for second-hand**

- Approach second-hand users differently from first-hand users in areas including marketing, product placement, trend-setting, communications, pricing and delivery
- Seek to better understand the different user segments within the second-hand market and target them accordingly
- Adopt technological and logistics innovations, and form strategic partnerships with service providers (e.g. in insurance, transport/shipping and IT) to make second-hand business models more cost efficient
- Leverage on the fashion industry's influence to set fashion trends in second-hand, which has the potential to raise visibility and shift societal norms towards second-hand clothing consumption
- Prioritize sustainability in a genuine manner and communicate to users accordingly
- Prioritize user interaction and education to build awareness of second-hand consumption, its potential environmental benefits and product care. This also has the potential to shift consumption norms.

## **recommendations for leasing**

- Continue to offer high-value items in leasing systems while steadily introducing everyday wear and promoting leasing as a form of clothing consumption
- Provide flexibility in pricing and leasing periods to facilitate the build-up of familiarity among users
- Partner with service providers to develop solutions for leasing systems, including insurance products, web store platforms and transport logistics
- Collaborate with industry partners to build visibility, confidence and engagement with investors to secure long-term capital and upscale leasing models
- Build a loyal base of users who can become advocates for this form of clothing consumption and build awareness.

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# 1. introduction

The fashion industry is increasingly under fire for negative environmental and social impacts along the value chain, as reports are emerging on the intensity of resource use and pollution in textile production, unethical working conditions in the supply chain and rapid rate of clothing consumption and textile waste generation. The sustainability challenges of the fashion industry are growing on a global scale with clothing consumption dominated by a fast fashion culture, consisting of underutilization, rapid disposal of products and minimal recycling (Larsdotter & Yance, 2019). A study by Statistics Sweden and the Swedish Environmental Protection Agency (Naturvårdsverket) found that over half of the clothing and other textiles consumed in Sweden every year is incinerated (Carlsson et al, 2011 and Palm et al, 2014). In a more recent study commissioned by the Swedish EPA one in every four persons report that they throw used clothes in the waste bin (Naturvårdsverket, 2018). Largely explained by that the same users report that they do not know what to do with unwanted clothes.

Extending the use life of garments as much as possible can reduce the total quantity of textiles consumed and decrease the rate of textile disposal, thereby reducing the negative environmental and social impact of textile consumption (Roos et al, 2015; Watson, Gylling and Thörn, 2017).

The background studies to this report is part of a series of research studies that address the potentials, but also the challenges linked to extending the use life of garments, and is part of the research program Mistra Future Fashion, a cross-disciplinary research program focusing on circular economy and a future-positive fashion industry. The research program adopts a unique system perspective involving over 60 partners with researchers and industry actors. Under the program, a study by Watson, Gylling and Thörn (2017) described five business models that support reuse, collective use and a prolonged lifetime of textiles. They are: 1) take-back of a business' own products for resale (e.g. through in-store collection), 2) general collection and resale (e.g. donation and sales at charity second-hand stores), 3) sharing with other users (e.g. leasing), 4) longer technical life (e.g. design for long-life and repair), and 5) redesign (e.g. of old collections).

Circular business models in the form of redistributed ownership (i.e. second-hand, types 1 and 2 above) and utility-based non-ownership (i.e. leasing/rental, type 3 above) have become increasingly common among both established brands as well as among new entrepreneurs. The specific operational approaches vary in the two business models. This includes location (e.g. online or in-store); collection methods (e.g. drop-off boxes, collection at store, pick-up at home or by mail); approach in sorting, pricing, photographing and displaying; the value model (e.g. for-profit or non-for profit); user interaction (e.g. online or offline) and service system integrations (e.g. insurance, transport and shipping) (Stihl & Vilimaa, 2019).

The current report is building on previous research on the impact of the apparel industry and the potential in prolonging life of garments (e.g. Sandin et al, 2019; Roos et al, 2015; Elander et al, 2017), thus it aims to summarize and discuss three studies on how second-hand and leasing business models can be upscaled and promoted, by identifying and analyzing the areas of value generation from the perspective of businesses and users. It is based on the findings of three masters and bachelor studies made as part of two deliveries of Mistra Future Fashion: "D2.3.3.1 Report with recommendations for the (Swedish) fashion industry on how to engage in and work with supply chain commitment for circular textile flows", and "D3.3.5.1 Report Analysis of

instruments, actions and initiatives for making reuse of textiles and textile fibers more mainstream”.

The studies synthesized in this report are as follows:

1. Merging sustainability and clothing: An exploratory study on the leasing of clothing and the selling of second-hand clothing (Stihl & Vilimaa, 2019)
2. Embracing a new era of clothing consumption: A qualitative study on consumer perceptions of redistributed ownership and utility-based non-ownership (Larsdotter & Yance, 2019)
3. The value of second-hand: An exploration of value construction within second-hand fashion markets and its sustainability potential (Han, 2018)

## **the objectives of this report are to**

- analyze instruments, actions and initiatives in Sweden for making the reuse of textiles more mainstream
- contribute to the understanding of the hurdles and corresponding strategies to promote reuse markets and increase supply of second-hand textiles in a Swedish context
- give recommendations for the (Swedish) fashion industry on how to engage with users in prolonging the life of textiles and achieve circular textile flows

## **1.1 limitations of the studies**

The analysis done within this report should be seen as an indication of the market and users' perception within Sweden today, 2019. It should be noted that these studies (Stihl & Vilimaa (2019), Larsdotter & Yance (2019), and Han (2018)) are limited to cases and research conducted in Sweden, and therefore the context and consumption norms may not always be applicable to other countries. The sample size of interviewees is limited and statistically not fully representative of all businesses and users in Sweden.

The report should serve as a pointer and inspiration to build understanding of specific challenges and potential relating to attempts to prolong life of garments in mature consumption markets.

### **Structure of the report**

After this introduction, chapter 2 provides a summary of the objectives, methodology and scope of the three studies. Chapter 3 summarizes and compares the findings of the studies, and chapter 5 provides conclusions and recommendations to the fashion industry.



**'how items are displayed  
affect how users perceive  
value and cost.'**



## 2. data collection for sources of value generation in second-hand and leasing of clothing

In this chapter, the rationale, scope and method of the three studies (Stihl & Vilimaa, 2019), (Larsdotter & Yance, 2019), and (Han, 2018)) are summarized. The next chapter analyzes their findings.

### 2.1. value creation of second-hand and leasing from the business perspective

Stihl and Vilimaa (2019) conducted interviews with nine companies to identify where value is created in second-hand and leasing business models in the fashion industry.

The research questions were:

1. "How is value created in clothing leasing services and the sales of second-hand clothing?"
2. "What opportunities and challenges do actors face in the market for clothing leasing services and second-hand clothing?"

The nine companies (see Table 1) were assessed based on various definitions of value creation applied to the business model canvas for each company, followed by cross comparisons and analyses, conclusions and recommendations. The scope was limited to companies that seek to scale up or are already national in scope. Non-profit organizations were also included if there is an intention to generate profit, which would in turn be spent on other charitable or social improvement purposes. Handbags were also included in addition to clothing. Some companies practiced a combination of first-hand, second-hand and leasing models.

table 1 List of relevant business models for the companies contributing to the interviews in Stihl and Vilimaa (2019). See Appendix 1 for more information on the companies studied.

Company	Business model:		
	First-hand	Leasing	Second-hand
Appletrees	V		V
Nudie Jeans	V		V
Sellpy			V
Varié			V
Red Cross			V
Myrorna			V
Sabina & Friends		V	
MyDresscode		V	
Houdini	V	V	V

## **2.2. perception of second-hand and leasing from the users' perspective**

Considering how the users feel about second-hand and leasing businesses, as in Larsdotter and Yance (2019), the big question can be: "How do consumer perceptions of the two different consumption modes 'redistributed ownership' (second-hand) and 'utility-based non-ownership' (leasing) differ and what implications does this have for commercial pre-used business models?" In Larsdotter and Yance (2019) the perception of users on second-hand and leasing was assessed through interviews with three lenses:

1. how users view the used product (the consumer-product relationship)
2. how users view their interaction with other users in the system (the consumer-consumer relationship)
3. how users view business organizations in the system (the consumer-business relationship)

One focus group and pilot interviews were conducted to develop and test an interview guide. Semi-formal interviews were then conducted to collect the main data. The sample focused on a 50/50 split of men and women in their mid-20s to early 40s in age, with a total of 24 individuals. Qualitative data assessment was conducted to analyze the findings.

## **2.3. the value of second-hand from the perspective of experienced second-hand users and retailers**

The perceptions of value of retailers and users from three different types of second-hand stores: non-profit, vintage and a second-hand boutique, was assessed in Han (2018). The main focus in that study was to clarify:

1. how do sellers and buyers create conditions for value to emerge within second-hand fashion markets
2. what is the link between novelty and value in this market
3. how viable are second-hand fashion markets as a mode of sustainable consumerism

The study focused on three second-hand stores in Stockholm, Sweden: Stockholm Stadsmission (a mid-sized charity shop); Arkivet (a trendy and brand-oriented boutique operating on commission); and Lisa Larsson Second-hand (a well-known vintage shop established in the 1970s). The methodology consisted of informal observations at the store locations, interviews with the three retailers and in depth interviews with ten second-hand users.

# 3. findings and analysis for sources of value generation in second-hand and leasing of clothing

This chapter summarizes the findings of the studies (Stihl & Vilimaa (2019), Larsdotter & Yance (2019), and Han (2018)) to find out the value generation of pro-longed lifetime of garments from different angles:

1. value generation in second-hand business models from the perspectives of businesses, experienced second-hand users, and general users
2. the perceptions of value in leasing from the perspectives of businesses and general users
3. an analysis to compare and reflect on the two systems.

## 3.1. Value generation in second-hand

In this section, the perception on value creation in second-hand business models are presented from three perspectives:

1. the view of brands and retailers (Stihl & Vilimaa, 2019),
2. the view of dedicated second-hand retailers and experienced second-hand shoppers (Han, 2018) and
3. the view of general users (Larsdotter & Yance, 2019). Linkages are made between the papers on similar and contrasting findings

### 3.1.1. perspective of brands and retailers

Business value is a general term that covers both monetary and non-monetary values of a firm. This includes tangible elements such as goods, equipment and monetary assets, as well as intangible elements such as services, brand value and intellectual property. According to Stihl & Vilimaa (2019), the value creation process can be goods-dominant (i.e. the traditional creation of value through the exchange of goods for money, aka "value in exchange") or service-dominant (i.e. the creation of value when the offerings provided by a firm are used by a user or other users, aka "value in use"). Value creation occurs in a service system consisting of individuals and organizations and is defined as an arrangement of resources such as people and information. Producers and users are both involved in creating both value-in-exchange and value-in-use.

From the perspective of second-hand brands and retailers, value is created in the following ways (Stihl & Vilimaa, 2019):

#### **clothing collection**

Value is facilitated by collection activities including in-store collection, such as H&M and KappAhl, collecting clothing by mail, Sellpy, and from boxes at recycling centers and homes, Myrorna. The value is cemented when the clothing is used (i.e. purchased and worn by the user). Value is also co-created between the business and the user when used clothing is collected in-store and users are given vouchers for returning old garments to benefit from a discount when buying new garments.

#### **clothing management**

This includes sorting, repairing and pricing, as well as photographing and writing ads for online businesses. Most large second-hand retailers, such as Myrorna, are performing this function today. Artificial intelligence is a coming technology for sorting due to the time and resource consuming process. These processes facilitate value by helping users find the product, and the value is then cemented through the actual use of the product by the user.

#### **service system integration**

Second-hand businesses work with other service providers to operate their business model. This includes used textile processing and recycling companies, eg. Texaid and SOEX, pick-up service providers and first-hand clothing stores that provide space to feature second-hand products. These service system actors are intertwined with second-hand actors and value is created together.

#### **educating users**

In this case, value is created when store personnel relay their knowledge on sustainable garments on users and teach them how to best take care of their clothing to last as long as possible (which is also environmentally sustainable as it extends the use-life of the product). Examples are Houdini and Nudie Jeans. Value is also created because it boosts the chances of the business receiving the garment back in good condition for reselling.

## **3.1.2. perspective of second-hand retailers and experienced users**

From the Han 2018 study of the dedicated second-hand physical retailers and experienced second-hand users, value creation is generated in more abstract ways, as follows:

#### **displaying objects**

Value is created when the second-hand store is situated in the right location, aligning with other stores and their target demographic in the area. Within the store, second-hand shops also provide a "creative and unique atmosphere" that differs it from first-hand retailers of mass-produced products. How items are displayed affect how users perceive value and cost. While most users expect low prices for second-hand, they can also accept higher prices if the display and image of the store expresses a high-end culture, uniqueness, character and spontaneity - this is a form of "value enhancement" (as justified in the eyes of the user). Even traditional non-profit charity shops are now adopting such value enhancement methods to join the competition.

Second-hand users are also significantly motivated by the search for unique items, deemed the "treasure-hunting feeling" of spontaneity. However, a certain level of order and organization in

product display is needed to maintain the perception of value in the eyes of the user. For example, a user may expect to pay less to sort through a box of mixed items than the same items neatly hanging on a rack.

#### **socializing objects**

Sociality makes up a large part of the recreational value of second-hand consumption in-store, in the relationship formed between business owners and users, and the development of a loyal user base. Users also find value in the stories behind second-hand items, which build attachment between the user and the product. Lastly, social aspects create value in unpredictability, spontaneity and creativeness in the interaction between users, store personnel and products. This is appreciated by second-hand users in contrast with their relatively negative perception of first-hand retailers as restrictive spaces that lack spontaneity and uniqueness.

#### **finding objects**

The second-hand item itself only forms a small fraction of the overall value, while most of the value is from the experience of acquiring it. The search process has been described as a 'treasure hunt' which in itself provides experience value. "Making the find" provides second-hand users with a sense of discovery and novelty. Second-hand users also express pride in their ability to "perform the find" through "savvy consumerism", which requires having a keen eye, creative mindset and knowledge of trends and garment types and quality.

### **3.1.3. perspective of general users**

In contrast to the above, the view of the general consumer group (i.e. those with some or minimal experience of second-hand shopping) have a more cynical view on second-hand clothing (Larsdotter & Yance, 2019). These perceptions are presented in three ways, in terms of the view on second-hand products, on other users, and on the second-hand businesses themselves.

#### **on how users view second-hand products**

The most relevant dimensions were the product's characteristics, in terms of price, quality, health impact and uniqueness. Price is an important driver as one of the main motivations for most second-hand shoppers is affordability. Though some also acknowledged uniqueness as a value associated with second-hand, there was evident stigma attached to second-hand clothing, as well as an association with being low quality or untrendy, which is in contrast to the positive perceptions of experienced second-hand users in Han's study (2018). Nonetheless, these perceptions are linked to the shopping venue, the shopping environment and level of perceived formality which can decrease the stigma of second-hand, as supported by Han (2018) in the mental value derived from the shopping experience and environment.

Users also find that their shopping experience is enhanced if they are shopping in a more professional setting with personnel helping them, which is supported by Stihl and Vilimaa (2019) on the value of user education and interaction.

#### **on how users view other users**

The most relevant aspects were whether the social interactions were anonymous or communal, and any perceived hygiene risks. Like the findings of Han (2018), second-hand users expressed that part of the value of a second-hand garment is its history, which motivates users to

participate. On the other hand, the stigma of perceived hygiene risks remains a factor for some users.

#### **on how users view second-hand businesses**

One of the most relevant aspects was the degree of formality or institutionalization. This refers to whether the system is business-to-consumer or peer-to-peer, whether it is a for-profit or non-profit business, the perceived risks and the signaling of value by brands. The position of the system, referring to the extent to which consumerism is motivated by political will (such as environmental wellbeing), sense of sharing and innovativeness, is also relevant. Finally, convenience (the required time, effort and responsibility), the accessibility of the product and level of flexibility on pricing, time and cost savings were also relevant aspects for how users view second-hand businesses.

In general, users appreciate a high degree of formality in second-hand businesses because it is perceived as trustworthy and would resemble traditional consumption channels and platforms. To users, a greater level of formality is also an indicator of better hygiene and trendiness. Similarly, brands are also synonymous with formality and recognizable brands are perceived to have greater value for second-hand users.

Second-hand shopping tends to take more time since it is more time-consuming to find the right style and size compared to first-hand shopping. While this is a motivator for users (as found by Han (2018) on the value in savvy thrifting), it can also be an inhibitor to becoming the main or only way of consuming clothing. Users have said that they would opt for second-hand if the brand they like is available in physical stores, as found by Stihl and Vilimaa (2019) connected to the importance of convenience.

Finally, second-hand retailers and second-hand offerings within mixed commercial businesses are considered as sustainable, and therefore to maintain legitimacy and credibility, businesses should take care to operate and communicate their efforts meaningfully. This can be linked to the findings on credibility (Olofsson, Vesterholm and Sweet, 2019) in that sustainability efforts must be credible in order to have impact (chapter 4).

## **3.2. value generation in leasing**

In this section, the perception on value creation in leasing business models is presented from the view of brands and retailers (Stihl & Vilimaa, 2019) and the view of general users (Larsdotter & Yance, 2019). Linkages are made between the papers on similar and contrasting findings.

### **3.2.1. perspective of brands and retailers**

From the perspective of manufacturers and retailers, value in a leasing system is created in the following ways (Stihl & Vilimaa, 2019).

#### **clothing usage**

An important distinction is made in that in a leasing system, value is created in the use of the garment by the consumer, rather than in ownership. Value is also created in that users can consume higher quality products without paying as much money as they would if they would buy the product. Examples of companies providing this value are Houdini and Sabina&Friends.

#### **user interaction**

Because users have already paid through the leasing program, store personnel are not incentivized to upsell or cross-sell. This allows them to provide honest and genuine advice to users which they have demonstrated appreciation for. Value thus emerges from this interactive and co-creative process, as the businesses are also able to improve their understanding of demand and their user base to better match their offering.

#### **service system integration**

Besides the service systems mentioned with second-hand (see section: 3.1.1 perspective of brands and retailers) insurance companies also play an important role in leasing systems because it protects users from liability on product damage during use. Leasing companies also sell used products to second-hand actors, which allows product use to be extended even further while allowing the company to generate more revenue and make room for renewing their assortment.

#### **educating users**

Besides the values described for second-hand business models (See section: 3.1.1 perspective of brands and retailers), interaction and education between personnel and users also creates a "spillover effect" in which the user mindset is shifted towards more sustainable consumption. An interesting example is that of Houdini, in which their leasing systems changed the way one particular user viewed the concept of ownership after experiencing Houdini's leasing service and then decided to sell his car, since he no longer viewed it as necessary to own a car.

## **3.2.2. perspective of general users**

The business perspective above is contrasted with the view of the more general user group, i.e. those with some or minimal experience on clothing leasing (Larsdotter & Yance, 2019). These perceptions are presented in the view on leased products, on other users, and on the businesses themselves.

#### **On how users view leased garments**

The relevant aspects were related to product characteristics: price, quality and need for newness. There was less concern for clothing quality since leased items tend to be more expensive and be on the high end (formal wear and outer wear), though it is important for users to get the most value for money spent. Similar to the findings of Stihl and Vilimaa (2019), users of leasing systems look for an economic advantage. It was evident that leasing models have not become established amongst traditional users in the same way as second-hand shopping. More time is needed for this to settle in, as was also found by Stihl and Vilimaa (2019). Unlike second-hand, leasing items do not have the same stigma that items are of low quality.

#### **On how users view other users**

The most relevant aspects were on the social level (whether interactions are anonymous or communal), as well as perceived risks on hygiene, product damage and personal liability. Not knowing the previous users of the rented clothing increases uncertainty and a perceived hygiene



risk. What seems to be important is transparency on use and past users rather than the sense of shared history of the garment, which is contrary to the history and story-based value of second-hand users studied by Han (2018). This may indicate a point of differentiation between the second-hand and leasing user groups.

#### **On how users view leasing businesses**

The relevant aspects on institutionalization were whether the system is business-to-consumer or peer-to-peer, whether it is profit or non-profit, and perceived risks (e.g. of product damage and hygiene issues). The degree to which consumerism is motivated by political reasons (e.g. to support the environment) and having a sense of sharing with others were also deemed relevant. Lastly, convenience is a common aspect in terms of the required time, effort and responsibility, in addition to the accessibility of the product and time and cost savings.

In leasing, formality is equated to reliability, though the relative innovativeness of leasing as a form of clothing consumption may remain as a deterrent to new users because of the lack of familiarity with the model, which leads to perceived risks. This makes formality even more important as it builds trust among users. As mentioned by Stihl and Vilimaa (2019), this forms a barrier to getting investment but the role of educating users is even more important in this case, to build knowledge, understanding and trust among users.

### **3.3. comparison analysis of shopping first-hand, second-hand, and leasing**

#### **3.3.1. first vs second-hand shopping**

One marked difference between first and second-hand users is that experienced second-hand shoppers (Han, 2018) do not hold the same negative views on second-hand products in terms of stigma on hygiene and trendiness. In fact, with the latter point there is an overwhelming view among these users that second-hand shopping is unique, creative and spontaneous, even arguably superior (in their view) in contrast to the grim narrative of conventional first-hand shopping which is seen as dull, uncreative and impersonal.

These contrasts indicate that first-hand and second-hand users are acting on very different markets, and that the second-hand fashion industry can respond by supplying the demand and desires of second-hand shoppers while working to remove the stigma and negative connotations among first-hand shoppers.

#### **3.3.2. second-hand vs leasing**

Both second-hand and leasing share similar sources of value generation in terms of the way clothing is collected, sorted, marketed and priced, and the profitability and efficiency of the business models depend on the specific tools and methods used. One common aspect is the importance of convenience for users, who may also play the role of product supplier when they

donate or sell clothing back to the second-hand store. Finally, formality and institutionalization are also important for ensuring user trust and reduction in perceptions of risk.

Artificial intelligence and IT tools play an increasingly vital role in creating user-friendly user interfaces and creating efficiencies in operating the business. Both second-hand and leasing business models are currently limited by the way service systems operate, such as insurance, transport/shipping and online shopping platforms which are not currently designed for circular business models. However, this also presents new opportunities on the market to develop innovative insurance products, transport logistics solutions and web/IT tools, which can help reduce user perceptions of risks and boost business efficiency. While relatively rare, combined methods of product placement online and in-store are also an area of business model innovation, with the potential to blur the lines with conventional first-hand consumption and strengthen the visibility and reputation of second-hand and leasing systems.

One other value that was pointed out by all studies and is shared amongst businesses, general users and experienced second-hand and leasing users is the value of consumer education and interaction. From the business perspective, consumer education can expand the user base, maintain and prolong product life (and thus retain value both for the company and the environment) and create a positive shopping experience to boost user loyalty. For users, such interactions add value to the shopping experience, serve as learning opportunities for sustainable fashion consumption and create a sense of community. Together, this facilitates a shift in public perception and greater acceptance of leasing and second-hand consumption of clothing.

Both general users and experienced second-hand users value the story of a garment as it is passed down from one owner to another, which creates a sense of communality. On the other hand, in leasing there was a strong preference for transparency over communality since it is the "uncertainty of the previous owner that is important rather than the meaning and values shared among users" (Larsdotter & Yance, 2019). Second-hand users also seem to be driven more by sustainability reasons (i.e. the view that buying second-hand is better for the environment) than leasing users. In that sense, sustainability is a greater motivator in the second-hand market. However, this may be due to the fact that current leasing offerings are dominated by high-value products, so the motivation for leasing is fundamentally different to begin with (i.e. leasing as an opportunity to consume expensive items that would not normally be affordable).

**'for the second-hand market to grow in dominance, there needs to be a shift in perspective to buy second-hand not because it is second-hand, but because it fits the style and needs of the user.'**



## 4. towards more sustainable textile production and consumption

### **a note on consumption culture**

The value of second-hand markets extends beyond the cash-object transaction of the product to values in sharing, interaction and the shopping experience. While many users cite environmental wellbeing as a motive for shopping second-hand, Han (2018) describes it as "much about reducing environmental and social impact as it is about engendering concepts that transcends sustainability: individuality, authenticity and distinction".

On the other hand, as long as premature disposal and a strive for novelty prevail as consumption norms, overconsumption will remain as an unintended consequence of second-hand consumerism, especially given that more products can be purchased at lower prices. According to Han, the "data overwhelmingly indicates that users overly rely on the assumption that second-hand fashion is inherently more sustainable and thus fail to hold their criticisms up against unsustainable structures of consumerism that persist within the second-hand realm".

Therefore, the assumption that second-hand markets automatically creates more sustainable consumption is the "greatest barrier for second-hand markets to reach its full ecological potential".

The fashion industry faces the challenge of capturing the additional values of second-hand shopping (individuality, authenticity and distinction), fulfilling the consumerist desire for novelty while remaining sustainable. At the same time, brands must also operate in a genuinely sustainable way to avoid unintentional greenwashing or being perceived as greenwashing, as this brings the risk of damaging brand reputation in the long term.

### **what about first-hand consumption?**

It is evident that while circular models emerge, linear challenges remain. In the production and consumption of apparel made from virgin materials, some of the largest sustainability challenges are connected to the supply chain and have thoroughly been analyzed in other projects within Mistra Future Fashion (see for example Roos et al, 2015; Sandin et al, 2019).

While collaborative users of second-hand and leasing are growing, this demographic picture remains relatively small compared to conventional users of first-hand clothing. At the same time, conventional users are becoming increasingly aware of the environmental and social issues in textile production, adding to the societal pressure faced by fashion brands to produce clothing sustainably. In response, Swedish fashion retailers are working to improve production practices in their supply chains through various multi-stakeholder initiatives such as the Higg Index developed by Sustainable Apparel Coalition, SAC, and the newly established Swedish Textile Initiative for Climate Action, STICA.

Ecolabels are used to communicate these efforts to the consumers, but the criteria behind labels are not standardized, and the many labels that have emerged can cause confusion and can also

lead to 'green wash' of the products. To be able to create transparency and track to capture important information in a garment, new tracking methods and technologies are needed. For more on textile tagging see Englund et al 2018. Many labels existing today only captures a small part of the complex textile value chain and many are not known to the consumers.

The study '(In)credible Sustainability: Requisites for credible sustainability labelling in the apparel industry' by Olofsson, Vesterholm and Sweet (2019) developed a credibility model to assess the potential of sustainability efforts in becoming credible ecolabels. To be credible, an ecolabel needs to be transparent and legitimate. Transparency is based on whether the scope of the label is clear (i.e. what it stands for), which production processes used are certified, the criteria for certification, how criteria are selected and the authorities behind the selection. The initiatives towards more sustainable fashion production should also be focused on key aspects of responsible production and decent work in the raw materials and manufacturing stages of the value chain, management of chemicals and environmental impact management, and be upfront about its shortcomings. Legitimacy involves being realistic in scope and feasibility, being independent by having different actors behind it, and auditable. Being auditable means that the above key sustainability issues are addressed and achievable.

In Olofsson, Vesterholm and Sweet (2019), a number of sustainability initiatives by Swedish fashion businesses were assessed, tackling the aspects mentioned above (for the list of initiatives assessed in this study, see Appendix 1). While raw materials and environmental impact management have fulfilled almost all criteria of credibility, followed by sustainable labor conditions (with fewer initiatives identified as credible), there were in fact no initiative that was identified as credible for the management of chemicals. This indicates that much effort remains necessary in chemicals management.

Even under such areas as sustainable labor conditions, efforts need to consider potential unintended effects. A study by Nylöf and Stoy (2019) found that while the provision of training to Bangladeshi women on garment sewing leads to employment and greater economic stability, it also entails long-term health effects from long overtime hours (average of 40% over time in a six-day work week) and social effects from decreased time with family (especially considering that the role of women in the household remains unchanged despite employment).

Nonetheless, for the majority of existing sustainability initiatives that are deemed credible, there is a potential to develop a sustainability label that covers these key sustainability areas. To do this, companies need to increase their control over the production chain by vertical integration or relocating to countries where a high level of control is not necessary (e.g. countries with more stringent regulations). If these options are not deemed feasible, companies should strengthen coordination and collaboration with other manufacturers and suppliers to launch credible labelling systems. Finally, companies should consider the potential environmental and social impacts of their efforts to understand and avoid potential negative side effects. If such ecolabels can be standardized and streamlined, there is a genuine potential for first-hand clothing consumption to shift towards sustainability. Also see more in the life-cycle-assessment studies made within Mistra Future Fashion (e.g. Sandin et al 2019).

## 5. conclusions and recommendations

This section provides a summary of conclusions and recommendations to the fashion industry on how second-hand and leasing business models can be promoted to facilitate the reuse of textiles.

### 5.1. second-hand

The second-hand market for textiles is expanding, both in terms of the number people donating or selling their clothing and the number of second-hand users. While this means increasing competition amongst retailers on the supply of pre-owned garments, the overall supply is also increasing. This presents great potential for market capture. It should also be noted that the current market consists mainly of women, indicating that the male market remains largely untapped.

The perceptions and desires of second-hand and first-hand users differ, and thus should be treated as separate in a market analysis. Among conventional first-hand users there remains a level of stigma towards purchasing second-hand that it is unhygienic and untrendy. On the other hand, the experienced second-hand users have a starkly contrasting view that second-hand shopping is unique, fun and creative, and it is the conventional first-hand shopping experience which is untrendy and impersonal. The fashion industry should therefore target these two user types with separate strategies and methods.

Currently, second-hand consumption is mainly motivated by desire for contributing to environmental wellbeing (as claimed by users), value-for-money and sense of uniqueness. Price is a strong driver for second-hand consumption, though there are distinctions within the greater user group to balance out willingness to pay against quality. Users also enjoy second-hand shopping because of the greater interaction with other users and businesses and a sense of communality and history in the products.

Given the importance of hygiene and formality for users, it is important that retailers ensure a degree of institutionalism, formality and accessible information to users. This can overcome barriers of inconvenience and skepticism (including concerns on hygiene and other risks). The presence of recognized brands in product offerings also adds similar value. This is also where a tag as an information carrier would be useful. Although tagging is outside the scope of this report we can recommend reading Englund et al, 2018 and Olofsson et al, 2019, to capture different aspects of apparel tagging.

For the second-hand market to grow in dominance, there needs to be a shift in perspective to buy second-hand not because it is second-hand, but because it fits the style and needs of the user. There is already movement on this - an example is non-profit Myrorna, which has rented places in shops selling new clothing such as the boutique pop-up store The Lobby in Stockholm. The effective and efficient collection, sorting, pricing and marketing of large volumes of unique items presents a challenge, but digitalization and Artificial Intelligence technologies are making this easier and more cost effective. For example, while it is conventionally more cost effective to invest time on selling higher-value unique items, digitalization has the potential to make the sale

of lower-value unique items, at volume, more cost effective. These aspects can be developed as online platforms for both second-hand and leasing. Opportunities exist to develop innovative methods to collect used garments, while opening value-generating opportunities for collaboration with service providers and other retail businesses.

Lastly, tax structures also present a challenge for profitable businesses to resell second-hand garments. Since they must pay VAT and the individuals that they buy their clothing from are not required to pay VAT, the company is not able to claim VAT receivables for the VAT paid, which reduces profit margins.

## recommendations to second-hand

- Approach second-hand users differently from first-hand users in areas including marketing, product placement, trend-setting, communications, pricing and delivery
- Seek to better understand the different user segments within the second-hand market and target them accordingly as well
- Adopt technological and logistics innovations, and form strategic partnerships with service providers (e.g. in insurance, transport/shipping and IT) to make second-hand business models more cost efficient
- Leverage on the fashion industry's influence to set fashion trends in second-hand, which has the potential to raise visibility and shift societal norms towards second-hand clothing consumption
- Prioritize sustainability in a genuine manner and communicate to users accordingly
- Prioritize user interaction and education to build awareness of second-hand consumption, its potential environmental benefits and product care. This also has the potential to shift consumption norms

## 5.2. leasing

Leasing systems are changing the way users behave. Users are accustomed to make decisions that provide the greatest value for money. In some mixed business models of leasing and first-/second-hand sales, some users decided to buy out certain products after having leased them. In this sense, leasing can present an opportunity for selling high-value products as it allows users to try before buying, if they decide that they would prefer to own the product. This provides great opportunity for value capture.

On the other hand, some users also opted to lease higher-value items to get the greatest "value for money", rather than lower value items that they may actually need. Nonetheless, users began to favor items based on fit and need rather than monetary value as they adapted to the leasing system over time. While the shift for users to accept the leasing of clothing will take time, retailers can adapt by providing greater flexibility in price levels and leasing periods in the meantime.

The lack of awareness may remain as a barrier to increase the number of users to the leasing model. For now, firms may also continue to offer items that users see as unnecessary to own (such as formalwear and outerwear) and build on this towards conventional clothing items as the users' familiarity with leasing grows. Indeed, users have become increasingly open and positive towards leasing these two types of clothing and it may cater to the specific set of users that seek variation and novelty. More convenient consumption models and improved logistics are also needed to attract more users.

Given that many insurance companies are not accustomed to or even aware of that private home insurance policies usually cover leased movable property, many users are confused and hesitant to join leasing programs due to concerns over liability. This presents a challenge but also an opportunity in stakeholder communication as well as developing appropriate insurance products that fit clothing leasing, covering areas including in-store storage, shipping and use.

Similarly, current online sales platforms and checkout systems are not suited for leasing, demanding more time and resources to operate online sales. An opportunity exists for new platforms to be developed but investment is also needed to provide the necessary capital. Efficient and timely shipping must also be ensured for leasing businesses to run smoothly.

Finding investment is an ongoing challenge for leasing businesses, since investors often desire quick returns, which cannot be guaranteed since leasing systems are not yet mainstream and shifts in user norms take time and can be unpredictable. To upscale, larger inventories are needed, but this is not possible without investment and investors are more accustomed to calculating risk in linear business models rather than circular models.




## recommendations to leasing

- Continue to offer high-value items in leasing systems while steadily introducing everyday wear and promoting leasing as a form of clothing consumption
- Provide flexibility in pricing and leasing periods to facilitate the build-up of familiarity among users
- Partner with service providers to develop solutions for leasing systems, including insurance products, web store platforms and transport logistics
- Collaborate with industry partners to build visibility, confidence and engagement with investors to secure long-term capital and upscale leasing models
- Build a loyal base of users who can become advocates for this form of clothing consumption and build awareness

## 5.3. concluding remarks

In summary, there is a growing market of second-hand and leasing users which is relatively untapped. The perceptions, preferences and desires of these users differ between each other, and also from conventional first-hand users, which should be considered by the fashion industry. Nevertheless, one common aspect shared amongst all user types is that the desire for novelty remains. This is likely to present an ongoing challenge for environmental wellbeing as it encourages rapid consumption cycles, but it also presents opportunities for the fashion industry to market, trend-set and shift its offerings to fulfil the desire for novelty while facilitating textile reuse to reduce waste.

Fortunately, given the rise of fast fashion and growth of the clothing industry, the supply of used clothing is enormous and growing. By understanding these trends and perceptions, the fashion industry can be empowered to make collaborative consumption a shared concept and shift the consumption paradigm from a linear model to a circular one.



**'nevertheless, one common aspect shared amongst all user types is that the desire for novelty remains.'**

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# appendix

The following list of companies was studied by Stihl and Vilimaa (2019) in *Merging sustainability and clothing: an exploratory study on the leasing of clothing and the selling of second-hand clothing*.

- Appletrees: a Swedish company that sells premium, high-quality unisex clothing. Established in 2014 in Stockholm and runs their own store as well as sells exclusively through select retailers in over ten countries. Collects and resells their own garments as second-hand for half the original retail price, in-store and online. Users who return a used garment receive 30% off on a new product.
- Nudie Jeans: a Swedish denim brand founded in 2001, with stores worldwide. Collects and resells their own jeans and sell as second-hand. Also sells online in batches (aka. "drops") of 200 pairs of jeans at a time. Users who return a used jean receive 20% off on new pairs.
- Sellpy: a Swedish company founded in 2014 that operates an online sales platform for second-hand products. H&M is one of their biggest investors. Any user can order a Sellpy bag delivered to their address to be filled with used items and collected by Sellpy for free. Sellpy then takes care of the whole sales process, including advertising and pricing. Sales are on consignment, where the seller receives 40% of the sales price.
- Varié: a premium second-hand clothing company established in 2015 and operates online, with one pop-up store which opened in 2018 in Norrköping. Sales are on consignment; the provider receives a commission of 30 or 60% depending on the price of the product.
- Red Cross: an international non-profit humanitarian organization that opened their first donation and second-hand store in Växjö, Sweden in 1986. Currently there are over 300 stores around Sweden, led by local associations. Donations are sorted, priced and repaired if needed. Sometimes auctions of products are held online for high-value items.
- Myorna: a chain of second-hand stores in Sweden, selling both on online platforms and in-store. Revenues are spent on social work in Sweden. Myorna collects items in-store, at municipal recycling centres, collection bins outside other stores (e.g. IKEA) and from pick-up at home.
- Sabina&Friends: a leasing service for women founded in 2011 that focus on upscale designer clothing, operating mainly operates online and through one store in Stockholm. Washing and dry cleaning is included in the service. During the change in fashion seasons, the pieces are either sold to current clients or to second-hand retailers such as Sellpy.
- MyDresscode: founded in 2017, a leasing service for designer bags that can be leased for periods of one week, two weeks or one month. Mainly operates online, though some products are displayed in stores such as those of Sabina&Friends. Pick-up of leased products can be in-store or by delivery in the mail.
- Houdini: a Swedish outdoor clothing company with a global presence, founded in 1993. It is known for its high-quality products. Houdini sell in-store and online, as well as lease, repair and sell in second-hand. Users returning used products can receive a 50% commission on its resale along with a 20% discount on a new item.

The following provides a list of the initiatives studied by Olofsson, Vesterholm and Sweet (2019) in *(In)credible Sustainability: Requisites for credible sustainability labelling in the apparel industry*.

**Raw materials** - many initiatives identified as credible, almost all have all criteria fulfilled in transparency, legitimacy and credibility. Those identified as credible are:

- BCI: Better Cotton Initiative, an initiative that aims at lowering the environmental impact of cotton production and to increase the living standards in the areas where cotton is produced. Certifies cotton that fulfil the criteria for “better cotton”.
- GOTS: Global Organic Textile Standard, a sustainability label that covers both environmental and social criteria throughout the value chain.
- GRS: Global Recycling Standard, a label from Textile Exchange that indicates recycled materials within the textile industry.
- RCS: Recycled Claim Standard, a traceability standard from Textile Exchange for recycled material that indicates that the material is traceable throughout the production chain.
- OCS: Organic Content Standard, a label from Textile Exchange that indicates organically grown raw materials in the textile industry.
- SCS: Recycled Content Standard, certification that measures the fraction of recycled material in a product.

**Sustainable labor conditions** - many initiatives identified as credible about half have all criteria fulfilled. Those identified as credible are:

- Accord: Accord on Fire and Building Safety in Bangladesh, an agreement between trade unions and companies to achieve a safer working environment within the textile industry in Bangladesh.
- ETI: Ethical Trading Initiative, a collaboration between companies, trade unions and organizations where all affiliated companies have adopted a standard regarding working conditions at their suppliers.
- BSCI: Business Social Compliance Initiative, a code of conduct for the suppliers of the member Companies.
- FWF: Fair Wear Foundation, an organization that together with member companies, factories, trade unions and other organizations audits and works to improve working conditions for textile workers.

**Management of chemicals** - no initiative identified as credible according to the Credibility Model. The initiatives that were assessed for transparency and legitimacy were determined not to fulfil the required criteria. The following cases were studied under this aspect:

- Oeko-tex: a label that indicates that no hazardous chemicals have been used in the raw material or the production process.
- Bluesign: a label that indicates that a product, throughout the entire production process, is produced without the help of hazardous chemicals.
- Audit X: nameless third party that audits the use of chemicals in Gina Tricot.

**Environmental impact management** - many initiatives identified as credible. These were:

- STWI: Sweden Textile Water Initiative, an initiative to reduce the use of water in the textile and leather industry (<http://stwi.se/>).
- Higg: Higg Index, measures and values the sustainability of a product in regard to the local society, the factory workers and the environment. It is an index developed by stakeholders in the apparel industry and organized under the name of Sustainable Apparel Coalition (<https://apparelcoalition.org/the-higg-index/>).
- BSCI: Business Social Compliance Initiative, a code of conduct and supply chain management system that implements international standards and conventions to protect workers rights and human rights (<https://www.amfori.org/content/amfori-bsci>).



Mistra Future Fashion is a research program that focuses on how to turn today's fashion industry and consumer habits toward sustainable fashion and behavior. Guided by the principles of the circular economy model, the program operates cross disciplinary and involves 60+ partners from the fashion ecosystem. Its unique system perspective combines new methods for design, production, use and recycling with relevant aspects such as new business models, policies, consumer science, life-cycle-assessments, system analysis, chemistry, engineering etc.

MISTRA is the initiator and primary funder covering the years 2011-2019. It is hosted by RISE Research Institutes of Sweden in collaboration with 15 research partners.

FUNDED BY



The Swedish Foundation for  
Strategic Environmental Research

