



Central Baltic Programme

BALTIC2HAND: RESEARCH DATA ANALYSIS REPORT

Olga Gurova

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1) DESK AND FIELD RESEARCH DATA AND **ANALYSIS**

DESK RESEARCH DATA AND ANALYSIS

Current state, problems, and opportunities of the second-hand market in the CBR

Eerika Heinonen, Noora Salmela, Maarit Jaakola

Overview

The history of second-hand clothing is old, even though early accounts are hard to find. Already in the 15th century there has been some sort of trading in used clothes, some trading guilds which dealt with higher quality items such as silk gowns, as well as lower-class vendors working on the street. Some hand downs between social classes have been reported as well. ¹ The second-hand market has come a long way after that. These days new businesses pursuing success in the reuse industry pop up all the time. You could say, there is something for everyone. But what is the industry looking like? And what kind of barriers or enablers are there for companies and consumers to participate in this now booming market?

The aim of this report is to clarify the current state of second-hand market and textile waste in the Central Baltic Region (CBR), meaning Finland, Sweden, Estonia and Latvia. This report will review the possible challenges as well as opportunities of the second-hand market in general but especially in the CBR.

There have been some attempts to quantify the amount of textile waste and reuse of textiles in Europe. However, since there is no standardized method for mapping or requirement for reporting, the data is scattered and non-comparable. The amount of collected used textile vary as a consequence of varying methods and reporting. However, as stated, there have been some attempts to quantify the amounts of textile consumption as well as textile waste generation. Based on Statista, in 2016 Europeans consumed around 15 kilos². Based on European Environment Agency, Europeans throw away around 11 kilos of

² Smith, 2020. Leading yearly textile waste producers in the European Union (EU) in 2016, by country. Statista.















¹ Brooks, 2015. Clothing Poverty. The Hidden World of Fast Fashion and Second-hand Clothes. Bloomsbury Publishing.

textiles every year. Used clothes can often be taken outside the European Union, but most of they (87%) are incinerated or landfilled. Europeans do not give away their clothes to charity as much, but in fact throw them away after they no longer want to keep them. Only about 30-35% of the used clothing is collected for reuse and recycling, and only 1% is recycled into a new piece of clothing. Technologies for recycling clothes and other textiles into fibres are only emerging and their usage has been piloted.³

There is some pressure coming from the European Union to develop the textile industry into a more circular and sustainable one, through legislation. EU textile strategy was first launched in 2022. The aim is to make textiles more sustainable, repairable, and to end fast fashion and accelerate the industry's readiness for innovation. 4 In addition, by 2025 each member country should have a separate collection for consumer textiles⁵.

Current state of the second-hand market in the CBR

There are numerous actors on the second-hand market (small stores, platforms, large actors, online sharing groups etc.) and it is therefore hard if not impossible to quantify the amounts in an exhaustive way. To make matters worse, there is a lot of un-traceability in the market, since many of the actors are only platforms for consumers to sell and buy, hence there's no data available regarding these purchases (in sense of exchange and price). In addition, there is a lack of numbers since many of the actors are fairly new and only getting started. ⁶ Based on the Changing Markets Foundation's study, 75% of all the clothes that are reused or resold, equalling only about 25% of all clothing, end up in other countries than where they are used in. 7

Based on the Global Data Market Sizing report delivered for an American second-hand company thredUp in 2022, the second-hand market is expected to grow 127% by 2026. The growth is fastest in North America, but also in Europe twice as fast as overall apparel market growth. 8

There is great demand for second-hand products, especially clothing. For example, in Finland the retail for second-hand clothes increased 17% as fashion retail only increased about 5,1% between 2018 and 2020. Especially young people are interested in buying second-hand. Over a third of Finnish people aged between 15-24 has reported buying second-hand. 9 However, only about 1,3 kg out of the 11,3 kg of textile consumption per capita in Finland was used clothes in 2019¹⁰.

In 2017, Swedes consumed 12,5 kg of new textiles and only about 0,9 kg of used textiles. In 2016 approximately 73% of all collected textiles in Sweden were exported. ¹¹ Sweet, Aflaki and Stadler (2019) recognized three distribution channels in the Swedish market for second-hand textiles, which can also be

¹¹ Bellezza & Luukka, 2018. Svenska textilflöden- textilflöden från välgörenhet och utvalda verksamheter. SMED Rapport Nr 2, 2018.















³ European Environment Agency, 2021. Progress towards preventing waste in Europe — the case of textile waste prevention. doi:10.2800/49450

⁴ European Commission, 2022. EU Strategy for Sustainable and Circular Textiles. COM/2022/141 final.

⁵ European Parliament, 2018. Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste (Text with EEA relevance).

⁶ Sweet, Aflaki & Stadler, 2019. The Swedish market for pre-owned apparel and its role in moving the fashion industry towards more sustainable practices. Mistra Future Fashion report number: 2019:01. ISBN: 978-91-88907-42-4

⁷ Changing Markets Foundation, 2023. Take-back Trickery. An Investigation into Clothing Take-back Schemes.

⁸ Global Data, 2022. Market Sizing and Growth Estimates. ThredUp Resale Report: 2022. https://www.thredup.com/resale/2022/

⁹ Muoti- ja urheilukauppa ry., 2022. Kierrätettyjen vaatteiden suosio tuplaantui vuodessa.

https://muotijaurheilukauppa.fi/2022/10/07/kierratettyjen-vaatteiden-suosio-tuplaantui-kahdessa-vuodessa/ ¹⁰ Dahlbo et. al., 2021. Textile Flows in Finland 2019. Reports from Turku University of Applied Sciences 276. ISSN 1459-7764

applied to some degree in the whole Central Baltic area. The first set of distribution channels include the non-business channels such as flea markets and online consumer-to-consumer swapping. The second set of distribution channels are distributing pre-owned apparel like online classified platforms and marketplaces, as well as collecting and reselling online shops and physical second-hand shops. The third set of channels has a mixed set of business models, like own product take back and resale.

Estonia and Latvia have a higher consumption of second-hand clothing, in 2018 almost 20% of textile consumption in Estonia was second-hand and in Latvia it was even around 40%. 12 On the contrary, as stated before, in Finland the use of second-hand clothes was around 15% and in Sweden only 7%. (Table 1.)

Country	Consumption of 2. hand clothing
Latvia	40%
Estonia	20%
Finland	15%
Sweden	7%

Table 1. Consumption of 2. hand clothing in different countries. Modified from Bellezza & Luukka (2018), Watson et. al. (2020) and Tekstiili-ja urheilukauppa ry. (2022).

Based on the report written by Watson et. al. (2020), the consumption of new textile products was significantly lower in Latvia than in other Nordic countries (Finland, Sweden, Norway, Denmark). The Baltics represent an important area for the European second-hand market providing up to 4000 jobs in the area. There are high volumes of used textile imports from other Nordic countries to the Baltics. There is high expertise especially in manual sorting for reuse and the cost of labour is low compared to the other Nordic countries. Most of the second-hand sales in the Baltics consist of imported textiles rather than domestic textiles. Only Estonia has a high rate of internal recirculation amounting up to 22%.

Competition in the second-hand market has increased in the past few years, due to new businesses constantly emerging onto the market and increasing demand. Profitability can be an issue for businesses, especially the for-profit ones. ¹³ Many fashion brands have created a resale business on the side of their traditional linear business. Usually, the traditional sales enable the resale business, so that the company's revenue is not dependent on making the resale business profitable. (Ibid.) In addition, many fashion brands have taken up a take-back scheme, where they collect unwanted textiles for resale and recycling. Changing Market Foundation tracked 21 items, which were taken to ten different fashion brands, such as H&M, Zara, Nike, Boohoo and The North Face, aiming to investigate where these items end up. As a result,

¹³ Persson & Hinton, 2023. Second-hand Clothing Markets and a Just Circular Economy? Exploring the Role of Business Forms and Profit. Journal of Cleaner Production (390), Article 136139. https://doi.org/10.1016/j.jclepro.2023.136139















¹² Watson et. al., 2020. Post-consumer Textile Circularity in the Baltic Countries. Current Status and Recommendations for the Future. TemaNord 2020:526. https://pub.norden.org/temanord2020-526/#

they categorized four different scenarios for different paths: downcycled or destroyed, resold within Europe, lost in limbo, and shipped to Africa. Based on this study, it is clear that not all promises made by these brands on reusing and recycling the items taken to their stores are in fact continuing their lifecycle, but instead can end up being shredded or even burned. 14

There is great inequality in the world of second-hand clothing, and how it is distributed. For example, the amount of second-hand clothing flowing into Kenya from around the world, has grown and up to 900 million items was sent to Kenya in 2021. This amount to 17 garments for each Kenyan every year. Out of these, almost 150 million items came from the EU and the UK. (Ibid.) There are similar countries around the world, where there is only a limited amount of new clothing sold and used clothes make up most of the apparel market. The imports of second-hand clothing have undermined the local production of clothes, and market traders have shifted from selling new local to used foreign clothes, as these products have higher profit margins. ¹⁵ It could be argued that this is also to some extent the case for Latvia, as most of the second-hand market there consists of imported textiles and the second-hand market is 40% of the whole apparel market there.

Current state of textile waste in the CBR

Textile industry has doubled in the past 20 years in terms of textile fibres being produced. ¹⁶ As stated before, Estonia and Latvia receive a great number of used textiles, especially from the Nordics, including Sweden. Around 60% of the Nordics' textiles are exported to Estonia and 10% to Latvia. ¹⁷ 18% of these imports are sold second-hand within the Baltics, meaning Estonia, Latvia or Lithuania. This is mainly because the Baltics have bigger and better sorting facilities as well as lower labour costs. 18 There are multiple actors in the collection of post-consumer textiles in the Baltics. In addition to traditional waste companies, there are charities and commercial actors. These actors have difficulties in relocating these textiles, as no less than 42% of collected textiles end up incinerated or even landfilled. Municipal waste companies' collected textiles go mostly to incineration. In the Baltics, only Estonia has so far, obliged municipalities to set up separate collection of textile waste.

Around 28,000 tons of textile waste was created in Estonia and Latvia together in 2020¹⁹. In 2018 only about 600 kilos of separately collected textiles, which amounted to 30% of new textiles bought, were recycled in Estonia. In Latvia this number was as low as 5%. There is a great lack of recycling capacity, especially for waste companies. Moreover, the waste companies are not motivated to invest in collecting, separating and recycling textiles as the quantity and quality of textiles vary and there is only limited access to potential markets for recycled materials. 20

²⁰ Hvass & Watson, 2020. Post-consumer Textile Circularity in the Baltic Countries. Telaketju R&D Webianr Series 24.9.2020. https://telaketju.turkuamk.fi/uploads/2020/10/be37d8af-telaketju_3resweb-nordicbalticproject_revised.pdf













¹⁴ Changing Markets Foundation, 2023. Take-back Trickery. An Investigation into Clothing Take-back Schemes.

¹⁵ Brooks, 2015. Clothing Poverty. The Hidden World of Fast Fashion and Second-hand Clothes. Bloomsbury Publishing.

¹⁶ European Environment Agency. (February, 2023). EU Exports of Used Textiles in Europe's Circular Economy. European Union, European Environment Agency. https://www.eea.europa.eu/publications/eu-exports-of-used-textiles

¹⁷ Watson et. al., 2020. Post-consumer Textile Circularity in the Baltic Countries. Current Status and Recommendations for the Future. TemaNord 2020:526. https://pub.norden.org/temanord2020-526/#

¹⁸ Nørup et. al., 2019. Evaluation of a European Textile Sorting Centre: Material Flow Analysis and Life Cycle Inventory. Resources, Conservation and Recycling (143), 310-319. https://doi.org/10.1016/j.resconrec.2019.01.010

¹⁹ Watson et. al., 2020. Post-consumer Textile Circularity in the Baltic Countries. Current Status and Recommendations for the Future. TemaNord 2020:526. https://pub.norden.org/temanord2020-526/#

In Finland, the collection of post-consumer textiles increased between 2012 and 2019 by 39%. Only about 44% of the textiles purchased by households ended up in the collection in 2019. 18% of all collected textiles were exported and the rest stayed in Finland for reuse, recycling and energy usage purposes. Up to 60% of all collected textiles were incinerated. The increase in number of textiles being collected is mostly due to effective piloting in the field of circular textiles in Finland. A municipal waste company, Lounais-Suomen jätehuolto Oy, founded their piloting plant in 2021. Already before that there were many post-consumer textile collection pilots. 21

There are some barriers for textile circularity in the Central Baltic Region. These include underdeveloped domestic collection, decreasing value and quality of textiles, limited reuse of local collections as a consequence of imports, market barriers for scaling up upcycling, limited cooperation within the sector, and no recycling capacity for low quality textiles, which therefore get exported (usually) to less-developed countries.²² There are various aims within the various actors of the second-hand market. This can lead to contradictory views on how the process should be performed. Economic indicators are usually the primary target for the actors instead of ecological or social indicators. There are some actors, such as the more traditional non-profit organisations, which already have a working infrastructure beyond country borders, but most of the actors are small and lack in knowledge as well as experience in the logics and logistics of reuse. 23

Only about 3-4% of UFF's collected post-use textiles are qualified to be sold in the charity shops in Finland and are exported to the Baltics and further with low transparency. Post-use textile exports are profitable for NPOs (non-profit organisations) and there is a lack of sufficient enough technology, and therefore textiles, especially of lower quality, are in many cases exported to developing countries. ²⁴

Problems on the second-hand market

There are several studies on the challenges as well as the possibilities of second-hand market. Here we go through some of them. We give an overview but also focus on the areal perspective of the Central Baltic Region. The barriers for second-hand consumption have, based on the Global Data report (2022), decreased in the past couple of years. ²⁵ There are still many barriers for businesses to participate in the

Silva et. al. (2020) have studied the role of social embarrassment and perception of hygiene in second-hand consumption. Based on their study, there is indication that negative experience of using second-hand goods based on for example lower quality, hygiene or social embarrassment influences the consumption of used clothes. The most positive attitude towards second-hand is among the people that are already most active on the second-hand market, hence have many positive purchase experiences. ²⁶ Also, Wang, Fu & Li

²⁶ Silva, Santos, Duarte, & Vlacic, 2021. The role of social embarrassment, sustainability, familiarity and perception of hygiene in second-hand clothing purchase experience. International Journal or Retail & Distribution Management 49:6. ISSN: 0959-0552















²¹ Dahlbo et. al., 2021. Textile Flows in Finland 2019. Reports from Turku University of Applied Sciences 276. ISSN 1459-7764

²² Watson et. al., 2020. Post-consumer Textile Circularity in the Baltic Countries. Current Status and Recommendations for the Future. TemaNord 2020:526. https://pub.norden.org/temanord2020-526/#

²³ Hedegård, Gustafsson & Paras, 2019. Management of Sustainable Fashion Retail Based on Reuse – A Struggle with Multiple Logistics. The International Review of Retail, Distribution and Consumer Research, 30(2): 1-20. DOI:10.1080/09593969.2019.1667855

²⁴ Sweet, Aflaki & Stadler, 2019. The Swedish market for pre-owned apparel and its role in moving the fashion industry towards more sustainable practices. Mistra Future Fashion report number: 2019:01. ISBN: 978-91-88907-42-4

²⁵ Global Data, 2022. Market Sizing and Growth Estimates. ThredUp Resale Report: 2022. https://www.thredup.com/resale/2022/

(2022) studied consumer behaviour in second-hand market and found out that stigma attached to used clothes, unknown origins, poor hygiene conditions, and embarrassment of shopping in second-hand stores have been identified as popular shopping barriers for consumers. ²⁷ It can be argued though, that this view on the negative aspects of second-hand clothing is no longer fully accurate, at least in the Global North, as second-hand clothing has become more of a norm among the younger consumers (e.g., Lewe, 2023²⁸).

A study implemented in Finland, stated that almost half of the people who answered the questionnaire, found it hard to get their hands on clothing that was suited for their purposes. The study also stated that 51% of the people surveyed do not sell their clothes after they stop wearing them. ²⁹ In Finland the main barriers for businesses to take on reuse models were costs, skills needed for handling the textiles, logistics, quality issues, the ability to meet customers' needs, attitudes, and being up to date. From the consumers point of view the barriers were decrease in product value, aging of products, hygiene, messy flea markets, and the supply not meeting the need. 30

There has been discussion and study on the fact whether products bought second-hand actually replace the ones bought new. 31 Based on Vaayu's study for Vinted, there was a replacement rate of 39%, meaning that 39 out of 100 people buying a second-hand product on Vinted would have avoided purchasing a new product instead. 32 Too often buying second-hand does not equal to sustainable consumption but on the contrary gives consumers a permission to keep consuming as usual. 33

For companies and organisations, developing reuse business requires knowledge and expertise for handling the products. There are questions of logistics, costs, quality and condition of products, consumer attitudes, hygiene, and many other things to be considered. ³⁴ In addition, some retailers think that resale will cannibalize new product sale and that resale does not align with their brand narrative³⁵.

Interviews with the Baltic textile waste collectors, identified many challenges, such as low quality of textiles, supply and demand not matching, competition with imported used textiles, little interest in unsold locally collected textiles, lack of testorage, overloaded containers, contamination by non-textiles, lack of available recycling opportunities resulting in textiles being discarded as waste, and lack of financial aid from the government. ³⁶ These challenges can be applied when analysing the barriers for cross-border cooperation in the Central Baltic Region. As the Baltic countries, in this case Latvia and Estonia, are

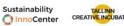
³⁶ Watson et. al., 2020. Post-consumer Textile Circularity in the Baltic Countries. Current Status and Recommendations for the Future. TemaNord 2020:526. https://pub.norden.org/temanord2020-526/#













²⁷ Wang, Fu, Li, 2022. Young consumers' motivations and barriers to the purchase of second-hand clothes: An empirical study of China. Waste Management. 157-167. https://doi.org/10.1016/j.wasman.2022.02.019

²⁸ Lewe, 2023. Consumer Perceptions of Circular Practices in the Textile Sector and the Relation to Consumption Behaviour. Master's thesis, Malmö University.

Practical Implications for Stakeholders in the Textile Industry

²⁹ 'tise, 2022. Kyselytutkimus suomalaisen muodin kuluttamisesta – Poimintoja tuloksista. https://www.sttinfo.fi/data/attachments/00284/6ec016bb-b809-4db0-bf3a-1dc175c60876.pdf

³⁰ Eskelinen et. al., 2018. Uudelleenkäyttö ja sen edistäminen Selvitys uudelleenkäyttömääristä ja uudelleenkäyttöön liittyvistä liiketoimintamahdollisuuksista Suomessa. Suomen ympäristökeskuksen raportteja 19/2018. ISSN 1796-1726

³¹ Gary et. al., 2022. Reducing the Environmental Impact of Clothing: An Emploration of the Potential of Alternative Business Models. Sustainability; Basel 14:10, (2022):6292. DOI:10.3390/su14106292

³² Vaayu, 2021. Vinted Climate Change Impact Report. Understanding the Avoided Emissions of Second-hand Shopping on Vinted. https://www.vaayu.tech/vinted-climate-change-impact-report-2021

³³ Gray, Druckman, Sadhukhan & Keith, 2022. Reducing the environmental impact of clothing: An exploration of the potential of alternative business models. Sustainability, 14(10), 6292. doi:https://doi.org/10.3390/su14106292

³⁴ Eskelinen et. al., 2018. Uudelleenkäyttö ja sen edistäminen Selvitys uudelleenkäyttömääristä ja uudelleenkäyttöön liittyvistä liiketoimintamahdollisuuksista Suomessa. Suomen ympäristökeskuksen raportteja 19/2018. ISSN 1796-1726

³⁵ Global Data, 2022. Market Sizing and Growth Estimates. ThredUp Resale Report: 2022. https://www.thredup.com/resale/2022/

receiving much of the Nordics' discarded textiles, there are still many obstacles to be resolved when planning the future prospects of Central Baltic regional ecosystems for reusable and recyclable textiles. For making second-hand business viable, cooperation between different parties is essential. In their study Zhuravleva and Aminoff (2021) list barriers, based on past literature, for establishing circular business. These include economic, social, institutional, technological and informational, supply chain, and organisational barriers. The dominance of economic indicators, the (economic) importance of exports of post-consumer textiles, lack of awareness of industry needs, the complexity of legislative mechanisms, the difficulties in handling the textiles, the conflicts of interest between different actors of supply chain, and the fear of risks associated with the need to adapt of change the current business model, act as challenges in establishing partnerships and cross-border collaboration. ³⁷ Compared to local reverse logistics (meaning returns), cross-border logistics remain at a relatively primitive stage. ³⁸ Therefore, there is not much research on the challenges of cross-border cooperation between different value chain actors. Only some implication could be made based on recent study on partnerships in second-hand market. Too often, the company's or organisation's main aim is profitability. Fortunately, in the EU legislation will drive organisations towards implementing more sustainable practices. There is still a great need for political will in promoting circular business models and making them functional, tempting, accessible, less environmentally harmful, and compensatory for linear models. In addition, investments, education, knowledge, change in consumption and development of design, is needed. ³⁹

Opportunities on the second-hand market

In addition to barriers, the second-hand market of course offers many opportunities. The growth of the number of businesses in the second-hand market indicates that there is trust in circular business models such as reuse being profitable business. Reuse is most times better for the climate than the consumption of new products, and consuming second-hand does not require a total transformation in consumption behaviour compared to traditional linear consumption. ⁴⁰ In addition, consumers have the possibility to save money or even make money selling their unwanted textiles. 41

Retailers are entering the reuse sector to satisfy consumer demand and to boost their own sustainability. Based on the Global Data report (2022), 88% of retailers who currently offer resale as part of their business model, say that it has helped drive their revenue and resale is becoming a strategic priority for them⁴². There can be found similar consumption patterns when comparing buying new products and second-hand. These include impulse buying, minimal usage of products, seeking trendy items and gaining hedonic

⁴² Global Data, 2022. Market Sizing and Growth Estimates. ThredUp Resale Report: 2022. https://www.thredup.com/resale/2022/















³⁷ Zhuravleva & Aminoff, 2021. Emerging partnerships between non-profit organizations and companies in reverse supply chains: enabling valorization of post-use textile. International Journal of Physical Distribution & Logistics Management Vol. 51 No. 9, 2021, pp. 978-998. Emerald Publishing Limited 0960-0035 DOI 10.1108/IJPDLM-12-2020-0410

³⁸ Wahab, Tan & Roche, 2023. Comparison of Cross-Border Reverse Logistics of a Fast Fashion Brand in China. Operations and Supply Chain Management. Vol. 16, No 1, 2023, pp 25-35. ISSN 1979-3561

³⁹ Coscieme, Manshoven, Gillabel, Grossi & Mortensen, 2022. A framework of circular business models for fashion and textiles: the role of business-model, technical, and social innovation, Sustainability: Science, Practice and Policy, 18:1, 451-462, DOI: 10.1080/15487733.2022.2083792

⁴⁰ Gary et. al., 2022. Reducing the Environmental Impact of Clothing: An Emploration of the Potential of Alternative Business Models. Sustainability; Basel 14:10, (2022):6292. DOI:10.3390/su14106292

⁴¹Fisher, James & Maddox, 2011. Benefits of Reuse. Case Study: Clothing. WRAP Final Report, Project SAP134. https://wrap.org.uk/sites/default/files/2020-09/WRAP-Clothing%20reuse final.pdf

pleasure. Based on a thesis by Marholeva and Pusic (2023), Swedish consumers often might feel guilty after buying new products and attach some degree of sustainability to second-hand shopping. One of the study's key findings was that the respondents felt good about themselves after buying second-hand. Interestingly, the respondents would much rather give away their clothing to their surroundings than sell them. 43 Interestingly, Swedish people tend to follow the people they are surrounded with, and people strive to be like everyone else. This might, in the best case, lead to the increase of second-hand consumption and adaptation of more sustainable consumption patterns. 44

Based on the Global Data report (2022), technologies and online marketplaces drive second-hand market growth. This is supported by a thesis by Tuomainen (2022), which states that generation Z representatives appreciated the change that came with C2C (consumer-to-consumer) applications, making the second-hand consumption effortless.

Especially young people, aged between 11-25, use a bigger portion of their apparel budget on secondhand. Many of them also define themselves as 'thrifters', meaning that they identify themselves through their second-hand consumption. ⁴⁵ Based on a thesis by Tuomi (2022), Nordic consumption habits, which can often be motivated by political consumerism and egalitarianism, encourage consumers to actively take part in circular economy in all its shapes and forms, especially by buying second-hand and donating used clothes to friends and family or to second-hand stores. ⁴⁶ Generation Z representatives felt that sustainable consumption was a strong part of their values and the formation of well-being. They felt that they would consume second-hand products whenever they had the chance. Generation Z representatives were motivated by second-hand consumption, especially because it allowed them to get higher quality and more durable products at a lower price. ⁴⁷ The latest global developments, like inflation, have affected people's consumption, and many have stated that they are now more likely to get their clothes from second-hand shops. ⁴⁸ As for some people economic motivation is the greatest driver for buying second-hand, for others it is fashionability. These people can be, for example, on the hunt for unique items at a bargain price. These consumers are likely to construct at least some part of their identity on buying second-hand. 49

Normalizing second-hand consumption indicates that people are no longer afraid of using clothes or other products that have been used by other people. This could eventually lead to taking onto novel consumption models such as sharing and renting.

There are many possible positive social impacts that can be resulted through reuse business, such as creating new jobs, generating tax income, highlighting local practices, raising knowledge on circular

https://urn.kb.se/resolve?urn=urn%3Anbn%3Ase%3Ahb%3Adiva-29943

https://www.sttinfo.fi/data/attachments/00284/6ec016bb-b809-4db0-bf3a-1dc175c60876.pdf

⁴⁹ Ferraro, Sands, Brace-Govan. 2016. The role of fashionability in second-hand shopping motivations. Journal of Retailing and Consumer Services. 262-268. https://doi.org/10.1016/j.jretconser.2016.07.006













⁴³ Marholeva & Pusic, 2023. Is second hand the new fast fashion? The consumption habits of young swedes in the second hand fashion market. Bachelor Thesis: Textil högskolan i Borås.

⁴⁴ Sweet, Aflaki & Stadler, 2019. The Swedish market for pre-owned apparel and its role in moving the fashion industry towards more sustainable practices. Mistra Future Fashion report number: 2019:01. ISBN: 978-91-88907-42-4

⁴⁵ Global Data, 2022. Market Sizing and Growth Estimates. ThredUp Resale Report: 2022. https://www.thredup.com/resale/2022/

⁴⁶ Tuomi. 2022. Second-hand fashion, the Nordic consumer, and the circular economy. Bachelor of Science (Economics and Business Administration) AALTO UNI.

https://aaltodoc.aalto.fi/bitstream/handle/123456789/119715/bachelor Tuomi Tytti 2023.pdf?seguence=1&isAllo wed=v

⁴⁷ Tuomainen. 2022. Z-Sukupolven motivaatio kestävään second hand kulutukseen C2C-verkkoalustan kautta. Jvväskvlän vliopisto Kauppakorkeakoulu Pro Gradu. https://jyx.jyu.fi/handle/123456789/85440

⁴⁸ tise, 2022. Kyselytutkimus suomalaisen muodin kuluttamisesta – Poimintoja tuloksista.

economy and sustainability, developing wellbeing and communality. ⁵⁰ However, often the fact that reuse businesses can rely on lower cost labour such as unemployed people, which can in turn be the secret to success, is quite questionable in moral. ⁵¹

Local and cross-border cooperation may fuel the development of the market and increase reuse through a working ecosystem. As mentioned before, there is great intention and political interest in developing the textile industry towards sustainability through textile strategy and corporate responsibility requirements. It remains to be seen what the second-hand industry looks like in 5- or 10-years' time.

Best practices for increasing reuse of textiles and decreasing textile waste in the Central Baltic region

Noora Salmela, Maarit Jaakola & Eerika Heinonen

The goal of this section is to consider best practices for increasing reuse of textiles and decreasing textile waste in the Central Baltic region. These practices are linked to business models. Hence, first, the report offers an overview of the second-hand business models and then continues to the examples of best practices from the countries of Central Baltic region.

Overview of second-hand business models Business models

With the increasing consumer awareness of reuse of textiles, overall public and political focus on textile circularity and especially fashion industry's growing interest in re-commerce and rental models, it is expected that more innovative business models will enter the market in the future ¹.

The relevant second-hand business models for textile and fashion industry for decreasing textile waste and increasing reuse of textiles include **resale**, **rental**, **repair and remaking**². The business models include, for instance, product longevity and durability, leasing and sharing, garment collection, recycle and reuse of materials³.

According to Ellen MacArthur foundation (2021), the business models of resale, rental, repair and remaking can provide considerable greenhouse gas savings, and could be worth USD 700 billion by 2030, making up 23% of the global fashion market. Listed US-based second-hand store Thread Up has estimated (in 2021) that extending the life of clothing by an additional 2,2 years on average would decrease the environmental burden; carbon dioxide emissions, waste streams and huge use of water, mainly in cotton production, by as much as 72 %⁴.

⁵⁰ Scarpellini, 2021. Social Impacts of a Circular Business Model: An Approach from a Sustainability Accounting and Reporting Perspective. Corporate Social Responsibility and Environmental Management, 28:3, 646-656. doi.org/10.1002/csr.2226
⁵¹ Elander, Watson & Gylling, 2017. Evaluation of business models for increased reuse, collective use and prolonged life time of textiles. Mistra Future Fashion report number 2017:4. ISBN: 978-91-88695-03-1















Business models related to resale focus on extending the useful life of textiles beyond the first user and intensifying textile usage. Resale includes (online and offline) sale of second-hand items: peer-to-peer, third party marketplaces and own brand re-commerce and textile take-back. The important part related to resale is the collection of textiles to the market for reuse and recycling. The collection of textiles may be brand-selective or unselective. In collection and sorting, logistics is crucial.

One promising option for enabling a resale market is to selectively locate second-hand stores in central shopping areas, making them more visible and contributing to the creation of a mind shift among customers and retailers. Existing businesses should be encouraged to dedicate some of their space to second-hand sales. Textile reuse platforms could allow enhanced sharing of garments and/or returning end-of-life clothes for resale.

From the other business models, rental includes peer-to-peer rentals by private owners, large-scale rental and subscription models by multi-brand platforms or individual brands. In the repair models, a faulty or broken product or component is returned to a usable state. In the remaking business model, on the other hand, a product is created from existing products or components. This operation can include disassembling, re-dyeing, and repurposing.

The longevity and durability extend the lifetime of garments⁵. Improving the physical durability of garments is possible by using quality materials. Quality standards must be set; relying on sturdy assembly methods; choosing dyes, finishes, and processes to suit selected fabrics instead of more generic ones. Also, quality testing is important. Labels with clear instructions for maintenance and care should be used. Consumers should be educated to recognize and buy good quality garments. In addition, brands or third parties could offer repair and maintenance services and product guarantees.

However, resale and collection business models must be complemented by recycling and material reuse models for addressing all circular economy goals together (Picture 1). The improvement of used clothing and textile waste collection system and the development of recycling technologies is essential. The business models related to reuse and recycling of materials emphasize turning textile waste into raw materials to produce new textiles. They involve reusing parts and cuts and producing recycled fibers for re-spinning and use in other products.

Business culture

The breaking away from a linear business model requires a remarkable change in business culture. Clothing brands need new capabilities in the move towards circular business models in the transformation process to overcome transformation related challenges. The dependency on the past and prevailing product portfolio, a product-oriented business model, and the position in the supply chain affect the efficiency with which incumbent companies can become circular, setting boundaries to changes in product segments, target customers, price points, and brand image 6.

Business model innovation requires organizational change and transformation of the value proposition for customers, and throughout the product life cycle, challenges in renting models.

Ellen MacArthur foundation has developed critical steps to follow, in order to achieve circular economy in the textile and clothing industry. These require a substantial change in product designs and consumer behavior to encourage sustainable practices:

- 1. Phase out unsafe materials and microfiber discharges. Innovative design and production processes are required.
- 2. Change the ways cloths are designed, marketed and used.
- 3. Design product for recycling by using products that are recoverable.
- 4. Build efficient utilization of resources and shift to the use of renewable materials.













Fuentes & Hedegård 8 have found that devalued goods may be turned into valuable second-hand products via production that includes practices of selecting, modifying, pricing and marketing. The study has been made in a shopping mall based on reuse, ReTuna, located in Eskilstuna, Sweden. ReTuna is a retailer and producer of secondhand products. Valuation of products has many sections and alternatives. Selecting practices involve deciding which donated goods to sell and which to discard. Some second-hand products are sold without modifications, other stores in ReTuna modify donated goods in some way to add value. Pricing practices intersect and interact with selecting, modification, and marketing practices. Marketing is done, for instance, by organizing display arrangements, providing in-store service, and arranging various mall events to attract consumers' attention and add value to second-hand goods.

Some companies, like Filippa K, have noticed that the expansion of the second-hand clothing trade does not eat into sales of new products, but may create new markets for them. However, second-hand products are kept separate from the brands' actual stores. For fast-fashion manufacturers, a shift to a more service-based business seems less profitable, as more service would inevitably mean additional costs and higher product prices. Fast fashion is also perceived to have more quality problems, which may make it difficult to reuse or extend the life of the product in the first place 9.

Funding

Funding of the fashion industry is limited because investors are unaware and have little experience of fashion innovations. However, financing will flow if stakeholders create the conditions for manageable risk, attractive returns and impact that can be measured.

- Access to fashion, not necessarily ownership, new materials (eg. lab-grown leather),
- digital platforms for clothing takeback are emerging to incentivize consumers https://yellowoctopus.com/ UK but a strong government push will be required to rebalance what is currently a broken market system for recovery and recycling. Policy options including extended producer responsibility and outright regulation to, for example, ban the burning of unsold fashion items have begun to take shape in countries like France and the UK.
- ensuring that materials are produced in a way that avoids the use and therefore recirculation of toxic chemicals and by-products is essential

New circular business models are often start-ups which could benefit from financial and business support by funding bodies and national public business authorities in the form of grants, business counselling, coaching, etc. Additionally, national governments can develop policies designed to accelerate the market share of these circular business models. Inspiration can be drawn from the Telaketju program in Finland, Wärgon Innovation in Sweden, the Green Circular Transition program in Denmark and the Dutch Circular Textile Valley10.

Responsibility and policies

The responsibility of clothing manufacturers is becoming increasingly important in addressing global sustainability issues in the clothing industry. Therefore, models in which the manufacturer of products also participate in their reuse, for example through buy-back services or repair and maintenance services, are of particular interest. While some manufacturers are known to see this as undermining their core business, other companies may see sustainability as an increasingly important value and part of their business potential 11.

Policy enablers are needed in boosting the circular textile business models. Policymakers can play a vital role in stimulating circular business models by shifting taxes from labour to the use of finite virgin resources. In addition, policy enablers are needed. Such tax reforms could include reducing value added taxes (VAT) on resale, rental, repair, and remaking activities that keep products in use. Other fiscal incentives can increase the use of secondary materials, encourage regenerative production of materials where they are needed, or provide transition funding for start-ups.















All of this can be enabled by increasing awareness about the quality and durability of second-hand clothes, as well as by implementing policies on reuse targets and extended producer responsibility.

In regard to donations, a clothing tax-donation receipt can be created as documentation of charitable clothing donations and used by the donor to claim tax deductions similar to the provision available in the United States. 12

As an example, in Latvia, opportunities are being sought for the reuse and recycling of textile products 13. The first level is the extended responsibility of producer's tax policy. A higher natural resource tax should be paid for the import and sale of used clothing from foreign countries than for the sale of unused clothing. The second level is the responsibility of traders. The third big link in the chain is the population with its clothing buying and textile sorting habits. It seems that the most effective, convenient and beneficial solution for all parties would be the application of the principles of the producer responsibility system to textiles, which would be implemented through the natural resource tax.

Overview of second-hand marketplaces

Marketplaces for second-hand stores may be categorized in 14:

Walk-in stores

- Traditional second-hand stores. In the concept, a flea market company rents the premises, offers sales space to customers and the customer is responsible for display and pricing of the items.
- More personalized entrepreneurs. In the concept, the trader himself buys the clothes he wants and sells them at the price he wants. These shops are often trendy and may sell some certain brand or style,
- Curated large second-hand stores that are run by charitable organizations. The items are donated to the stores. In Finland, for instance UFF and Kontti.

Online stores

- Large web stores (Facebook Marketplace, tori.fi, ebay)
- Web stores specialised in certain products
 - Facebook groups
 - Other platforms

Examples of online stores:

Large web store, eBay: is the world's largest online marketplace, where you can buy both new and second-hand products from individuals and businesses around the world. eBay has 183 million active buyers worldwide and nearly one billion products when all categories are added together. eBay has become a popular marketplace for vintage and retro products.

Facebook group HYPEND: is a Finnish online community founded in 2016 with the aim to connect people interested in current streetwear culture, new (and old) trends, styles, collections, designers and to create a discussion based on the different subcategories of this culture, thus providing the best and most understanding environment for these creators. The Hypend group was created on Facebook among friends. Each of the founders invited twenty of their friends to join the group 15

Hypend is a sales platform, and a known, or appropriate, target audience can be found there. Hypend is a free platform for its users. Products are perceived as an investment. The buyer will probably use his investment once or twice and then sell it on. If it goes well, the product can be resold for more than the purchase price. Many users extend the activity to "loyalty trading", i.e. systematic buying and selling. From 2021 onwards, Hypend will have expanded from being a buying and selling channel on the web to a "hybrid PR and advertising agency". A platform, Grailed: specializes in fashion, particularly unique and exclusive outfits that can be difficult to find elsewhere. It focuses on street fashion and designer clothing. It is well known and therefore a good platform for















buying and selling. Platform owners look after both traders and customers and protect their interests in the event of a dispute. On behalf of the company, the buyer will be assisted with payments. 16

Best practices for increasing reuse of textiles and decreasing textile waste from the Central Baltic region

Based on the literature and company examples, the best practices and interesting business model examples for increasing reuse of textiles and decreasing textile waste from Central Baltic region may be categorized as:

- **Resale.** The principle is to extend the useful life of textiles and intensify textile usage market. Second-hand stores may be selectively located in central shopping areas, making them more visible and contributing to the creation of a mind shift among customers and retailers.
- Closed loop. These practices rely on a closed loop where materials are kept in circulation and utilized as many times as possible. Products do not end up as waste at the end of their life cycle, but materials can be used as raw material for new products. Also, new renewable materials are developed to replace fossil raw materials.
- Remaking. The principle of the model is that all materials are in use. Virgin raw materials may be substituted by the raw materials generated in production. Materials may be surpluses from production or recycling of discarded textiles.
 - Design is an integral part of remaking. By design, it is possible to increase the value of (possible waste) materials by utilizing it at higher rate products. "Waste" is used in a creative and innovative way.
- Product as a service. A solution that takes into account the whole life cycle instead of a single product. The service may be repair or maintenance of textiles. Also, rental business models are included.

Examples from Finland

In recent years, Finland has continued to develop new business models that increase the reuse of clothing. For example, companies have introduced buy-back systems and started to offer maintenance services and rent and lend products. Many of these companies are still start-ups and relatively small, but they have found profitable businesses in the reuse sector.

Examples of this new type of business are clothing rental shops, which have been operating in Finland since 2011 17. Clothing rental shops often operate on a membership basis. Customers can borrow a certain number of items, which must be returned after a certain period of time. If they wish, they can also buy a product or rent a complete outfit. In other words, the shops are partly retailers and partly rental. The clothing rental business is essentially a product-as-aservice business, as the customer pays for the membership on a time basis and the price of the membership is not affected by the products borrowed.

Companies related to resale:

- **Emmy Clothing Company**: web store for used branded clothings.
- Reuseful Oy sells quality second-hand furniture and clothing in a shopping mall Skanssi, Turku.
- Second Hand Market is a circular economy hub in a shopping mall Redi, in Helsinki, offering a range of circular economy products and services

Companies related to closed loop:

Touchpoint: turns used working clothes and other material into furniture. From 2021 onwards, the company is committed to recycle all the textiles they supply to their customers responsibly and to reporting on recycling volumes on an annual basis.















- Infinited Fiber Company: has developed a new fiber to compensate wool. The fiber is made from textile waste in a chemical process developed in cooperation with a Finnish research institution VTT.
- Spinnova: produces thread out of wood fiber without a chemical process. A Woodspin factory (opened in 2023) produces Spinnova fibre from wood pulp that is used, for example, in clothing.
- **Finarte**: produce design carpets from surplus from textile industry.
- Finlayson: the company uses different worn-out materials and, for instance, produces towels from used jeans. The company has collected jeans and other used materials in their shops.
- Rester Ltd and LSJH: have invested in refinement plants for recycling and reusing end-of-life textiles in Finland. Rester Ltd. focuses on the collection and treatment of B2B and public sector textile waste streams, whereas LSJH is developing a nationwide operating model for post-consumer textile waste streams together with 28 other municipal waste companies. Their new refinement plants started operating in 2021 18.

Companies related to remaking:

- Muotikuu: uses surplus materials to make new products.
- **Costo**: manufacture of hats and accessories from the surplus of furniture industry fabrics.
- Remake: manufactures design products from used textiles. The company also offers education for upcycling.
- **Tauko**: manufactures design products from textile waste (from hospitals, hotels and restaurants) Companies related to product as a service:
 - Menddie: provides services such as clothing and costume repair as well as modification and maintenance of clothes.
 - Vaatepuu and Vaaterekki: clothing rental shops. The companies rent design clothes and accessories for members.

Examples from Sweden

Companies related to resale:

- Bloppis: Bloppis is a number of influencers coming together, either by own initiative or by a blog network, to arrange their own branded flea market and leverage their online marketing channel. Even though the concept of C2C selling is similar to an ordinary flea market, this is a way to reach a new audience and a different segment than the traditional flea market. However, it is important to note that these occasions are often combined with a charity perspective and donations as a part of the objective.
- Filippa K: one of Sweden's leading clothing manufacturers, which is recognized for its quality, actively communicates its sustainability values to consumers and has launched several sustainability initiatives. In 2008, Filippa K started a partnership with the Swedish second-hand clothing store Judits Secondhand and established its own second-hand clothing flagship store. In 2015, Filippa K expanded its reuse business to other countries (e.g. Finland) and made it possible to return products to any of the brand's stores, regardless of the country.
- Arkivet: the business model is the embodiment of this newer kind of second-hand store, which is aimed at conveying the image of a fashion boutique.
- **Tradera:** an online marketplace for second-hand goods with over 2 million users.

Companies related to remaking (and resale):

- Stockholms Stadsmission: the not-for-profit organization has for long been selling secondhand in physical shops and has for 15 years been selling some pre-owned items that are refurbished, remanufactured or repurposed. The year of 2016 they started a specific brand and concept store for pre-owned items that are redesigned in any way called 'Remake'.
- Remake: the company includes strategies to process the items for making them more fashionable.















Companies related to product as a service:

- Nudie: repairing jeans, collect back services. The company is also reselling second-hand of their own brand.
- Sabina & friends
 - Clothes rental company, offering luxury and premium casual, business and occasion wear of the latest season.

Examples from Estonia

In Estonia, charity organizations are expanding their resell activities and new for-profit reuse business models are entering the market. However, in Estonia, only 30% of the donations can be directed to the new round 19. Unfortunately, a lot of unsaleable goods are brought to the centers, which end up as mixed household waste among. One of the biggest concerns for recycling centers is textiles, it is the most dominant among the donated goods. Broken, dirty and unwashed clothes that do not match the conditions of the center and are of low quality, are included in mixed household waste. At the moment, there is no solution for this in the recycling center, and there is none for such in Estonia capacity for reprocessing for volumes of textile products 20.

A new trend is to sell your own clothes. Several options have been devised for this. One of them is second-hand clothing stores based on the booth principle, such as Sahtel, Sarapuu flea market and in Riisaikel. It is also possible to sell your clothes on internet platforms such as Yaga, Instagram, E-kirbukas etc. There are also various lice (e.g. Müürilille täika Tartus) and fleas, where you can sell your old clothes.

Apart from the reuse center, other different recycling centers also accept clothes charity shops, such as recycling centres, the Sõbralt Sõbra chain of stores and Aarete box sorting center in Tallinn, also brands like H&M.

Companies related to resale:

- Yaga is a fast-growing buying and selling platform where everyone can sell their clothes, jewelry, cosmetics, household goods and other pre-loved items. They work a lot with influencers, who open their own stores on the website and therefore generate traffic for the store. Yaga raised 2.2 million euros from investors to take a leadership role in fast-growing markets in Africa and Asia. Yaga has grown three times in the last year and a half and opened a platform in Kenya and India in addition to South Africa.
- Riisaikel second-hand store with box system. They have physical showrooms and e-store. They also have a store located in the Stockmann shopping center, where they sell more premium clothing brands's used clothes. They also work with different influencers, who have their own boxes at the store. Riisaikel also has separate section for Estonian design.
- Basaar second hand clothing store that also works with people renting out place at their store, where they bring their own clothes. In addition to the store, they have an application.
- **Uuskasutuskeskus** Non-profit organization, that has several store locations all over Estonia. Their operating model is based on collecting donations from Estonian people and re-routing items in good condition in stores. In addition, they support many people in need and are cooperation partners for many theaters, filmmakers, craftsmen, student companies and other organizations.
- Tallinn Design House Estonian design store, where over 100 design brands are represented. And as a new direction, there is a pre-loved section, where people can bring their old Estonian design items and which are then sold there.

Companies related to remaking:

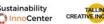
Reverse Resources, founded by Ann Runnel, was awarded the 2020 Estonian Startup Awards













first place in the categories "Stereotype Breaker" and "World Changer". Reverse Resources creates platform for the mapping and recycling of waste generated in clothing factories. Although the company currently cooperates with large textile and clothing manufacturing companies in Bangladesh, in India, Sri Lanka and Hong Kong and has launched a pilot program with Levi's and H&M, could companies operating in Estonia can also benefit from the platform. For example, manufacturing companies could map emerging textile waste and thereby be visible to potential customers for waste handlers.

Examples from Latvia

Companies related to remaking:

- Swimbe: custom made swimsuits for women and children, which are produced out of old fishing nets, carpets, PET bottles and other plastic waste.
- Zile-Zile: the label's main resource materials are denim trousers, men's shirts and fantasy to create a sustainable and modern wardrobe. Every piece of clothing that ZĪLE upcycles is completely unique. ZĪLE uses second-hand clothing that is either bought in vintage shops or donated by our collaboration partner, charity shop OTRA ELPA.

Remaking and social aspect:

OWA is the first brand in Latvia that offers clothes with water colour and graphic prints, which are transferred to the fabric with the help of sublimation printing. Aim to promote the employment and integration of the socially vulnerable population, especially the disabled, people of pre-retirement age and young parents.

Examples from other countries

Companies related to resale:

- Online peer-to-peer marketplace, Lithuanian based Vinted, allows users to swap products as well as purchase, incentivising users to engage with the platform even when not spending money, while increasing the use of clothes. By elevating the circular business model experience, making it desirable through a better user experience than buying new (e.g. through convenient delivery, personalised service), it can both serve customers better and encourage them to engage with circular business models.
- US online consignment thrift store thredUP offers users services to make resale a convenient option. Sellers get a 'clean-out' kit and their items are sorted, listed, and delivered for them. Such a user experience has increased the number of repeat users on the platform with thredUp reporting that 80% of orders come from repeat buyers.
- Vestiaire Collective (France): a resale platform that encourages local peer-to-peer sales, has aimed to create a user experience on par with prominent e-commerce brands while controlling and authenticating all items once sold.
- Resale platform Depop (UK) highlights carefully curated product assortments by their users and points users to specific profiles based on their style to encourage more peer-to-peer transactions.

Companies related to product as a service:

- GANNI: is designing exclusive items for its rental platform, 'GANNI Repeat'. If customers want access to these designs, they are incentivised to try rental, instead of buying.
- Ralph Lauren has introduced a rental subscription service, 'Lauren Look'. The subscription service starts at USD 125 a month and includes delivery, cleaning and suggestions from expert stylists.
- Digital platforms for clothing take-back are emerging to incentivize consumers, an example from UK Yellow Octopus















Companies related to resale and product as a service:

FARFETCH's online platform provides convenient ways for users to filter and find 'vintage' pieces, donate to resell through a third-party platform (FARFETCH Donate x Thrift+), prolong the use of their shoes & handbags ('Farfetch Fix') and also resell them ('Farfetch Second Life').

Consumer nudging

Nudging seeks to improve people's decisions by changing the way options are presented to them. The main idea is that it is feasible to make nudging suitably transparent and democratically controlled. It is any feature of the social environment that affects people's choices without imposing coercion or any kind of material incentive. Mainly, people choose the easiest and most normal option. People who do not want to shake the status quo are often too optimistic and overconfident. People often stick with the default. In future work on nudging, we should pay particular attention to the kinds of institutions through which we develop and implement nudging policies. A challenge for future large-scale nudging policies will be to ensure that the relevant institutions and procedures will remain suitably transparent and democratically controlled. If they are, they might not only increase overall welfare but also facilitate democratic control over the social contexts within which we make choices. 21 In Nudge, Thaler and Sunstein identify five further broad ways of changing civic behavior to push it in a positive direction:

- 1) citizens often have a default option; a good nudge is one that installs an intervention that leads people towards a positive choice by, for example, enrolling them on a pension scheme automatically unless they actively opt out.
- 2) Policy makers should expect error and design systems so that citizens learn immediately and effectively about the mistakes they will inevitably make.
- 3) It is important to give feedback in a timely and effective way so that people understand the implications of their actions. For example, houses could be fitted with a light and sound indicator when a lot of energy is being used in order to get householders to consider taking measures to save energy.
- 4) Policy makers could support citizens by paying more attention to the way they construct mind maps when making decisions and encourage the adoption of mind maps that facilitate better decisions. Is this my choice or is it a choice that should be framed by my responsibilities to others?
- 5) Given the problems that people have in making complex decisions, policy makers could provide opportunities for collective filtering so that people can learn from others about what works or what choices might suit them as a person, given the tendency we all have to follow those we regard as like-minded. 22

The strengths of the nudging strategy rest on its consistency with what we know about human action. The relative inertia and lack of use of cognitive capacity means the nudge actions go with the grain of this aspect of human behavior. Nudge gets individuals to cooperate in ways with which they are comfortable. It is low cost and sustainable. The weaknesses of nudging have to do with its inability to address the fundamental problems and, as such, it arguably generates fairly modest outcomes as a result. The very ease of nudging may lead to a false sense of security about these changes. (Ibid.)

Two Scandinavian countries (Sweden and Denmark) where trust in public institutions is very high but the support for nudging is relatively low; and on an individual level, a new predictor that formally runs counter to trust in public institutions. Green nudges were most controversial and politicized in terms of polarization across sociodemographics and political party preferences. There are several academic debates on governmental nudging. One concerns its alignment with citizens' preferences and its effectiveness compared with conventional policy tools, another its transparency and a third its public support. It has found that left-wing views implied greater support for nudging than right-wing views did but discovered 'no systematic correlation along approval and party affiliations. Denmark paradoxically stands out as a country whose citizens are trustful of public institutions yet relatively unsupportive of nudging. 23















A nudge, in the sense of using choice architecture to push people to choose desired results, works well; and a nudge, in the sense of pushing people to choose desired results so that people will be better off, remains questionable. In financial markets, regulators and financial intermediaries currently use nudge theory to adjust how investment choices are presented to investors; and provide information in a selective way. Nudge theory inspires people to think about the use of subtle psychological 'hints' to change people's behaviors, at low cost. This ground-breaking phenomenon can be used to both inform and drive future methodologies and strategies. In the coming years, we may see new and innovative ways to apply nudge theory in different domains, either for better or worse. 24

Visual nudge

A study by Roozen, Raedts and Meijburg (2021) examined if a verbal or visual nudge on a retailer's website can significantly influence consumers' (sustainable) fashion choice. The findings showed a significant positive influence of the verbal nudge and, to a lesser extent, of the visual nudge on choosing the sustainable version of the apparel. The nudges also positively influenced the willingness to pay for sustainable apparel. This suggests that nudging is a promising tool to direct consumers to a more sustainable fashion choice. Furthermore, the results showed that respondents with a relatively high score on ecological conscious consumer behavior and a relatively low score on fashion involvement are significantly more likely to choose sustainable apparel. 25

The analysis of a set of expert and consumer interviews revealed that nudging in the fashion industry is currently untransparent and the consumers do not trust the provided information due to information overflow and the spread of false information. Idea how to use RFID tags; the implementation of DPPs (Digital Product Passport) would encourage consumers to participate in circular fashion consumption models by exchanging, recycling, or returning their garments. For instance, a potential journey of the DPP could be the following: 1) A consumer claims the ownership of a DPP through a first-hand purchase of a garment and the RFID tag is updated about the first lifecycle of the garment; 2) After a few years the consumer returns the garment at a clothing collection point. The collection machine can recognize the RFID tag and the product passport is transferred to the second-hand store. The secondhand store prints a clothing tag with a QR code for easy access to the product passport; 3) Another consumer finds the garment at a thrift store and views the product information through a QR code on the tag before purchasing the product. 26

Based on the findings of some interviews, the study proposes a Retail Change-Makers Workshop informed by the findings and targeted at retail actors such as shopping center owners and retailers. The purpose of the proposed workshop is to enable a mindset change among the choice architects of retail and help them to nudge a change towards strong sustainable consumption through shopping centers and other retail environments. 27

Informational nudge

Focusing on the nudges, their effectiveness is suggested, and it is possible to distinguish between informational and visual nudges, whose impact differ. In fact, informational nudges, meaning long, detailed, and transparent explanations on the products' sustainable aspects, is more appealing to consumers than a green eco-responsible label. In fact, there is evidence that wealthier respondents are not the ones spending more money on clothing purchases on average. This could mean that those individuals are either more interested in more affordable articles, despite their wealth, or that they are buying more consciously and less often. As discussed in the literature review (Leal, 2022), it is assumed that, for materialistic and emotional reasons, middle classes tend to be more willing to spend on high end brands, urging for a sense of belonging to a wealthier class. When comparing both types of nudges used in this research, informational nudges (system 2) seem to be much more effective than visual nudges (system 1). Comments about appreciating the level of transparency and enjoying being able to make decisions with all information available were made by participants. 28

Nudging in second-hand

There is little research on the topic of nudging in second-hand. However, there can be found some examples of nudging in the retail industry and reuse.

Gustafsson & Twengström (2022) studied the effect of nudge through intervention in reuse in the office premises in their degree project. Based on their study, there was a knowledge gap, and communication between tenants and landlords needed to be improved. The nudge of availability was considered to be the most applicable one in the context of reuse, providing knowledge about the issue in the form of positive insights of completed projects and













potential savings. By supporting the presented information with quotes and data the respondent gets a positive image of reuse and how successful it has shown to be in practice. 29

Visual presentations such as coordinated outfits on display, graphic walls or backdrops, and haptic product experiences have been found beneficial in facilitating the imagery of consumption. By physically touching and examining the products, consumers' experience can be made more enjoyable and can result in more precise purchase decisions. 30 Another physical way of nudging was studied by de Groot et. al. (2022). They found out that the smell of fresh laundry increased the sale of second-hand products compared to no-odor or citrus odor ones. This was most applicable to shoppers without time constraint and a specific goal and intention in shopping. 31 Also, Doucé & Janssens (2013) stated in their study that a pleasant fragrance positively affected consumers' reactions and intentions to revisit the store. 32

Some examples of how different second-hand clothing stores should meet the needs of their targeted groups were presented in Zaman et. al. (2019) study. Three different second-hand clothing stores were categorized as were their target groups. In this study, frugality was the biggest predictor of second-hand shopping, hence all types of secondhand clothing stores should carry a variety of clothing types to meet the needs of diverse tastes of shoppers that value prices. All second-hand stores should carry a variety of classic styles, as style-conscious consumers desire longlasting and timeless styles. Consignment stores interest especially nostalgia-driven consumers, mostly women, hence they should provide vintage clothing targeting baby-boomers and seniors and play retro music and use vintage themes in their displays to further attract their target group. Online second-hand clothing stores attract ecoconscious people and therefore should offer less wasteful packaging, discounts for bulk buying. For nostalgic people, they could create a storytelling section on their authenticity or craftsmanship, and for fashion-conscious people offer seasonable fashion items and use social media influences to promote their brand. Thrift stores should promote products that target the minimalistic lifestyles of their consumers, who are prone to dematerialism. In addition, they should offer unique items targeting the bargain-hunters. They could also promote themselves as communal by emphasizing the importance of providing affordable clothing for all. 33

In addition to the above-stated research, there are some examples of political nudging. As an example, France is offering citizens a "repair bonus", meaning that they will get 6-25 euros of cash for repairing their apparel instead of throwing them out. This bonus will be paid out of a sustainability fund the government has founded. 34 In addition, there has been a pilot in city of Lahti in Finland, where they created a textile deposit system to attract people to bring their discarded clothes for recycling. They received a gift card after this. 35













FIELD RESEARCH DATA AND ANALYSIS Companies' and consumer awareness about circular business models, including secondhand ones, in the CBR

Companies' awareness

Veera Joro, Olga Gurova

Overview

As part of the discover and define phase of the service design process for the Baltic2Hand project, the project partners conducted a series of organisation interviews in Estonia, Finland, Latvia and Sweden. The general goal was to understand companies' awareness about second-hand market at CBR. The purpose of the interviews was to explore the transition of fashion and textile organizations, both businesses and non-profits, towards circular operations. For the companies born circular, the focus was on challenges and opportunities with current business models. Overall, the interviews aimed to identify the challenges and opportunities involved in each respective country, and the experiences of organizations in transitioning towards circular business models and operations and how they can be best supported by external actors, such as legislators, experts, academics and consumers, in this process.

Each project partner was responsible for both contacting the relevant organizations in their respective country and for also conducting the interviews. The transcribed interviews were thereafter unpacked and thematically analyzed by the Laurea University of Applied Sciences project team.

A total of 20 organizations were interviewed, 12 from Finland, 4 from Estonia, 2 from Latvia and 2 from Sweden. The companies range from large-scale transnational businesses to local small-scale firms. The Interview guide used can be found in Appendix 1. In what follows, we offer a descriptive analysis of the main topics of the organization interviews.















Opportunities in adopting circular business models by companies in the CBR

Increasing Consumer Demand

From the organisation interviews, the described opportunities for implementing circular business models and operations were identified. The most significant of these are described below. There are also plenty of barriers and limitations which are discussed afterwards.

Around half of the organisation which were interviewed claimed that they noted that consumer demand for circular products, especially second-hand clothing, was on the increase. Those organisations who are already working with second-hand clothing and textiles, such as charities and non-profits, claimed that they were being sought out by consumers. In addition, those companies not yet working with used clothing mentioned that those organisations selling second-hand clothing emerged as their competition.

This is further supported by increasing number of consumers getting actively involved in the selling and buying of second-hand clothing on peer-to-peer platforms indicating that through various schemes, organisations could also try to benefit from operations with second-hand clothing. Peer-to-peer selling and buying enabled further development of platforms assisting in such operations. In addition, some consumer segments, especially those whose purchase decisions are motivated by sustainability, are independently seeking out more sustainable solutions and options. Through effective marketing and communication, consumer engagement may therefore be harnessed. Consumers are exhibiting signs that they are ready for more circular clothing options to be offered and the clothing and textile industry should respond accordingly and keep pushing consumers in this direction.

With increased consumer awareness and access to new knowledge, sustainability is becoming a consumer expectation as opposed to an 'added benefit.' There is still a question whether the awareness and demand lead to purchases. However, the intention is there. Clothing companies are therefore under increased pressure to not only conform or do the bare minimum, but to be transparent and to showcase their level of sustainability and responsibility to consumers. Many of the interviewed organisations explained how it is important to stay ahead of the sustainability obligations, as opposed to merely meeting the bare minimum requirements.

However, there is also considerable room for innovation and development. Whilst in Estonia, Finland, Latvia and Sweden, second-hand and other circular textile options are present and increasing, much can be done to continue bettering these operations and services. As the fashion and textile industry is gradually transitioning towards a future where circularity is becoming the norm, opportunities to take this even further and make these more attractive to consumers should be identified. Making and using second-hand and circular clothing and textile products and services should be as easy, convenient and positive as possible.

Effective Consumer Incentives

Many of the organizations interviewed proposed that effective consumer incentives need to be identified which would allow for better consumer engagement with circular services and second-hand clothing















products. This was a common theme amongst the organizations interviewed, where different incentives which would encourage consumers to donate or bring back unwanted clothing, purchase second-hand clothing instead of new clothing, reduce their overall clothing consumption and also take good care of their existing clothes were highlighted. This also included active donating or selling of unwanted clothing and in general consumers putting their unwanted clothing back into the circulation as opposed to leaving such items in their wardrobes or throwing them away.

Whilst consumer demand and engagement with second-hand clothing circulation is on an upward trend, more opportunities for how to maintain this trend and also increase its momentum is important. Carrots as opposed to sticks are incentives which were preferred by the interviewed organizations, such as providing them with discount coupons upon returning items, ensuring such coupons have an extensive expiry date, thus not encouraging impulse buying, providing consumers with tool kits to help them take care of their clothing items or offering repair services.

Whilst legislation, which often uses sticks to impact consumer behavior, plays its own role, the interview responses highlighted the need to create positive associations for the consumers when engaging in circular operations. Evidently, certain barriers continue to hinder consumer engagement, such as higher prices for some circular products or repair services, inconvenience in having to return items to store, or not wanting to purchase used clothing items. However, such barriers can be lowered if the overall experience of the product or service is positive, which is why much emphasis needs to be placed on identifying the most appropriate and effective incentives for different products and services.

Furthermore, altering consumer behavior, habits, choices and opinions is also vital and can also be impacted upon through certain consumer incentives or consumer nudges. Creating gift cards and discount coupons, providing higher percent discount when use second-hand items, rewarding consumers instantaneously after receiving unwanted items as opposed to waiting for these to be sold are just some of the examples which could be used. Providing consumers with discounted repair opportunities is another example. Take-back schemes or selling platforms for unwanted clothing could also act as an important point of contact, where nudges and incentives could be used to encourage these consumers to also purchase second-hand clothing and engage with circular operations in other ways.

Support for Circularity Across Organization

From the responses of the interviewed organizations, some of the main enablers for these organisations in implementing or transitioning towards circular operations or second-hand, was support from the C-level management in the organisations. This was especially the case for larger organisations, as much of the decision making occurs at the higher level. However, once management become motivated to move towards this direction, they will actively motivate and push for resources to be implemented where needed. Having committed personnel at the top levels of the organisation enable progress and development at all stages of the supply chain and operations. It also makes it easier for those who are experiences and experts in circular economy to pass new procedures or implement new trials or pilots.

The commitment and support of the top management of organizations allow for finances and recourses to be invested in finding new partners, developing innovation and technology, choosing more sustainable materials, allowing for experts to be hired, training to be prioritised and legislation to be closely followed, makes transitions and implementations of circular economy steady and effective. There are better opportunities for the right decisions to be made, more reactions to changing environments to be rapid, for long-term strategies to be drawn out and visioned. This acceptance and eagerness to embrace change and a changing industry supports innovation and the trialling of new ideas.

Allowing for the personnel with aligned values to be in charge across departments also plays a significant role, as it means that the entire organisations is working towards the same goals and are all aware of the new models and directions which the organisations need to take. Not having all decision makers working













towards the same ambitions will create stalls in operations and or incorrect or ineffective decisions being made.

Innovative Thinking & Active Piloting

Active piloting and trialling were also identified as a main enabler in being able to create effective circular operations and being able to continue improving and expanding upon these. There are no ready-made path and circular operations are to a large extent trailblazing. Piloting provides room for innovation to occur, but it also allows organisations to see which operations are most effective and suitable for their own goals and existing business models. It may also help organisations identify a niche worthy joining. It may allow them to differentiate themselves from other clothing organisations, especially as other organisations are now steering in this direction.

Whilst the successful implementation of circular business models and operations is complex, entering the circular economy loops provide organisations with a range of different opportunities and directions. Many organisations responded that as there are multiple different ways that circular operations could be implemented, and further expanded on, it does allow organisations the opportunity to test different solutions. Actively piloting different options also allows the organisation itself and its personnel to gain experience in this area. As not all options, services or products will be suitable nor accepted by existing consumer bases, piloting and trialling remain vital and a huge enabler for organisations to effectively implement circular operations.

Circular Economy as Smart Business

Circular economy operations and second-hand services and products were considered by the interviewees as being a smart business choice. The increasing consumer demand for second-hand items and for circular practices in general, make transitions towards circularity more appealing for organisations. The direction of the clothing and textile industry both in terms of legislation and consumer preferences is already steering towards this direction. It is therefore important for organisations to also follow suit as it makes sense to do so. For many, they did not want to be the first, but it is also important not to be the last.

For many, local and cross-border opportunities also looked promising as they open new consumer markets and provide opportunities for new partners. Whilst the development, maturity and acceptance of circular services or products is different across all four countries locations, opportunities for expansion, new ideas and local markets provide great incentive to explore cross-border cooperation.

Furthermore, as EU organisations already have certain sustainable development obligations, promises, and pledges which they must meet, circular operations provide a means and end to achieve these and vice versa. Sustainability goals, emissions and carbon footprint targets can all be strategically strived for by transitioning towards a circular business model. It is a holistic business strategy, which safeguards the organization for the future but also proves to be a sound business strategy in the current time.

Circular Economy as a Positive Brand Image

Another important enabler was the positive brand image which was associated with implementing circular business models and operations. For some of the organisations interviewed, circularity was at the very core of the organisation's identity. They particularly catered towards this identity and the business model was centred around maintaining a circular and sustainable brand image. For these organisations, it was vital that identity was not only maintained but also developed further. With the textile industry being pressured towards meeting more circular standards, it is vital for these organisations that they maintain this unique identity which is primarily associated with a sense of pride and duty towards sustainability.















For other organisations, the gradual build of a sustainable brand image is the main target. There is pride which can be associated with being known as a sustainable brand and getting involved in different sustainability projects and explicitly attempting to becoming more responsible is vital for this brand image. Tracking and effectively communicating progress, remaining transparent and continuously expanding and developing this further are vital. Once this brand image has been communicated, consumer hold a certain amount of responsibility and expectations upon the brand. Transitioning towards a circular model is thus no longer communicated as an obligation, but a core principle or value by which the organisation wants to comply by. This promise and responsibility to consumers and the brand image provides a strong motivation to not only maintain standards but also to continually be seen as a forerunner.

The Right Partners as Enablers

Circular economy business models are based on partnerships. The importance of having the right partners regarding both efficiency and commitment was also mentioned as an enabler. Having the correct partners allows for organisations to build supply chain as well as collaborate and implement changes throughout the supply chain. Whilst not solely being applicable to implementing circular operations, a form of close partnership as opposed to merely an exchange between partners was acknowledged as being a vital component. Circularity requires reconsideration across logistics and operations, meaning partners need to collaborate closely and commitment needs to be matched.

This was especially the case amongst larger organisations which have more extensive supply chains. Implementing effective circularity becomes more challenging the more steps and partners there within organisations supply chain. Transparency becomes an issue; the supply chain requires audit. Having the correct partners and the correct commitment acts as a huge enabler for implementing successful circularity operations. This also extends past the implementation phase, and effective partners allow for circular operations to be both maintained and continuously developed.

Collaborations with partners who potentially already possess some form of expertise or have different areas of experience are especially important at the early stages of implementing circular operations. Smaller innovative companies offering circular services can provide larger companies opportunities to "close the loop". Larger companies can provide the smaller ones an opportunity to develop and expand. Regardless of the size of the organisation, many of those interviewed explained that being able to collaborate with a more experienced in circular business partner allowed for transitions towards circularity to occur more seamlessly. It also allows for less experienced organisations to become exposed to alternative ventures, services and products which they may have not previously considered. It allows to experiment and pilot.

It was also identified that whilst finding new or more appropriate partners, may be resource and monetary intensive, especially if old partnerships need to be replaced, this investment allows for less resources to be spent in the later stages. This was seen as a vital step and one which needed to be invested in to ensure that new operations ran smoothly, and potential future problems reduced.

Impact of Smaller Operations and Gradual Steps

Smaller steps and gradual development and expansion of circular operations was also identified as a best practice. This was considered best achieved through the introduction of limited lines, new services or products. Essentially ensuring that these limited operations were successfully implemented and developed before attempting to expand further.

Piloting new services, products and operations through gradual steps was viewed as a successful strategy, as this allowed for improvements to be made by learning through mistakes and downfalls. As trials and















alterations can be financially demanding and resource intensive, it was seen as important to start with smaller and gradual changes, learning form these before expanding.

This was especially highlighted given the fact that for many, there exists no specific roadmap for achieving successful circularity, with each organisation needing to approach this goal differently. Focusing on the success of a limited product service or operation, being flexible and able to experiment and develop this further, provides the organisation with unique blueprints for future implementation. However, it was also highlighted that smaller operations may be more resource intensive to operate as they are done on a smaller scale, but they were nevertheless seen an important for the testing and trial phase.

Changes in Legislation as Opportunity

The upcoming changes in EU legislation currently discussed (Digital Product Passport, Ecodesign Directive, Extended Producer Responsibility, etc.), were also considered to be a both a motivating factor in transitioning towards circularity and an opportunity to potentially thrive in it. Whilst the official legislative polices are yet to be approved, these legislative actions are seen as enablers that will help to control textile waste flows and place producer responsibility on proper end-of-life textile treatment.

Whilst such changes will create logistical and operative demands on clothing and textile organisations, they also provide, according to many interviewees, an equal playing field, where risk involved in transitioning towards circularity is reduced. As all EU organisations operating within the clothing and textile industry are obliged to move towards more circular operations and services, the feeling of uncertainty is somewhat unanimously shared. It is now no longer a new strategy, but a clear direction towards which all organisations should move. The legislation therefore brings a certain motivation to move towards the trend of circularity and also remain to a certain extent ahead of it.

The legislative obligations will also impact upon the price, availability and demand of materials, sparking innovation for creating alternative services and products. Other services or products may look more favourable for both organisations and consumers shifting new market practices and operations. With circularity obligations becoming more mandatory, it also requires innovative thinking for organisations to be able to market themselves differently and set them apart from other organisations in the industry.

Legislation was therefore viewed by many as a form of support, which helps to normalise circular services and practices amongst both organisations and consumers. Such actions motivate and provide a sense of security for transitioning towards circularity and implementing new services, operations and products. Such changes in direction also provide strong incentive for investing in such changes, to remain ahead of future obligations. However, it was also mentioned that functional solutions are needed in the fact of changing legislation, ensuring that organisations are not merely forsaken in the face of new measures.

Sense of Shared Solidarity

Many of those interviewed explained that many if the challenges associated with the changing fashion and textile industry, are challenges which are faced by all. There was a sense of solidarity expressed by the organisations interviewed, where many felt it was beneficial to cooperate with others and even share best practices and lessons learnt. Effective circular business models rely on cohesivity to be apparent throughout the entire industry and this was also displayed by those interviewed.

Whilst those interviewed also explained acknowledgement that they were in competition with each, many were very willing to collaborate with each other. Organizations are learning and adapting to the changing situation together. For many, the demand for circularity throughout the fashion and textile industry, means that collaborating with others works as a win-win situation. Even larger organizations can learn from the















smaller organizations who have are experienced in circular operations and are already familiar with such models and operations.

Collaboration amongst organisations is understood as bringing strength and security, where the changes implemented are more effective if done in unison. However, some organisations explained how often it is the larger organisations who have more available resources, supporting smaller organisations. Nevertheless, there are also a large variety of smaller organisations who have already been implementing or working with circular operations who can offer expertise and experiences as well as clients to larger organisations. Collaboration between smaller and larger can therefore prove to be extremely useful, according to the interviewees.

New Presumed Opportunities across Baltics

The Central Baltic region proved to be an attractive market for the interviewed companies, who highlighted the ability to access new markets, but where the logistics and operations could remain relatively local. The region offers both expansion opportunities regarding larger or diverse consumer bases and new partners and expertise. The need to identify different consumer demands, trends and groups alongside current and potential market opportunities was highlighted.

Some of the Finnish and Swedish organisations interviewed were relatively unfamiliar with the Baltic regions of Estonia and Latvia, and little market research had been done in these two countries. This therefore highlights a great need to conduct cross-border collaboration to identify areas of potential expansion and development. The Baltic nations of Estonia and Latvia were viewed by many of the Finnish and Swedish organisations as being regions where textile production occurs, and many were extremely curious about supply opportunities. Similarly, Estonian and Latvian companies sought for collaboration with the Nordic countries as partners and consumers of their products.

Challenging Fast-Fashion and Linear Business Models

An interesting theme which was discussed by some of the organisations, in particular smaller ones, was a want to detach and remove the brand from 'trends,' or the fast fashion thinking of having multiple stocks of clothes changing on a regular basis. For these organisations, the idea of not wanting to keep up with ever changing and fast paced fashion, but instead trying to focus on seasonal demands. Whilst garments need to be altered in accordance with seasonal demands such as weather, the style of the clothes remains stable, and items do not 'go out of fashion.'

Challenging fast fashion models requires consumers to alter the way they shop for clothes, and what they deem as a need. The organisations are also however responsible for steering this direction as best they can and try to find alternative ways of being competitive as opposed to encouraging 'unnecessarily sales.' For some of the organisations they highlighted that the way growth and profitability is attained needs to change. Supporting slow fashion also requires re-thinking and slowing down attainments of development and expansion. In this sense, while the companies seek for profit, some are actively re-thinking the idea of profitability and what it means in terms of circularity.

Being able to make more accurate forecasts over demand and supply would reduce the likelihood of overproduction and textile waste in the form of unsold stock, limiting the need to have sales where consumers are encouraged to overconsume through the temptation of low prices. Maintaining accurate stick means being able to accurately follow demand as opposed to driving demand itself.















Challenges in adopting circular business models by companies at CBR

Securing Consumer Engagement & Loyalty

Many organisations interviewed highlighted the challenge of being able to establish and utilise functional consumer incentives for both attracting new customers and transitioning their existing consumers to use more sustainable products and services.

This was an issue which existed amongst the different organisations, although the role of the consumer altered. For some organisations, consumer engagement with the product or service was measured regarding their willingness to buy or utilise services, but consumer engagement also included acts such as donating second-hand items or using take-back schemes or partner services such as repairing or selling clothes onwards.

One of the major challenges was creating sustainable second-hand products and services which were deemed to be hassle free and easy to use by customers, or identifying effective incentives to compensate any added or alternative labour which may exist. In addition, one of the most identified challenges was that of being able to attract first time users or buyers of circular services or products. Whilst many organisations highlighted the importance of creating an efficient and pleasant product or service, making this attractive enough to gain new consumers and lower first-time user barriers is paramount. To secure first-time buyers, organisations identified that any potential barriers, such as pre-conceptions, mistrust or inability to be detected by potential consumers must be both identified and eliminated.

In addition, being able to first identify and later possibly expand target customer groups was also highlight as an important challenge. In order to secure and increase resources, finding the initial target group which is most likely to buy new circular products and services is vital, as the provide a stronger foundation for expanding these products and services further. This, however, requires research, knowledge and know how, to both successfully identify, communicate and market to the initial target group.

In being able to successfully implement and provide new circular products and services, there exists the need to be able to influence the consumer habits of existing customers. For many of the organisation interviewed this remained one of the biggest challenges. By including circular business operations, they would potentially be able to attract ecological conscious consumers, but the existing customer base also needs to be shifted in this direction. The right incentives and nudges are needed to both attract new customer and transitions old ones, but these nudges and incentives may be very different which is why this process remains complex.

Further still, the attraction of new customers or transitions of existing customers, is merely the first step. The experience of the product or service needs to secure continuous use from both target groups. The first- time experience of consumers with a new product and service was therefore viewed by many organisations as pivotal. However, as the needs, expectations and incentives of new and existing customers may differ radically, being able to satisfy and secure both is challenging.

Finally, the sheer increase in price of circular products in comparison to linear products, is an aspect which many organisations believe deters potential and existing customers. Being able to transition consumers to such a mindset which allows them to understand, accept and willing to pay higher prices for circular products is a big challenge. Circular services may also add more labour and effort on part of the consumers, so again being able to market and communicate the use of circular products to such an extent where such aspects do not act as barriers remains difficult.

As circular economy concepts, ideas and practices remain complex and difficult to define, being able to communicate products and services as more sustainable to existing products and services to consumers is a vital step. However, being able to balance the necessity and ecological benefit of circular product and services with the needs, wants, expectation and demands of consumers is difficult.











Different Markets Require Different Solutions

An important need identified by the organizations was that of conducting more expansive research in a rapidly changing environment and industry. The consumer, both potential and existing, needs to be further understood in consideration of sustainability and circularity. How best to ensure that consumers will support circular services and products, even if this means higher prices or more inconvenience for the consumer.

The change in consumer behaviour was seen by many organizations as slow. Although consumers may say they support more sustainable or ethical products or services, there is limited guarantee in them purchasing or using these. To alter services and products towards circularity, there needs to be enough demand for these changes to be profitable and maintainable from the organization's perspectives. Organizations therefore remain hesitant to make bigger changes as consumer support is not guaranteed.

Further still, for those organizations already conducting take-back schemes or operate through the donation of second-hand textiles, there is a need to both understand what is happening to those clothes which consumers no longer want or need, and how to get consumers actively donating, selling or bringing these back to store.

In addition, for those organizations operating across borders, consumer wants, needs, demands and their ability to accept or adopt to changes differs. With so many different consumer sectors and target groups it is difficult to implement circular products or services which can take so many different consumer perspectives into consideration. For the physical stores in different countries, there remains different resources and needs, so being able to make cohesive circular changes proves difficult.

It was also highlighted that for those organizations which manufacture using different types of textile materials, different changes and methods may be needed to make their existing products and services circular. The complexity of circularity requires organizations to identify the best circular solution for different products and services, there is not a 'one fit for all' form of circularity which can cover the diversity of products and services offered by larger organizations. Ensuring that circularity in one product does not end up simply causing different forms of harm or emissions is essential.

Effective Communication with Existing & Potential Consumers

A further important need highlighted by the organizations was the ability to communicate effectively with both existing and potential consumers. When transitioning towards circularity, communication can play an important role in both advertising these products and services and gaining new target consumers, but also in convincing existing consumers to both try and support these new products and services.

This requires being able to effectively identify the different target consumer groups and what type of messaging works best. This requires to be transparent and finetuned to the needs of each group. Motivations vary widely amongst consumers, so being able to communicate different benefits, images, or messages effectively, and how to ensure these are seen by the different consumers requires extensive consumer research to be conducted.

Many organizations explained that the role of sustainability is becoming an expectation. Both consumers and organizations are increasingly expected to take responsibility for climate change, thus, how the organization is actively contributing towards this goal needs to be communicated directly. However, many consumers are simultaneously aware of greenwashing and can detect it. Therefore, the companies must make sure that they can back up any claims that they make regarding sustainability, also in line with a discussed legislation (Green Claims Directive). Organizations highlighted that it is difficult to balance the ability of being able to explain more sustainable solutions, but still not making false claims and being able to back up any sustainability claims.















Organizations provided examples of situations where consumers were not able to fully understand the benefits of circular products or services or did not feel that prices were justified due to ineffective communication. The quality of the product was also an underlying issue, where certain materials were made more sustainable or recycled, which ultimately impacted upon the durability or function of the product or their colors or other characteristics. This again proves difficult to balance, as consumers are not always willing to accept "lower" quality or less functional products or "faded" colors even if they are more sustainable. In essence, many organizations feel that sustainability is not yet a priority for many consumers when it comes to buying decisions.

Resource Intensity for Smaller Organizations

Marketing effectively can be expensive and resource intensive especially for smaller organisations. Being therefore able to communicate through multiple channels, through multiple lenses and for multiple consumer target groups, is a challenge.

Whilst bigger brands are at the forefront of publicity and have some waging power in regard to making circular changes throughout their supply chain, legislative obligation needs to be applied to all globally. Having each organisation pulling towards the same direction allows for transitions towards circularity and changes to be made more effectively and expansively. In many cases bigger organisations feel that they must support and advocate for the whole industry, i.e., for smaller organisations, but simultaneously want more legislative support in making changes and being protected from lower priced but unsustainable foreign brands.

Securing Commitment and Cohesion in Large Supply Chains

Gaining cooperation and commitment throughout larger supply chains was also identified as a challenge. Again, as must supply chains cross-border, different expectations and legislative obligations make it difficult to have each part of the supply chain operating cohesively.

Circularity being a relatively 'new' concept or direction for many organizations, means that many organizations felt it was safter trying to identify and establish cooperation with suppliers who already have some experience in circularity as opposed to having to lead the transition themselves. The companies therefore depend on the existing pool of potential partners which are not necessarily many.

Furthermore, establishing accountability and responsibility at each stage of the product lifecycle is another challenge which needs to be planned and designed in advance. Great work and effort need to be placed in creating co-operative monitoring and reporting systems throughout supply chain. As there are different eco-legislations, norms, consumer expectations and demands which impact how organisations operate. This can make cooperation where each organisations involved is able to make similar commitments difficult.

Establishing Local Vs Global Operations

Many of the interviewed organizations highlighted complications in establishing both local and global supply chains.

Global supply chains make it difficult to achieve transparency. Global supply chains also make it difficult to be able to satisfy different consumer demands, needs and expectations whilst simultaneously being able to ensure that different suppliers are also meeting these different requirements. Adding in a circular aspect, also requires the need to consider the different emissions or negative environmental impacts which are















associated with having global supply chains and ensuring the circular benefit is not cancelled out in the process.

Global supply chains require comprehensive designs which make monitoring the complex and multiple parts of the supply chain effectively, ensure that shared goals are maintained and ensure that the positive impacts of circularity are maintained. However, global supply chains provide more opportunities, choice, and alternatives. Not all suppliers who are able to support the organizations circular products or services can be found locally, nor may there be the expertise be found locally which may be required for some products or services. Local markets may not be sufficient for growing companies or certain business models.

More local supply chains require less travel of products and materials, already enhancing the benefits of circular products or services. Local supply chains also enable more control over reporting and monitoring and make it potentially easier for different suppliers and parts of the supply chain to operate under similar legislation. Some circular products or services may end up being more environmentally harmful if operating on a global scale, so there may be need to identify which models, products or services serve better for local vs global.

However, as expertise, areas of interest, options and other legislative support differ amongst countries, limiting supply chains locally, may not allow all organisation to fully explore or implement their products or services. The organizations interviews, highlighted those national circular operations and commitments, need to further be developed to allow for more local alternative to become liable.

Furthermore, for those organizations already operating on a global scale and being dependent on global markets, the transition towards local markets and local supply chain may be problematic. It would require the operational model or the organization to alter drastically.

Investing in Right Places & People

The fast paced and ever-changing business and legislative environment obliges clothing and textile companies to continuously remain vigil and up to date in regard to legislation. The larger organisations interviewed had specialized personnel dedicated towards keeping up with legislative changes allowing the organization enough time to fully understand and effectively react to such changes. Yet they still see legislation as a 'jungle.' The smaller organizations may struggle to keep up with the changes.

With the legislative direction pointing towards circularity, many organizations explained that they had already begun, or were planning to surround their organisations with experts from the circular economy field. This was seen as a necessary action as it provides strategical security for the organizations long- term ability to compete and function in the changing environment. Investment in such expertise was seen as a requirement.

New or altered operations, products or services require a certain amount of resource and cost investment. Transitioning towards circularity becomes increasingly more complex the larger and wider the organization itself in already operating in. Being able to identify profitable solutions and knowing where resource and monetary investments need to be made to succeed remained challenging. If operations, services, or products are implemented, yet fail, it means that those resources have been wasted. This reality is somewhat normal in the changing environment, although it was highlighted as an area of concern.

In addition, investment into new technology was also heavily mentioned by those organizations interviewed. There remains a need to fully understand what types of new technology is available now or is being currently designed. This again allows the organizations to make effective decisions in regard to the type of circular operation or services they wish to implement and also decide upon what technology to invest in to best suit their needs.













Investing resources, money and time in to finding the right partners was also mentioned. However, an important consideration for many, was the stability and durability of partners. Creating effective and collaborative partnerships requires great time and effort. If the partner is thereafter unable to continue operating, this will cause huge issues for the organization. Hence, finding the right partners who have the right expertise but are also seen to be stable and secure is important.

Securing Survival in an Uncertain Environment

Many of the organizations interviewed, especially the larger ones, highlighted that making the necessary alterations to their businesses in order to be in line with sustainability, was strategically important to ensure the survival of the business long term. Being able to adequately safe proof the business against an ever-changing legislative environment was seen as a priority.

Legislation was viewed by many as a signal towards the direction in which the textile industry would be heading, and therefore, it was seen by those organizations interviewed easier to try to prepare for changes in advance or be ahead of legislative changes, as opposed to only meeting them. Being able to accurately predict the future nature or the textile industry is therefore a strategic necessity which allows organizations to adapt and thrive in changing environments.

However, being able to prepare ahead of circular obligations requires product or service longevity planning at each stage of supply and production. This was viewed by many as an extensive task, but one where any changes made should meet potential future obligations also. Transitioning towards circularity was viewed as future risk monitoring and attempting to eliminate potential future issues in advance, which is why it is viewed as a transition which needs to be approached gradually and with caution.

Surviving uncertain or rapidly changing business environments requires originations to also seek for opportunities and take advantage of projects where they can receive support, learn more or cooperate in creating more sustainable models.

Re-thinking Linear Business Models

An interesting aspect which was highlighted by a few of the organisations interviewed, was the aspect of rethinking linear business models, not only in terms of their operations but also of the expected outcomes. For many of the organisations, major concerns revolved around making circular products and services profitable and scalable. The extra costs involved in circularity mean an increase in prices, potentially unsettling the organisations' ability to remain competitive.

Whilst some of the organisation representatives noted a need for change regarding consumer behavior, in terms of consumers turning to buy out of a need as opposed to a want, the way this would impact overall profitability and aims of company growth were not addressed. At the moment, second-hand segment benefit from such attitude of consumers. A couple of the smaller organisations highlighted a need to abandon business models where the everchanging range of clothes was a driving force, as this type of model encourages consumers to buy now since the items will soon disappear from the stores range.

Consumer behaviour and organizational activities are closely interwound, with both being dependant on each other and impacting the other. For circular economy in the clothing and textile industry to be more normalised, change in consumer behaviour ensuring the acceptance of higher prices, new materials and different aesthetic must occur, but organisations also need to re-think linear business models and foundations all together to support this. This includes re-thinking profitability and goals of endless company expansion and growth.

Further still, the current clothing and textile market where fast fashion dominates, meaning poor quality clothing is the norm, reduces the effectiveness of circular models and operations. The poor quality of fast













fashion textiles makes it difficult to implement services, particularly rental and re-selling. The lifespan of fast fashion textiles is short, and as the materials used to produce such garments is often mixed and of poor quality, even upcycling and recycling these are complicated.

Identifying Suitable e-Solutions

There remains a need to understand the differences and obstacles involved in implementing circular products and services in e-shop versus brick & mortar organisations. E-shop and brick & mortar organisations have different limitations, benefits, and opportunities. To identify most suitable models and operations requires resources and expertise. For those which operate in both dimensions, there is a need to maintain coherency between the e-shop and brick & mortar platforms but also ensure that they function effectively.

In addition, being able to identify whether outsourcing or in-housing circular e-services was highlighted as an area of uncertainty by many of those interviewed. Outsourcing provides an attractive option for those organisations who have limited resources to operate or implement circular services themselves, and or do not currently have enough expertise or knowledge of the service itself. However, it requires identifying the correct partners and also trusting those partners to a certain extent representing the brand image. It will also make the organisations dependant on that external provider.

In housing the service allows the organisation to have more control over the service, regarding the prices, the communication, reputation, and brand image. It also allows the organization to have immediate access to data and be more self-sufficient and become an expert potentially allowing it to expand or alter its services more effortlessly in the future. However, these carry more internal risk and uncertainty and would require pilots and experimentation which can be resource intensive, to identify the best practices.

There is also much room for innovation, where digitalisation may play a vital role in allowing organizations reach wider consumer bases and make services more attractive and convenient. However, digitalisation also requires new considerations for making such services user friendly, convenient, safe and manageable. Both identifying suitable and functional solutions and creating new ones, is a great need for many organisations transitioning towards circularity.

Difficult to Re-design Established Business Models

For well-established large-scale organisations, transitions towards circularity may prove to be particularly challenging. Whilst they have more resources at their expense, re-designing such vast and complex supply chains is difficult, especially when there remains uncertainty over what models will be most functional or profitable. Piloting and experimentation are costly and require resources.

Linear business models are familiar to both consumers and organisations and are therefore difficult to break. This requires not only the re-designing of practical operations and supply chains, but also a re- design of the very model of thinking. Linear models have a relatively 'low' obligation requirement and responsibility, but circular operations require an organization to take up a new form of obligation, responsibility and transparency which can have negative implication on the brand image if done incorrectly.

As the concept of circularity is relatively 'new' for many organisations, it remains difficult to establish how this can be achieved effectively and resourcefully. There is a need for practical examples and cases of best practices for organisations to learn from, helping organisations to capture a new vison for their logistics and requirements.















Change as Slow and Unpredictable

Despite many organisations having an understanding of the changes needing to be made, the practical change needed to externally support circular businesses by legislators and consumers is slow and uncertain. Whilst legislative changes can have a profound impact, changes at the grassroots levels are much slower, yet is essential to motivate and secure effective changes at higher levels.

In addition, securing the needed commitment amongst European companies will prove to be difficult due to the industry already struggling and the European market being flooded by ultra- fast fashion brands from outside the EU. The force and magnitude of ultra-fast fashion is extremely overwhelming. European companies are anxious on how they'll survive competition with them once the new legislation comes into force.

Pressure needs to be applied to each stage of the production and supply chain, and the responsibility of making 'greener' choices cannot simply be left to just European companies and consumers. All actors in the textile industry in the supply chain must take responsibility, but creating this form of holistic pressure is difficult especially with global markets.

Legislative Change Needed to Support not Hinder Circularity

Whilst legislative changes were identified as a driver or motivational factor, which would help encourage organisations and consumers to shift and accept circularity, legislation needs to be designed in a way which fully supports such transitions. Some organisations identified that in terms of taxation, recycled materials, donated clothes and take-back schemes continue to not be properly included in taxation structures making these operations difficult to invest in.

In addition, with circular products, services and operations being vast and complex, different models will require different ways of measuring impact, textile waste reduction etc. Therefore, when legislation is being drawn up, it needs to consider the different models which organisations may operate in and make measuring requirement suitable and convenient for organizations to complete.

In addition, as organizations are dependent on consumer demand and engagement, legislation which forces the direction of organisations to target circularity should also address consumers and put pressure on consumer groups to follow a similar direction. Legislation can potentially force organizations to become increasingly vulnerable and less competitive if it fails to place pressure on consumers also.

Further still, legislation needs to be clear and well defined, and allow organizations enough time to appropriately react to any changes. Simultaneously, whilst it may enforce changes it must also provide functional solutions to these needed changes. Organizations need to respond to legislative changes, but there needs to be practical assistance and support offered simultaneously.

New Methods of Effective Reporting & Measuring

Being able to create efficient and cohesive measuring and reporting practices and techniques is another challenge which needs to be addressed. Creating efficient and cohesive measuring and reporting methods amongst partners which can consider new aspects of sustainability included in circularity is complex. Organisations heavily rely on being able to make supported green and sustainability claims, both in terms of attracting consumers but also due to new obligations being put in place. Thus, being able to design effective reporting and monitoring is crucial.

In addition, as for many organisations, circularity remains relatively new and unexplored, they also remain heavily unsure on how to implement this process or what is needed. Circular products and services differ greatly from linear products, and this requires organizations to re-learn, re-look and re-design reporting and















monitoring methods and tools. As sustainability measures and definitions differ between countries, this also adds another level of complication for those organisations operating across borders.

Need for Better Technology

A major challenge or obstacle for many organisations was the effectiveness, functionality and availability of current technological solutions in being able to make products and services more circular. This was especially the case regarding being able to recycle existing products or using recycled material to produce new products. In some cases, recycled materials are just not as effective as their virgin counterparts, making products less efficient for their purpose. Better technology can potentially identify how to alter or handle recycled materials in a manner which makes them as effective.

However, it was identified that technological solutions may not be able to resolve all of the ecological issues within the textile industry or provide alternative or more eco-friendly material replacement or recycling solutions. This therefore may require reconsiderations over the products and materials which should continue to be produced in the future.

New Collaborations & Partnerships

The navigation of creating new partnerships and collaborations, or altering existing ones was also viewed by many organisations as a challenge. These new partnerships and collaborations need to operate in a manner which can satisfy new organisations needs but also meet the needs and demands of consumers, which can be difficult. The obligations of new sustainability measures, means that partnerships throughout the supply and value chain need to be rethought, but the new product or service must continue to hold its attraction to consumers, whether this be the price, texture, or use of the product or service.

Furthermore, both ensuring and monitoring a high level of consistency and commitment at each stage of production and with each partner or collaborator is difficult. There needs to be coherency amongst different partners, and where regulations may alter and new practices introduced, this remains challenging. Auditing, monitoring and reporting practices which meet the demands of both big and small organisation coalitions thus needs to be thought out in advance.

Increased Competition

Whilst the aspect of solidarity between different organisations following the changing fashion and textile industry and changing EU regulations was highlighted, the aspect of increased competition was also mentioned. This increase in new competitors in a market which has been dominated by certain organisations, may impact the willingness to cooperate and share best practices. Whilst sustainability has previously been used by organisations to differentiate themselves from competitors, now that sustainability is becoming an obligation, this differentiation needs to be rethought.

With such increased traffic, organisations need to recognise their role in this new structure and new industry. This will also require more innovation and resources being spent in being able to pilot and text new services and products allowing organisations to meet the forthcoming requirements, but also differentiate themselves in a new way.















Consumer awareness

Veera Joro, Olga Gurova

DRIVERS AND BARRIERS IN CONSUMPTION OF SECOND-HAND CLOTHING

CONSUMER SURVEY & CONSUMER INTERVIEWS

Overview: Consumer Survey

A consumer survey was conducted with the objective of gaining comparative insight of the consumption behaviour and consumer perspectives of the second-hand market in Finland, Sweden, Latvia and Estonia. A 30 question online representative consumer survey was conducted across all four target countries Estonia, Finland, Latvia & Sweden. 2084 participants completed the survey all together, 319 in Estonia, 311 in Latvia, 735 in Finland and 719 in Sweden.

The questions of the survey contained both single and multiple-choice questions. The questions were organized in to 4 separate sections. Background of the participant, Current Clothing Behaviour, Attitude to Fashion and Sustainability and Selling and Consuming Second-Hand Clothing.

The target group was 18+ with the demographics of age, gender, income and educational background was recorded of each participant. The survey was conducted between 23.10.2023-29.10.2023, by a highly renowned Finnish research company Kuulas OY. The surveys were collected using CAWI web interviews and the sample sourced using Norstat Panel.

The surveys were translated into the respective local languages i.e. Finnish, Swedish, Latvian and Estonian. With Russia also being used in Latvia and Estonia. The results were translated from the local languages into English and a descriptive and visual analysis provided for each question. The results included a summary report representing the overall results for each question for each country and a cross country comparison. The purpose of the summary report was to take an in-depth look at the differences in consumer attitudes between countries.

In cooperation with Norstat, a leading data collector for market research in Europe, the results were converted into an online dashboard based. The online dashboard allowed for the results to be filtered country by country based on target groups, such as age, gender and other demographic variables.

Consumer Survey Results















The consumer survey was split in to 4 separate sections. 1. Background of the participant, 2. Current Clothing Behaviour, 3. Attitude to Fashion and Sustainability and, 4. Selling and Consuming Second-Hand Clothing.

The main findings from each of these four sections will be discussed below.

Section 1: Background of the Participants

Age groups

18-34 years: 26%

35-54 years: 32%

55+ years: 42%

Gender

Female: 51%

Male: 48%

Cannot Say: 1%

Typical Second-Hand clothing buyers

Finland: Females 18-54 years old, Low household income, Children living at home. Sweden:

Females 18-54 years old, Low household income.

Estonia: Females of all ages, Low household income.

Latvia: Females 18-64 years old, Low education, Low household income.

Section 2: Current Clothing Behaviour

Where to shop- This question was to gain an understanding of shopping preferences in terms of store types and was a multiple-choice question.

> Shopping malls & online marketplaces were the most popular answers in all four country locations, suggesting that variety and range is important.

Second-hand stores were more popular in Estonia (35%) and Latvia (30%) ranking as the 3rd and 4th most popular places to shop respectively.

Second-hand stores were selected by 23% of those who answered in both Finland and Sweden but fell much lower in the list possible answers.

Second-hand stores were selected by a considerable proportion of those who answered the survey in all four countries but were slightly more popular or more commonly used in Estonia and Latvia.

Online vs Offline- This question was to gain insight into the preferences of online and offline shopping and was a singlechoice question.















Offline shopping was favoured to online shopping, by 47% in Finland, 45% in Sweden, 49% in Estonia and 35% in Latvia.

Online shopping was favoured to offline shopping by 19% in Finland, 27% in Sweden, 14% in Estonia and 27%

A combination of online and offline was favoured by 32% in Finland, 28% in Sweden, 34% in Estonia and 29% in Latvia.

Out all three options, offline shopping was the most popular answer in four countries. Online shopping was considerably more popular in Sweden and Latvia in comparison to Finland and Estonia. However, using only online shopping, was the least popular answer in all four countries, suggesting that most participants preferred to shop offline or with a combination of both offline and online.

Main reasons for shopping-This question provides insight into some of the motivations for purchasing clothes and was a multiple-choice question.

> Out of 'need' was the most popular answer in all four countries (Finland 71%, Sweden 59%, Estonia 67%, Latvia 73%).

> The motivation of simply 'wanting something new' was again the second most popular answer in all four countries (Finland 30%, Sweden 38%, Estonia 34%, Latvia 28%).

> In contrast, 'wanting something trendy and fashionable' and 'not buying anything for ages', were the least chosen answers in all four countries.

Whilst the percentage of participants for both answers varied across all four countries, the main reasons for purchasing seem to be very similar in all four countries. There seem to be similar motivations for wanting to purchase clothing.

How does shopping make you feel: This question provides understanding of the emotions behind the shopping experience and was a multiple-choice question.

> The feeling of 'happiness' was the most common answer in both Finland (38%) and Sweden (50%), whilst 'excitement' was the most popular answer in Estonia (33%) and Latvia (33%).

Second most popular answers in Estonia and Sweden were more negative inclined. In Estonia (30%) the second most chosen emotion was 'tired' and in Sweden (16%) 'uncertainty.'

In Finland and Latvia, the second most popular answers were more positive inclined. In Finland the second most chosen emotion was 'empowerment' (19%) and in Latvia (22%) 'happy.'

There was not great variation or difference in how participants answered this question, but it can be suggested that positive emotions seem to be experienced by most of the participants in all four countries when shopping for clothes.

How often clothes are purchased – This question was to gain insight into the clothes shopping habits in all four countries in terms of shopping frequency. This was a single-choice question.

> In all four countries participants the most popular answer chosen was 'a few times a year,' (Finland 49%, Sweden 53%, Estonia 46% and Latvia 41%).

In contrast, 'once a year or more seldom' and 'once a month or more often', were the least chosen answers in all four countries.

Again, the purchasing habits in terms of purchasing frequency, seem to be similar in all four countries. The majority of participants buy more than once a year, but less than once a month.















Amount of money spent on clothes per month- This question supports the question above, in gaining insight in to how much money on average is spent on clothes purchases per month. This was a single-choice question.

> Again, in all four countries, typically the participants claimed to spend between 10-49eruos a month on clothes (120-580 SEK). This answer was chosen by 36% in Finland, 47 % in Sweden, 30% in Estonia and 34% in Latvia.

In Finland, Sweden and Latvia answers primarily fluctuated between spending less than 10 euros a month, 10-49 euros a month, and 50-99 euros a month.

In Estonia 14% of participants claimed to spend 100-199 euros a month on clothes, an answer chosen by considerably more participants in comparison to Finland (8%), Sweden (5%), and Latvia (8%).

The amount of money spent on clothes per month by participants was very similar in all four countries. The greatest difference was seen in Estonia, where a larger proportion of participants were willing or able to spend a relatively large amount of money on clothes each month.

Important criteria for buying clothes- This question provides insight into the main criteria used by participants to make clothes purchase decisions. This was a multiple-choice question.

> Price and quality were equally the most popular answers chosen in Finland, by 81% of participants choosing these as either important or very important.

Quality as either important or very important was ranked highest by most participants in Sweden (80%), Estonia (90%) and Latvia (90%). Price was second most popular in these three countries Sweden (67%), Estonia (87%) and Latvia (88%).

From all four countries, the importance of sustainability was chosen by the least number of participants in Finland (35%), whilst this was seen as important or very important in Sweden by 61%, In Estonia 82%, Latvia 71%.

Style was the third highest chosen answer in Finland (61%). Style was equally ranked with sustainability in Sweden (80%), and in Estonia chosen as important or very important by 59%, and by 54% in Latvia.

Brand and trendiness were the least ranked in importance in all four countries. They were seemingly not seen to be important purchasing criterion by the participants.

Price and quality seem to drive most clothing purchases in all four countries. Sustainability was not as commonly seen as an important criterion in Finland, in comparison to Sweden, Estonia and Latvia where sustainability is ranked as an important criterion by the majority of participants.

Style was also identified as quite an important factor in all four countries. What this style is, is unknown, and may therefore greatly differ, but the look of the clothing is seen as important.

Changing clothes often or keeping the same wardrobe for longer-This question provides an understanding on how often the participants want to alter the clothes they have in the wardrobe. This was a single-choice question.

> 'Keeping clothing for longer' was heavily favoured amongst the participants in all four countries. In Finland this answer was chosen by 87%, in Sweden by 74%, Estonia 78% and Latvia 75%.

'Indifference' to this was the second highest answer in all four countries. In Finland by 9%, Sweden 17%, Estonia 17% and Latvia 13%.

Opinions and preferences on changing clothes often or keeping the same clothes for longer, seem to be similar in all four countries. A large proportion of all the participants claimed to prefer to keep clothes for longer.















What is most typically done with broken items: This question provides insight into what participants do with broken item and this was a single-choice question.

> Very similar responses were given across all four countries. The most popular answer was to 'fix the item themselves,' (in Finland by 37%, Sweden 39%, Estonia 41% and Latvia 31%).

> Interestingly, the second highest chosen answer in each country was to 'throw the item away' (in Finland 31%, Sweden 27%, Estonia 21% and Latvia 25%).

Using professional services to fix the broken item was slightly more favourable in Estonia 13% and Latvia 17%, in comparison to Finland 7% and Sweden 6%.

Interestingly there seems to be two radically different approaches to broken items which are the most highly ranked in each country. A large percentage would attempt to fix the item, but then another considerable quantity would simply throw the item away.

What happens to items no longer wanted or needed- This is to also gain insight into what happens to clothing items which are no longer used. This was a single-choice question.

> 'Donating' unwanted items to charity was the most common answer in all four countries, answered by 41% in Finland, 54% in Sweden, 41% in Estonia and 42% in Latvia.

The second highest answer chosen in Finland (16%), Sweden (12%), Estonia (13%) was 'stays in closet.' In Latvia, 11% of participants also chose this answer, but the second highest chosen answer in Latvia (13%) was to 'do something or upcycle the item.'

'To do something or upcycle the item,' was interestingly the lowest ranked answer in the other three countries (Finland 3%, Sweden 2% and Estonia 3%).

Choosing to 'sell the item' was slightly more popular in Finland (12%), in comparison to Sweden (8%), Estonia (6%) and Latvia (2%). Selling was chosen as the third highest ranked in Finland and Sweden, whilst it was fifth in line in Estonia and last in Latvia.

Donation is the most favoured method for getting rid of unwanted clothing items in all four countries. Whilst selling was identified as being slightly more popular in Finland, selling as an option is still not a preferred choice by a large majority of the participants in each country. Interestingly, upcycling was seen as being considerably more favourable and perhaps common in Latvia, in comparison to Finland, Sweden and Estonia.

Consumer Characteristics: This question provides an overview of the consumer characteristics of the answering participants. The participants could either choose to agree or disagree to a varying extent with different statements.

There was very little differentiation in how the statements were responded to in each of the four countries.

Most participants either agreed or strongly agreed with, not wanting to or liking the idea of sharing clothes. (Finland 63%, Sweden 58%, Estonia 55%, Latvia 58%).

Buying as many clothes as one wants, was disagreed or strongly disagreed with by the majority in Finland (55%) and Estonia (60%). Whilst in Sweden this was chosen by 39% and Latvia by 47%.

In all four countries, the majority were either indifferent to wanting to be fashionable or disagreeing with this characteristic.

The majority in each country disagreed with not caring about the material of the textile.

The majority in Finland 52% also disagreed or strongly disagreed with the statement of not caring about textile waste. This was also the case for just under half of the participants in Sweden (48%), Estonia (40%), Latvia (44%).















The majority of those who answered do not like the idea of sharing clothes, and this was similar in all four countries, whilst the material of textiles seems to be an important aspect in each country, alongside the issue of textile waste.

Section 3: Attitude to Fashion & Sustainability

The importance of Fashion-This question provides insight into the importance of fashion and was a single-choice question.

Fashion was recorded as not being important by the majority of the participants in all four countries, (Finland 70%, Sweden 60%, Estonia 56% and Latvia 56%).

The largest contrast between those who did find fashion important and those who did not, was found in Finland with 19% answering that it was important to the 70% who said it was not. In Sweden this was 28% and 60%, Estonia 28% and 56%, Latvia 29% and 56%.

Fashion is regarded with similar importance in all four countries, in that the majority of participants did not consider it to be important.

The meaning of sustainable fashion-This question identifies the different understandings of sustainable fashion in all four countries. This was a multiple-choice question.

> In all four countries the most popular definition of sustainability was 'clothing made of high-quality materials that lasts long' (Finland 69%, Sweden 58%, Estonia 67% and Latvia 56%).

> In Finland and Sweden, 'clothing produced in an environmentally friendly way' was the second most popular answer (Finland 50% and Sweden 55%).

Whilst in Estonia (55%) and Latvia (41%), the second most popular definition was 'timeless and classical-style clothing.'

The least popular definition of sustainability in both Finland (42%) and Sweden (36%), was 'clothing not based on trends or fashion.' Whilst in both Estonia (21%) and Latvia (14%), the least popular definition was 'clothing produced with care for the workers who made it.'

Durability and high-quality products are primarily associated with the idea of sustainability in all four countries.

In Finland and Sweden, sustainability is more associated with environmentally friendly manufacturing and production, in comparison to Estonia and Latvia, where the timeless style of the clothing and the ability to continue wearing it long term was more popular.

Interestingly, understandings of sustainability were similar between the participants in Finland and Sweden, and this was also the case between the participants in Estonia and Latvia.

Awareness of sustainability promotions and activities in stores: This question looked at the level of visibility and awareness of sustainability experienced by the participants. This was a single-choice question.

> In all four countries the most popular answer was 'no' (Finland 49%, Sweden 51%, Estonia 47% and Latvia 43%).

The second most answered was 'difficult to say', with the smallest proportion of participants answering 'yes' (Finland 21%, Sweden 24%, Estonia 17% and Latvia 23%).

The answers would indicate that either the visibility of sustainability activities or promotions is relatively low, or that there is lack of interest from the participants, meaning that these go unnoticed. However, this was similar in all four countries.















Participation in sustainable fashion activities: This question provides insight into the active participation in sustainable fashion practices. This question was multiple-choice.

> The top two answers in all four countries were the same. 'Reduce shopping' was most chosen in Finland (43%), Sweden (34%), and Latvia (30%). This was second most popular in Estonia with (37%).

> The second most chosen answer was 'second-hand shopping', in Finland (35%), Sweden (29%), and Latvia (26%). Whilst in Latvia this was most popular answer (39%).

The use of 'repair services' was slightly more favoured in Finland (16%), Estonia (19%) and Latvia (17%), in comparison to Sweden (9%).

'Bring back schemes' scored relatively low in all four countries, with it being chosen by 7% in Finland, 12% in Sweden, 14% in Estonia and 14% in Latvia.

Quite a large proportion of participants claimed to not have used, nor participated in any of the mentioned activities (Finland 29%, Sweden 41%, Estonia 31% and Latvia 37%).

'Second-hand shopping' and 'reducing clothing shopping' were the most favoured or most commonly used activities which support sustainability, in each of the four countries.

Sustainable shopping behaviour is quite similar in each country. Engagement with sustainable activities and practices could be increased and promoted, as there remained a considerable number of participants in each country who had participated in any of the activities listed. However, if they have participated in other unlisted activities remains unclear.

Section 4: The Selling & Consuming of Second-Hand Clothes

Do you buy second-hand clothing? This question gives an indication of how popular the use of second-hand clothing is in each of the four countries. This was a single-choice question.

> Around half of the participants in each country, answered yes to buying second-hand clothing (Finland 56%, Sweden 45%, Estonia 61%, Latvia 55%).

Sweden was the only country where more than half of the participants answered no, but the proportions were still relatively similar.

Second-hand evidently already has a considerable presence in each of the four countries, with of course room to expand.

Those who currently buy second-hand clothing

Main motivations for buying second-hand clothes: This question was only applicable to those who answered yes, to purchasing second-hand clothing. This was a multiple-choice question.

> Price was the most popular answer in all four countries (Finland 83%, Sweden 78%, Estonia 84%, Latvia 57%).

Convenience was the second most chosen answer in Finland (47%), Estonia (30%) and Latvia (39%). Whilst in Sweden, convenience was third (27%), and the second most chosen answer was treasure hunting.

Treasure hunting was the third most chosen answer in Finland (30%) but was not as favoured in Estonia (22%) and Latvia (25%).















In Estonia and Latvia, the third most chosen answer was 'needing specific items for a special occasion' (Estonia 38% and Latvia 29%).

In Finland and Sweden, the ability to 'buy expensive items for cheap' was not a very chosen motivator but did score higher Estonia and Latvia.

In contrast, in Estonia and Latvia, 'love for old and vintage items' was not very favoured, but again in Finland and Sweden.

Interestingly, price remains as the main motivator for purchasing second-hand items in all four countries'. There is there for quite a universal perception that second-hand items are cheaper, and this acts as the main driver. Second-hand shopping is perceived as more convenient in Finland, Estonia, and Latvia in comparison to Sweden. However, the ability to treasure hunt in Sweden was also identified a big motivator, so expectations to be able to find hidden treasures in second-hand stores may be more prevalent.

In contrast, the expectation of being able to find 'expensive items for cheap' is potentially higher in Estonia and Latvia as this was identified as a stronger motivator in these two countries, in comparison to Finland and Sweden.

How does buying and/or wearing second-hand clothes make you feel?- This question explores the feelings and emotions associated with both buying and wearing second-hand clothes. This question was a multiple-choice question.

> The positive feeling of happiness was the most chosen answer in Finland (47%) and Sweden (58%), whilst feelings of indifferent and excitement were the most chosen answer in Estonia (27%), and in Latvia (50%), indifference was the most chosen answer.

In Finland the top three most chosen answers were positive emotions, 'happiness', 'proud' and 'excited.' In Sweden, happiness, followed indifference and proud. In Estonia, indifference, excited and proud. In Latvia indifference, happy and excited.

Feelings of disgust were low in all four countries, Finland (2%), Sweden (2%), Estonia (1%), Latvia (2%).

In Estonia, the main emotions recorded were a sense of indifference and excitement. For the surveyed participants, second-hand clothes are primarily met with feelings or normality or positivity. I

In Latvia, the feeling of indifference was primarily chosen, which could suggest that the consumption of second-hand clothes is seen as relatively normal and not an 'out of the ordinary' behaviour. In addition, the emotion of 'proud' was only chosen by 5%, indicating that buying or wearing second-hand clothing is not a special act, and that is not associated with feelings of morality.

The emotion of 'proud' was also relatively low in Estonia (13%), whilst in Sweden (23%) and Finland (28%) this emotion was chosen by a larger number of participants. In Finland and Sweden, aspects of social or ecological morality may still be associated with the act of wearing and buying second-hand clothing and is may not yet be seen as such a 'normal' purchase behaviour.

More positive emotions were chosen in Finland, with the emotion indifference being guite low (4%). This may suggest that second-hand clothing consumption is currently on trend, or a behaviour which is out of the ordinary for many, meaning some form of emotions will be felt.

The low emotions chosen, means that most make this decision to purchase SH clothing voluntarily as opposed to a need, which they would rather not do.

Buying Second-Hand as a Gift: This question was to gain understanding on how valued second-hand clothing is, and if it was considered as an appropriate gift.

> There was a dramatic contrast between the acceptance of second-hand clothing being purchased as a gift in Finland and Sweden, compared to Estonia and Latvia.















In Finland 63% would consider buying second-hand clothing as a gift whilst 23% would not. In Sweden 56% would consider buying second-hand clothing as a gift whilst 26% would not. For both countries, over half of those who answered consider second-hand as an acceptable gift.

In Estonia, 24% would consider buying second-hand clothing as a gift and 55% would not. In Latvia only 9% would consider buying second-hand as a gift whilst 73% would not.

It would seem that the appropriateness of second-hand as a gift is much higher in Finland and Sweden, in comparison to Estonia and Latvia. It could suggest that second-hand clothing is higher valued in Finland or Sweden, or possibly that the quality of clothing expected to be found second-hand is higher in these two countries. However, reasons behind this are unknown and could also be rooted in differences of gift culture.

Where do you mainly purchase second-hand clothing?- This was to gain an understanding on where participants preferred to shop for second-hand clothing. This was a single-choice question.

> Charities and non-profit organisations were most favoured in Finland (28%) and Estonia (39%). Second-hand offline marketplaces were the most favoured in Sweden (43%).

In Latvia local second-hand offline or online places were preferred (31%) with second-hand offline marketplaces being a close second (29%).

Second-hand peer to peer marketplace were not very favoured in Estonia (10%), Latvia (3%) and Finland (11%). However, second-hand peer to peer marketplaces were considerably more favoured in Sweden (22%).

Interestingly, different platforms are favoured with each of the four countries. Best practices from each favoured model in each country could be investigated further, allowing to see potential development areas in the other countries regarding these. Again, understanding why these different platforms are preferred would be useful. Is it simply due to availability or are there different aspects experienced within each country making certain models more favourable.

Preferences of second-hand clothing over new clothing items? This question was to gain insight into how second-hand clothing was ranked in comparison to new and unused clothing items.

> In Finland (31%), Sweden (35%) and Latvia (32%), preference of new clothes was most favoured. In Estonia this was (23%), but the most favoured answer was not having a preference (28%).

In addition, directly preferring to buy second-hand clothing over new and unused clothing was low in all four countries (Finland 5%, Sweden 2%, Estonia 2% and Latvia 2%.

Having no preference over new or second-hand clothing, was chosen by a considerable proportion of the participants in each of the four countries (Finland 22%, Sweden 25%, Estonia 28% and Latvia 16%.

There still seems to be heavy preference of new clothes over second-hand clothes in all of the four countries. Whilst second-hand consumption is practiced by the participants answering, it may not be a first choice for many, nor chosen as a direct alternative.

This also shows an interesting relationship between the low level of recorded negative emotions such as disgust, but still a significant preference to purchase new and unused clothing over second-hand. Whether this preference is rooted in the product itself, or in the shopping process in unknown.

Being of equal preference over the choice was more popular in Finland, Estonia and Sweden. This could indicate that there are participants in transition to using second-hand clothing as a frequent and alternative form or clothing consumption. Whilst in Latvia this was lower, and more of the participants were partial to often or always preferring new clothing.















Have you ever sold second-hand clothing?:- This question was to gain insight on the selling habits of those who already use second-hand clothing.

> Of those who purchase second-hand clothing, over half answered that they have sold second-hand clothing in Finland (57%) and Sweden (51%).

In Estonia (37%) and Latvia (30%), this was the other way round, so over half of the participants who purchase second-hand clothing have not sold second-hand clothing themselves.

This was an interesting find, and one which should be investigated as a possible consumer nudge, towards getting consumers to perhaps buy more second-hand clothing through the normalisation of selling it first.

Furthermore, understanding why selling is more common in Finland and Sweden is of great interest to see if there are any best practices or models which could be mimicked in Estonia and Latvia.

It is also of great interest to investigate further if, and if so, what implications of selling second-hand clothing has on the overall efficient rotation of clothes in the second-hand clothing market of each country.

Where do you mainly sell second-hand clothing? This question was to gain insight into the preferred selling platforms. This was a single-choice question.

> Second-hand peer to peer platforms were the most favored platforms for selling second-hand clothing in all four countries (Finland 27%, Sweden 53%, Estonia 44% and Latvia 42%).

In Finland the answers were more evenly distributed between the different choices with the second highest ranked, local offline second-hand store, being chosen by 18%.

In Sweden, the second highest choice, local offline second-hand store, being 10%, In Estonia, second-hand offline marketplace (14%), and in Latvia second-hand offline marketplace (10%).

Second-hand peer to peer platforms were the most favored selling platforms, and therefore understanding the motivations and drivers behind these platforms may be useful. Potentially understanding the reasons why there is such a radical difference of preference over peer-to-peer platforms, in comparison to other platforms would also help to develop other platforms further.

The selling experience: This question was to gain insight into the selling experience of participants. This was a multiple-choice question.

> In Finland the selling experience was mostly described as being laborious (47%) and time consuming (42%). In Sweden, the most popular answers were time consuming (36%), handy (35%), and convenient (33%). In Estonia, the dominant answer chosen was time-consuming (43%), and in Latvia, the experience was quite evenly described as time-consuming (27%), convenient (23%), fast (22%) and handy (22%).

> In Finland and Estonia, the selling experience was mostly associated with negative emotions. In Latvia there was a mixture of both, with time consuming being the most answered, bit the following emotions were associated with more positive experiences such as convenient, handy and fast.

> Similar to Sweden, with time-consuming being most chosen but followed closely by positive emotions such as handy and convenient.

Latvia and Sweden may have best practices and models to share which could help enhance the experience of selling second-hand clothes in Finland and Estonia. However, the experience of selling second-hand clothing was still associated highly with being time-consuming in all four countries, indicating that there still needs to be further development on the selling process of second-hand clothing to make it more efficient.















Willingness to sell second-hand clothing in the future? This question was to provide insight into how willing participants were to sell second-hand items in the future. This was a single-choice question.

> Over half of the participants in Finland (61%) and Sweden (64%) would consider selling second-hand clothing in the future. Whilst in Estonia, only 36% would consider selling second-hand clothes in the future, and those who would not (29%) or were unsure (36%) were quite evenly divided. In Latvia there was also a more evenly divided response, with 39% not considering selling second-hand clothes in the future, 31% would and 30% unsure.

In Finland and Sweden, the majority would consider selling second-hand in the future, whilst this opinion was considerably lower in Estonia and Latvia. Selling may still not be seen as a functional, worthwhile or an attractive option.

Those who currently DO NOT buy second-hand clothing

Main reasons for avoiding buying second-hand clothing? This question explores the main barriers for buying second-hand clothing. This was a multiple-choice question.

The barriers for not wanting to purchase second-hand clothing varied slightly in each of the four countries.

In Finland the most chosen reasons for avoiding second-hand clothing were 'hygiene' (43%), and 'don't like to wear other people's clothes' (40%).

In Sweden, 'preferring new clothes' (48%), 'not being able to find what they want from second-hand' (35%), and 'don't like to wear other people's clothes' (32%) were the primary reasons chosen.

In Estonia, 'preferring new clothes' (50%), 'don't like to wear other people's clothes' (50%), and 'can't find what they want from second-hand' (42%) were the most popular answers chosen.

In Latvia, simply 'preferring new clothes' (49%) and 'don't like to wear other people's clothes' (48%).

The barrier of 'not wanting to wear other people's clothes' was similarly highlighted in each of the four countries and remains a significant issue. The reason for this deterrent is however unknown. It may be associated with some form of hygiene issue or concern.

'Not having a second-hand store close by' was the least chosen reason in each country (Finland 11%, Sweden 11%, Estonia 11% and Latvia 12%).

This could suggest that there is not a scarcity of second-hand-hand stores available, or that this at least is not the main barrier for those choosing not to consumer second-hand clothing. The main barriers may therefore not be physical limitations such as access to second-hand clothing, but pre- assumptions or bad experiences.

Hygiene was also considerably voted by participants in Finland (43%), Sweden (25%), Estonia (27%) and Latvia (38%). The concern for hygiene seems to be a considerable barrier for many and efforts to help erase or weaken such assumptions should be prioritized.

'Not being able to find what they like,' was also considerably chosen in each of the four countries (Finland 31%, Sweden 35%, Estonia 42%, Latvia 34%).

This was more of a practical reason, which would suggest that these participants may have tried to buy second-hand clothing in the past and had not found anything suitable. This would instead require practical solutions to making range and availability mor extensive, and also help promote the circulation of unwanted clothes.















Would you consider buying second-hand clothing in the future? This question was used to understand the willingness of those who do not use second-hand clothing, to consider doing so in the future. This was a single- choice question.

> In Finland (74%), Sweden (71%), and Latvia (61%), a majority of participants would not consider buying second-hand clothes in the future.

This would indicate that there is quite a high threshold and barrier in getting participants in these three countries to alter consumption habits and consider second-hand clothing as an alternative.

Interestingly in Estonia, 57% of participants stated that they would consider buying second-hand in the future.

This was an interesting find and suggests that there may be a lower threshold for trying second-hand clothing in the future for those participants in Estonia. Understanding the best practices, nudges, norms or values which may contribute towards lowering these thresholds would be of great importance.















To support the consumer survey, a series of narrative inspired consumer interviews were also conducted in all four partner countries. In Finland, the Finnish research company Crowst OY, was responsible for recruiting participants and conducting the interviewees. The partner organisations in Estonia, Latvia and Sweden were responsible for this process in their respective countries.

The participants interviewed were between the ages of 18-40 years and both males and females were equally represented, with those identifying as 'non-binary' also being included. Three categories of participants were targeted; Group A: Regular Users of Second-Hand Clothing, Group B: 10-30% User of Second-Hand Clothing, Group C: Non-Users of Second-Hand Clothing.

The aim of the interviews was to gather consumer insights on people's clothing habits and clothing purchasing behaviour, with a special focus on second-hand and other circular services. The interviews were between 40-60 minutes long and were completed either virtually through Teams or in person. The interviews were conducted in the partner countries native language and later translated into English.

- o 20 consumer interviews were conducted in Finland (10 female, 9 male, 1 non-binary).
- o 3 consumer interviews were conducted in Sweden (2 female, 1 male).
- o 3 consumer interviews were conducted in Estonia (2 female, 1 male).
- 3 consumer interviews were conducted in Latvia (unknown).

The execution period of the consumer interviews: 23 October 2023 – 8 February 2024.











Consumer Interviews: Results

Group A- Buy's most of their clothes Second-Hand &

Group B- Buy's 10-30% of their clothes Second-Hand

GROUP A & GROUP B CONSUMER DRIVERS

1.1 Product- Related

Price

For both of these groups, price was identified as a prime driver in choosing second-hand. Purchasing items second- hand was viewed as being better value for money and the act as being economically smart. This was especially the case for items which would not be used for long periods of time, such as children's clothing, or clothes which would only be needed for special events, such as weddings.

Within these two groups of interviewees. price was also identified as a big driver when making 'new' clothing purchases. Deals and sale campaigns, enticed interviewees to browse stores or websites, make purchases and also choose to buy new clothes over second-hand ones. Deals and sale campaigns can result in new clothing items being cheaper to purchase in comparison to than second-hand clothing, undermining one of the most dominant appeals of second-hand clothing which is price. Deals and sale campaigns would either ignite interviewees interest in specific 'needed' or 'targeted' clothing items or would support impulse purchases of 'unneeded' clothing items.

However, price was not always a primary driver for those interviewees who did not purchase clothing frequently or in large volumes. Price also lost its prevalence when buyers became attached to the clothing item. If the interviewee deemed that the clothing item was of high quality, durability, easily fixable or simply really liked the item enough, price was not a primary concern.

Some interviewees claimed that they were willing to pay more money for highly ethical or sustainable clothing items, but only if these aspects could be guaranteed. Low prices, especially at second-hand stores, were identified as driving impulse or thoughtless purchases. Below a certain price threshold, interviewees more inclined to make unplanned or 'not quite right' purchases as the price felt like 'nothing.'

Quality & Price Ratio

Guaranteed quality enticed interviewees to both purchase second-hand clothing and also pay more for clothing items in general. Branded clothing items were identified by some interviews as being important, deciding to purchase quality items. Branded clothes were not distinctly favoured due to fashion or style preferences, but with their association to quality and durability.

In contrast, cheap brands had the opposite effect, where the interviewees did not want to buy certain cheap brands due to their assumed low quality. The ability to maintain the condition of the clothing was an important criterion when shopping for both second-hand item and unused clothing.















The importance of quality was also highlighted with special consideration on clothing items which were needed for heavier activities, such as outdoor clothing and shoes. Guaranteed quality and durability for such items was prioritised, whilst for other everyday items expectations may differ.

For those interviewees who were active in selling second-hand items, branded clothes were also seen as being able to maintain their value, especially in consideration to kids and baby clothes. Buying good quality branded items were there for seen as a form of investment, allowing such items to be sold second-hand for a good price after they were no longer wanted.

Branded second-hand clothing was also mentioned by several of the interviewees as a special point of interest. Some even preferred branded second-hand clothing to new or unused branded clothing items.

Unique Self-Expression

Style was viewed as an important component, but whilst for some this was the case for special events or in certain environments such as work, for others stye played an important part in their overall identity. Style could therefore be seen to have two primary roles, in both making the wearer of the clothes feel like 'themselves' or 'good,' or providing a suitable image for others in certain social situations. In contrast, for some, clothes were not viewed as tools for making statements, but instead as practical and necessary purchases.

Clothing also provided some interviewees with the ability to 'stand out' and differentiate themselves from others. Some described themselves as having their own unique identity or certain style preferences, which they would not deviate from despite changing fashion trends. For one interviewee, clothes provided them with a form of liberation and therapy, which could be used to re-confirm their identity and express themselves.

For those who felt the need to show unique identity through clothing, second-hand clothing provided opportunities for these interviewees to find unique, one-of-a-kind pieces, to deviate from mainstream styles and avoid looking like a 'copy' of everyone else. Also, with second-hand items being cheaper, one interviewee felt more comfortable to alter the clothes which they purchased to make the items 'perfect' for them.

Second-hand stores were also used by some for out-of-season items, which could not be found in mainstream retailers. Second-hand stores were chosen for their ability to provide a range of items, which may not currently be in season and are therefore not offered in other stores.

1.2 Service Related

Emotional

Positive emotions, associated with acting financially smart and responsible when purchasing second-hand items were felt by some of the interviewees. It was also mentioned that when buying new items, eco labels provided a sense of relief from guilt free emotions. This was especially the case for those who were aware of the harmful impact of the textile industry.

The emotional thrill of treasure hunting was also mentioned by some of the interviewees who felt that second-hand shopping ignited feelings of excitement, as it was never known what could be found. It was an opportunity to have fun browsing and potentially find something rare, new and exciting.

Many interviewees also highlighted feelings satisfaction and accomplishment when they were able to find the right clothing items second-hand. There is potentially a higher level of satisfaction with perfect second-hand purchases due to the more laborious and uncertain experience it provides as opposed to traditional clothes shopping.

However, others did not think too much about their purchasing habits and did not identify having any positive or negative feelings over the amount or frequency they purchased clothing.

<u>Convenience</u>















Convenience of the shopping experience was mentioned as a big driver in purchasing decisions. Regarding second- hand stores, the organisation of the store was highlighted as being important. Having items logically organised on the racks for example by style, size, season or colour, and prices clearly labelled. A costumer orientated atmosphere would make second-hand shopping less time consuming or overwhelming. This was also the case for online second-hand clothing stores, where the use of filters was identified as a necessity, as it allowed interviewees to compare prices, easily find what they were looking for and in the right size, and not become overwhelmed by the range of clothes.

Niche shops, which would carry items which are normally more difficult to find was also mentioned by one interviewee. Stores which specialise in plus sized clothes, but in a wide range of styles and colours motivate this interviewee. Such stores allow the interviewee to shop in a more practical way and also purchase out of 'like' as opposed to not having any other options.

The aesthetics of second-hand stores, or the presentation of the clothes in both brick-and-mortar and online stores was also highlighted. Interviewees preferred the way new clothing stores presented clothes in both physical and online stores, through the use of models or manikins.

Security:

The aspect of security was identified as being highly important when purchasing second-hand clothing. The aspect of security in the purchase could be achieved through multiple ways, including quality assurance. Buying for example branded secondhand clothing increased feelings of security for their interviewees, as did buying from second-hand stores such as Emmy, who monitor the quality of the clothing.

Having a form of 'middleman' assure the quality of the second-hand clothing was viewed positively and provided reassuring feelings. In addition, such set-ups in some cases could handle the transfer of money in a more secure manner. In these scenarios, the buyer would transfer the money to the 'middleman', where the seller would only receive this once the buyer had received the purchase. Such aspects were described as mimicking the methods of new clothing organisations.

However, for others, there remained a need to purchase second-hand clothing from brick-and-mortar stores, as the ability to try on, see, and feel the item before purchasing was important. For vintage or special items, it was also mentioned that extra measures were usually preferred to ensure that the item was not a 'fake.' Reputation and popularity of second-hand stores both online and brock-and-mortar were seen as having a valuable contribution to their assumed security.

Online & Brick & Mortar Shopping:

The decision to choose online or offline varied greatly depending on the interviewee. For many a combination of both online and offline shopping was preferred, but evidently both forms of shopping were highlighted as having advantages and disadvantages.

For those preferring to shop online, the convenience and range which online provided was primarily mentioned. With online department stores allowing consumers to shop a range of brands and items in one store, it makes buying higher volume of items easier as well as allowing to easily price compare between different items. This was also viewed as very important for those living in smaller, or more rural areas as they do not have easy access to a wide range of physical brock-and-mortar stores.

Online shopping was also highlighted as a driver for purchasing second-hand clothing, as it allows access for those who are not located near physical second-hand stores to still shop. Further still, if online second-hand stores have filters in place, it allows consumers to browse through second-hand items more conveniently in comparison to visiting brick-and-mortar stores. Online second-hand stores also provide more variety of sizes and styles and make it easier to search for specific items.

Even for those interviewees who preferred to shop in brick-and-mortar stores, some highlighted that they would often start their shopping process by first looking online at what each physical stores close by had to offer. Browsing first online allowed them to easily compare prices and products across the physical stores they were considering and therefore narrow down which they would visit.















However, online shopping also created some issues of security with some of the interviewees, who claimed that easy and free return policies were important when shopping online along with the reputation of the online store itself. It was identified that descriptions and sized varied, even when ordering from the same website making it difficult to choose the correct product. Many choose to order more than one size, which creates issues of unsustainability due to the inevitable return of many items.

This was especially the case for second-hand items, as there is always a sense of uncertainty with the pictures and descriptions of the products, and unlike other online clothing stores, the range of clothes available on second-hand clothing stores is highly dependent on the number of users and sellers of that store. In addition, having groups where the same sellers and buyers often visit was seen as adding security to the process. For example, Facebook groups where the members were to some extent monitored and were familiar made purchasing second-hand online more comfortable.

For those choosing to shop in brick-and-mortar stores, this was largely impacted by easy access to such stores. Living in a central are where physical stores are easily accessible meant that they were used. It was mentioned that physical stores would first be visited, as it was preferred to feel, see and try on the items before purchase, after which online stores would be used. However, some preferred to use online to find specific items, whilst physical stores satisfied the act of browsing and treasure hunting.

Interestingly online shopping impacted impulse purchases differently, depending on the shopping strategy of the interviewee. For more practical shoppers, online shopping was used to find and compare specific items, meaning they would easily be able to avoid browsing other items outside of their need. However, if they were to enter brick and mortar stores, they would also find themselves sometimes browsing or looking at other items which were available. However, for those who enjoy the experience of shopping and see shopping and browsing as a fun time, online shopping provides a way of looking at an extensive range of clothes quickly and easily. The ease of the online purchase prices therefore encouraged more impulse purchases to be made with these interviewees.

Payment Options

Providing flexible payment options was identified as a touchpoint by one of the interviewees, which would make them more likely to consider purchasing the clothing item. Being able to pay off items in instalments or after a certain date, increased the likelihood of the interviewee to purchase the item. This was especially the case for expensive clothing items, or high volumes of clothes being purchased at once.

Marketing & Sales Campaigns

Passing by or being exposed to deals or sales enticed some of the interviewees to enter a store, whether his was online or a brick-and-mortar store. Delas and sales heightened the interest of the interviewees, and some would first browse and look at the sales selections, even if their target purchase was not included. However, for others, they would specifically follow and look for deals and sales in relation to the specific item they were looking to purchase. Such sales or deals would then direct them to those stores, but it continued to be the item itself which guided this.

However, some interviewees identified that effective advertising and marketing helped to drive their purchase decisions and where they would initially shop. The frequency and volume of adverts across social media and online platforms makes it difficult to avoid being affected by them. Furthermore, as directed and targeted advertisement is now the norm, many mentioned that such adverts influenced their purchase decisions. One interviewee mentioned that more effective and visible advertisement of second-hand clothing items and stores would increase their interest and potentially increase their use.

<u>Aesthetics</u>

Aesthetics were also mentioned and coming in to contact with the aesthetics of the store, could impact purchase decisions. Furniture and decor were identified as important, as this given an impression of 'effort' which also may indicate that the store consider customer preferences and the customer experience. This also extends to the overall organisation of the store, especially in second-hand stores where the layout of the items is prioritised. If there is















evident effort made, especially in second-hand stores, it makes the shopping experience more pleasant and not as overwhelming.

Interestingly, while it was highlighted that second-hand stores should attempt to mimic the way 'normal' clothing stores are organised and designed, some also felt it was nice for second-hand stores to have their own identity, where one could distinguish them as second-hand stores immediately. Some did not want second-hand stores to look to luxurious and prefer the 'warmer' and less artificial atmosphere they provide. However, for second-hand stores in particular, space to be able to comfortably move around and browse was seen as important, alongside adequate and sufficient changing rooms.

1.3 Society Related

Sustainable & Responsible Consumer

Whilst price was identified as a primary driver of second-hand purchasing, environmental sustainability and responsible consumption were also mentioned. Many in these two categories were aware of the textile industries harmful environmental impact, and of the polluting materials often used in clothes manufacturing (e.g. micro plastics). These were highlighted as aspects which makes the interviewees both want to purchase second-hand clothing as an alternative to new clothing, pay attention to the materials used within clothing before buying and choose more ethical products whenever possible.

Purchasing second-hand clothing was identified by one interviewee as one of the easiest ways to become more of a responsible consumer. The need to use up clothing until the end of its product life cycle was acknowledged as an important criterion for helping reduce textile waste and this could be achieved through second-hand clothing consumption. Also choosing higher quality and more durable clothes which would not wear down so easily, and finally consciously decreasing or avoiding ultra-fast fashion. In addition, buying out of genuine need as opposed to want or impulse were also identified as best sustainable consumption practices.

However, for some, the idea of being a responsible consumer was associated with being financially smart and being able to make money go further. This could be achieved through either buying second-hand clothing as a cheaper alternative, or by buying more high quality and durable clothing items which would last longer.

Media, Family & Friends, Social Situations:

Many different possible external influences on motivation were identified. Advertisements, social media, celebrities and media were recognized by some as having some form of influence on how they view clothes or what they feel the need to purchase. The act of looking at what others wear was also prevalent.

Many identified the role which family and friends have in their style influence. Some actively watched and followed the style and fashion their friends used. This would usually come in the form of asking for advice from more fashionable friends or family members, if the interviewee needed to purchase something. In this sense, whilst they may not themselves actively follow fashion or trends, they are secondarily influenced by these fashion trends through their friends. Alternatively, friends and family members actively engaging with second-hand clothing also helped pave the way to using second-hand clothing for some of the interviewees.

Praise or compliments for clothing choices from friends and family members was also highly appreciated and seen as a very positive thing. Therefore, friends and family members may provide a secure channel through which shopping habits can be shaped and supported. Whilst these can further the use of unsustainable clothing choices, they may also act as a way of securing more sustainable choices too.

However, on the contrast others directly refuted that mainstream fashion or style had any influence over clothing choices as consciously chose not to view such adverts or media. Older age meant less talk about clothing in general between friends and family members. For these interviewees, clothes were not an important topic of conversation, and they did not feel in any way influenced by the opinions or choices of their friends or relatives. However, one of these interviewees did acknowledge that increased social pressure or demand on needing to purchase or wear second-hand clothing would encourage him to purchase more clothes second-hand.















In addition, some interviewees mentioned that certain social situations or events would alter the way they dress or the types of clothes they would purchase. The event itself was seen as determining how the interviewee felt they should dress or if they needed to purchase certain types of clothing under the pressure to 'fit in.' Even for those interviewees, who claimed not to be influenced by the opinions of others, admitted that for work events they would want to be appropriately dressed.

Aesthetics

Aesthetics of second-hand stores could have a lasting impact upon how second-hand stores and clothing were viewed, and drive or deter purchase decisions. Furniture and decor were identified as important, as it depicts an image of 'effort' being made on behalf of the store in adhering to customer preferences and customer experience. having pleasant interior and exterior decor, was identified as making the shopping experience more pleasant, and the layout of the store in terms of having adequate space to move around and browse with ease as less overwhelming.

Interestingly, while it was highlighted that second-hand stores should attempt to mimic the way 'normal' clothing stores are organised and designed, some also felt it was nice for second-hand stores to have their own identity, where one could distinguish them as second-hand stores immediately. Some did not want second-hand stores to look too luxurious and preferred the 'warmer' and less artificial atmosphere they often provide.

Normality

Interestingly, for many of the interviewees of this category, the first experiences of using and purchasing second- hand clothing could be traced back to their childhood. For these interviewees, second-hand clothing had not been a new or unknown experience, but vividly remember visiting second-hand clothing stores as a child. This habit of shopping for second-hand clothes has created a sense of normality for these interviewees, one which they have maintained into adulthood. In this sense any potential taboo, has been weakened through the act of using second- hand clothing and clothing stores in their past.

GROUP A & GROUP B: BARRIERS

2.1 Product Related

Price & Competition

Regarding second-hand clothing, for many of the interviewees the decision to purchase second-hand or not, was determined by the price of either the second-hand item, or the item as new. If there was only a small price difference between these two items, some interviewees felt more compelled to purchase it new.

Deals and sales may undermine the competitiveness of second-hand items, and for those mainly driven to purchase secondhand due to price, are then more inclined to buy new. Gift cards or coupons also had a similar effect, as when these are received consumers are inclined to use them and shop at the stores where these can be used. In addition, some interviewees highlighted that they were unwilling to fix cheap items. Whilst expensive items were seen as being worthwhile fixing, the availability of cheap clothes undermines the willingness to pay for repairs.

Many of the interviewees, were not prepared to purchase expensive second-hand clothing items. There was therefore an expectation to not pay past a certain amount for second-hand items, regardless of their condition or brand. There remains a perception that second-hand items are not as valuable as new clothing items, and therefore should not be priced as high, or sold past a certain price point. Some interviewees commented that they often found second-hand clothing to be overpriced, given the fact it was used and not new.

Difficult financial or economic climates, makes cheaper clothing more appealing. Whilst this is understandable, it highlights the issue of distinguishing between practical 'need' and 'desire' to purchase clothing. Whilst financial















struggles may encourage rationale spending, spending money on cheaper, less sustainable items which are not needed are usually also practiced.

Regarding local brands or high-quality clothing, some interviewees also found these items to be seemingly very expensive and overpriced, which deterred them from purchasing them. Despite these interviewees wanting to support local brands or high-quality clothes, the cheap prices of fast and ultra-fast fashion made these decisions difficult.

Security

A barrier of security, when purchasing second-hand items, both online and on site was also highlighted. Regarding secondhand online stores in particular, peer-to-peer platforms were seen by some interviewees as platforms they were unwilling to use. A lack of quality control or potential accountability for wrong or fraudulent items was of great concern. In addition, pictures of second-hand clothes on online platforms are sometimes deceiving and items are not as they appear on the photos, especially the feel of the material.

Confirming the right size for online items was mentioned as being difficult, whether the item was second-hand or not, but a free and easy return policy for unused items often appealed to many. The inability to return items online, especially second-hand items was seen as a big barrier for many. However, for the free return policy was also highlighted as being a controversial topic in terms of sustainability. The easier the return policies are, the more likely consumers are likely to purchase and return items thoughtlessly, increasing pollution from the travel back and forth of items.

Declining Quality

The rapid increase of low-quality fast fashion clothing makes the circulation of second-hand clothing more difficult. A lot of second-hand clothes are from fast-fashion manufacturers, making the durability and overall quality of these items questionable. Some interviewees mentioned they were therefor not willing to buy such items second-hand as they were not convinced, they were suitable for such circulation.

In addition, it was highlighted that certain clothing items, regardless of the brand, were perhaps not suitable as secondhand items due to losing their functional properties overtime and use. This interviewee mentioned hardware outdoor clothes, which may lose their ability to maintain their water-resistant properties despite their visual condition. This was also highlighted for items such as jeans, which get easily work down, and were therefore not considered as suitable second-hand purchases.

Further still, a general lack of awareness or knowledge of good quality materials, made some interviewees unsure of what they were purchasing was truly more sustainable or higher quality. Despite advertisements or labels, the inability to distinguish good quality products independent of these, made them question such purchases.

2.2 Service Related

Limited Selection & Availability

The selection of clothing available at second-hand stores is often unknown, and the range of sizes, styles and colors limited. This was especially highlighted by male interviewees who felt that there was not much choice of men's clothing in general. Specific items are difficult to locate and even when an item is found, it may not be the right size or in good condition.

Online second-hand clothing stores provide a larger range of items compared to physical stores, but many are not willing to purchase second-hand clothes online. The endless range of choice and the ease of finding different sizes and styles at unused clothing stores, both physical and online, make second-hand clothing seem even more inconvenient and less appealing.















For some interviewees, who defined themselves as being plus-sized, found a limited choice of clothing which was suitable for them second-hand stores. Niche needs or wants, which may be difficult to satisfy even through traditional clothing stores, may make shopping for second-hand clothes even harder.

However, it was also highlighted that a too expansive range of items, is for some overwhelming. Especially for those interviewees who felt the need to explore and compare all possible choices, and endless selection of unique items at second-hand stores was seen as off-putting.

Presentation and Re-Branding

Another barrier identified by some of the interviewees, was the lack of sufficient or quality marketing and presentation of second-hand clothing items, especially in comparison to unused clothes. Some interviewees mentioned that online items are not properly photographed, or do not appear photogenic making them unappealing.

The use of the name 'flea market,' was also identified as being unappealing and should avoid being used. Such terminology helps define and capture the type of services and products which are offered, and the use of such names do not depict an appealing first-impression. Essentially, second-hand stores need to re-brand themselves from 'flea markets.'

Similarly, physical second-hand stores should pay great attention to the way they organise and layout the clothes, potentially use models or manikins, or create potential looks, to make the shopping experience more enticing. Disorganisation or a lack of care, make second-hand stores seem unappealing or of low quality, even if the items sold are in fact in good condition.

<u>Un-organised Layout & Aesthetics</u>

The overall appearance and aesthetics of second-hand stores was also a concern for some interviewees, who explained that if done wrong, could act as a barrier for first time users and may also prevent repeat customers. Some interviewees felt that second-hand stores should attempt to keep up with modern clothing stores, in terms of their set-up and overall 'look.' Disorganisation, out of date exterior and interior, unlabelled items and a distinct second-hand smell can all be offputting and impact upon the assumptions of the clothes being sold.

One interviewee mentioned, that in city second-hand stores tended to be more active in modernising their stores and upkeeping a good image, whereas those on the outskirts were not. However, if first time buyers happen to enter unkept second-hand stores, their image of all second-hand stores may be tainted, as they all seem to be placed in the same category, meaning they are less likely to use second-hand stores in the future.

In addition, second-hand stores should have strict quality control and monitoring, where the quality of the items being sold is prioritised over the sheer quantity.

2.3 Societal Related

Advertisement

The constant advertising and marketing of unused clothing items at 'normal' stores again acts as a strong comparison, which makes second-hand items seem even more unappealing when compared to these. Some interviewees felt that the high volume of advertising and marketing make altering consumption habits and behaviour difficult.

In addition, it was mentioned that second-hand clothing stores should be made more visible and this could also be achieved through similar marketing strategies that 'normal' clothing stores use. This also included keeping social media pages up to date and seem active, as this also helps to build trust between consumers and the business.

Familiar Shopping Habits















A sense of familiarity with buying new clothes, and the process and convenience of this consumption behaviour is difficult to break for many. Whilst the purchase process of second-hand items can be made more convenient and easier for the consumer, it still requires an adjustment period and for expectations to be altered. Second-hand shopping requires expectations to change, in that you may not always find what you are looking for and the search process also requires more effort. This was seen by some interviewees as a barrier they felt many would face.

The more laborious reality of finding correct or appropriate second-hand items is a barrier for many, and even the interviewees who regularly purchase second-hand items would choose to purchase some clothing items new due to convenience and time constraints. Even in cases where the interviewee acknowledges that the purchases conflicted with their ethical concerns, the convenience of the purchase overrode these concerns. However, changes in organisation, categorisation, filtering mechanisms and customer service all help to make this process easier.

In addition, the explicit awareness of individual consumption habits or the complex emotions and processes involved in making purchase decisions, are not considered by many. Having active conversations exploring such clothing consumption choices helps highlight areas of reconsideration, but these conversations are rarely had. Established consumption habits are therefore difficult to examine or change.

Second-Hand clothes as 'unhygienic'

The interviewees identified several different forms of stigma, which still potentially remained in the minds of many, ultimately acting as deterrents for second-hand consumption. Some of the interviewees had friends and relatives who did not like the idea of sharing or wearing other people's clothes or were put off by the smell of traditional second-hand clothing stores.

Some interviewees also highlighted how the act of purchasing second-hand items could be associated with a sense of 'cheapness' or unwillingness to spend money on clothes, which could deter potential consumers, especially young consumers, from suing second-hand stores. In addition, it was suggested that those who have never used or visited secondhand stores, may not quite understand the types of clothes there are available and therefore have the presumption that only damaged or low-quality items are available.

Further still, one interviewee mentioned that the act or purchasing and wearing second-hand clothing items remained more of taboo with men and boys as opposed to girls and women. The reasons behind this are unclear, but there remains a limited selection of men's and boy's clothing in second-hand stores, and much could be achieved by specializing in men's clothing, especially high quality and good conditioned clothing.

Group C- Rare Consumers of Second-Hand clothes

GROUP C: DRIVERS

1.1 Product Related

Price

The participants in group C, who rarely, or never, purchase second-hand clothing had some similar traits in terms of price consciousness.

Price was also identified as a big driver in making purchase decisions. Interestingly whilst some interviewees would limit the amount they spend on clothing items, regardless of how much they liked the item, others highlighted that price was not a deterrent if they truly liked the item or the item made them feel good.















In addition, for one interviewee, who preferred to buy clothes from abroad, they were willing to pay more as they considered the items to be rare, and unavailable in Finland. For this interviewee, the feeling of missing out on the item or not being able to purchase it later, meant he was willing to spend more money on it.

In addition, some interviewees would be willing to spend more money on clothes which were guaranteed to be more ethical or of higher quality. Higher prices were often equated with the product being of higher value.

In consideration to second-hand, one interviewee highlighted some interest in second-hand due to its financial rationality but did not feel the current need due to being rational with his purchases already. Another interviewee mentioned secondhand clothing being worth considering when looking to purchase more expensive items.

Self-expression

For those interviewees who had older children and purchased clothes for these children, they stated that brands were extremely important. Whether this was for quality or durability was unsure, but one interviewee did highlight that she did not want her children to 'feel left out' or 'look different' to others. For another interviewee, brands were important as they made him feel more successful, and this was an image he wanted to portray to others even if it was not 'financially' speaking the case.

For a few of the interviewee's style was extremely important. This style did not equate to a need to be fashionable or on trend, but that their own unique style was followed. Style was identified as a form of identity construction and had the ability to alter the mood for some of the interviewees. Wearing the right clothes would provide some of the interviewees with positive and good feelings and fill their day with energy and confidence.

Emotional Satisfaction

For interviewees within this group, some interviewees were motivated to purchase clothing in order to fulfil emotional needs. One interview explained that during times of stress or overwhelm, she would go and purchase clothing in order to make herself feel better. The clothes serve as a form of treat. Similarly for another interviewee, clothes acted as a form of goal or prize in consideration to weight loss. This interviewee highlighted that for her to need to go and purchase smaller items which now fit her, was a reward for her weight loss.

Similarly, a few of the interviewees explained that they feel a certain 'need' to purchase clothes, especially if they find items which make them feel 'good' about themselves. This need, however, does not refer to any practical or functional need the consumer may have, but an emotional one which was difficult for some of the interviewee's erase, even if it conflicted with their budgets or ethics.

Branded, Quality & Low Price Second-Hand

In consideration to second-hand clothing, many of those interviewed in this group showed interest for branded secondhand items. Some interviewees already had experience in searching for specific branded items of online second-hand platforms, whilst others felt that they would consider this as a possible alternative. Primarily the main motivator, however, was the lower price. One interviewee, who did not actively purchase second-hand clothing, admitted that he would be interested in a second-hand store which carried branded items, or would at least have a 'look.' Branded items may therefore help to entice first time second-hand consumers to at least consider second- hand as a possible alternative.

For second-hand to be appealing, the items had to be seen to be in good condition and at a low price. In addition, knowing that the item had been in little use or still contained labels was also another motivator for purchasing it.

Deals & Sales Campaigns

Offers, deals and sales campaigns were seen as important touchpoint through which interviewees would become interested in browsing websites or entering stores. Some interviewees would actively keep an eye on sales and deals, especially in terms of needed items, and base their shopping process on these. Others admitted that deals and sales tend to trigger impulse purchases, especially if the deal or sale is 'exciting' enough or would at least entice















them to browse sales items even if the sale did not target their needed clothing item. In addition, gift cards were regarded as needing to be used or taken advantage of, so these directed where the interviewee shopped or what they purchased it, regardless of need.

1.2 Service Related

Convenience

One interviewee identified that her ability to easily use shopping apps, made here more likely to purchase items. This convenience and instant purchase process drives her frequency and volume of consumption. In addition, for a few of the interviewees, their easy access to clothing repair services, whether this is professional or the help of a relative, made them willing to use such services.

Aesthetics, Organisation & Store Reputation

Similar to the interviewees from the other two groups, these interviewees also placed high importance on the organisation and lay out of clothing stores. In consideration to second-hand clothing stores, one interviewee highlighted the need for these stores to replicate features from brand outlets, including the manner clothes are organised and styled, as this would make second-hand stores more appealing.

Second-hand stores, both online or offline, should be recognised as having good reputation as this also helps to guarantee the quality of the product and the feeling of security in using the service. One interviewee highlighted that better marketing and advertisement of second-hand would encourage its use more, as would the store having updated and active social media pages.

In addition, the aesthetics for second-hand stores received some support from one interviewee. This interviewee enjoyed the more 'homely' feel of second-hand stores and also the dim lighting. This interviewee was pleased by the cosier atmosphere in second-hand stores and like the fact that they had their own feel which was not as artificial as regular clothing stores. Furthermore, the shopping experience or 'treasure hunting' aspect of second-hand stores was something unique and special. In contrast, for other interviewees, more modern aesthetics were more enticing, with one interviewee mentioning they would be more interested in trying second-hand if the second-hand shops looked and felt like regular clothing stores.

Some interviewees also did highlight that they did feel second-hand to be useful and a positive concept and did support family and friends who purchase second-hand clothing. However, whilst there was support or initial motivations for trying second-hand clothing, there were also interviewees in this group who did not see themselves purchasing second-hand in the future, regardless of there being quality assurance or modern aesthetics.

Online & Brick & Mortar Shopping

Similar findings were identified in terms of preferences for online and offline shopping. The lack of physical shops meant that online shopping was preferred, alongside the wider range and selection and the general convenience of the purchase process. Online shopping was also viewed to provide cheaper prices as it was easier to compare prices and also follow sales and deals. Online was also seen as a convenient place to start the initial shopping process, by many, even those who preferred to shop offline. Easy pick up and return processes also made online shopping more appealing.

However, for others physical stores still provided more security, as it allowed for interviewees to try items on. Whilst some would start this search online, they would check the sites of physical stores so that they would be able to go and see and try the items on. In addition, physical stores brough more instant gratification for many as opposed to having to wait for an extended period of time before being able to even try the item on, and at that point still being unsure if it was suitable.















Security

Aspects of security were equally important in this group of interviewees as within the other two. An easy refund option, especially when purchasing online was important for many. This was also seen as an issue on regards to second-hand items, as many felt purchasing new items were more secure. New clothing items were more likely to be more durable and of better quality since they had been unused. In addition, if the clothing item does break, it is easy to get refunded for this item if purchased new.

Brand familiarity and accurate depictions of the clothing items were also seen as points of security for some of the interviewees. Brand familiarity provided confidence towards the item, as the interviewee knew what to expect in terms of sizing and also quality. In addition, the use of models and several pictures to showcase the clothing item online, was seen as important.

For one interviewee, the store itself operating in domestically was another important aspect. Whilst the interviewee was aware the product itself may not be produced in domestically, she felt surer knowing there was a physical store operating in the same country in case of any issues.

1.3 Societal Related

<u>Sustainability & Responsible Consumption</u>

A few of the interviewees highlighted that they had knowledge and awareness of some of the ethical and sustainability issues plaguing the textile industry, and this knowledge did ignite feelings of guilt over their consumption habits. Some interviewees admitted that ethics did make them question their consumption choices and behaviour, and was an aspect which crossed their mind, but had not currently acted on these feelings.

Media, Friends & Family, Social Situations

Similar to the interviewees in the other two groups, external influences also impacted motivations for purchase choices and habits.

Some of the interviewees had family and friends who were active in purchasing second-hand clothing, and this exposure was identified as being a form of encouragement for the interviewees to potentially also buy second-hand clothing in the future. It provided a sense of familiarity and also confidence, due to the positive experiences of others. For some, their friends or family were responsible for their first experiences in trying second-hand clothing, and for some this experience provided the, with a positive influence on their opinions of second-hand clothing.

In contrast, for others, who also had family members who regularly shopped second-hand, this did not impact their own opinions of second-hand and did not feel the need to buy second-hand clothes also. However, friends and family did have an influence in other shopping habits or choices, such as choosing more sustainable brands, or re-thinking consumption frequency. Even if clothes were not identified as an important topic of conversations, interviewees highlighted that they would actively look at the types of clothes worn by their friends and would also replicate certain looks or buy similar items. One interviewee highlighted, that special finds would however be openly spoken about with friends and family.

A few of the interviewees highlighted that their own shopping choices were not impacted by changes in fashion trends. These interviewees had their own style which they would follow, and although they highlighted that they would look at what others wear and adverts, they did not feel they were directly influenced. However, for others, fashion trends were an important influencer, and provided interviewees, who actively followed fashion on social media, with new style ideas and this was highlighted as being important to them.

Other external influencers included social pressure, such as gift culture which is related to certain holidays such as Christmas. One interviewee mentioned that although she feels guilty about the volume of clothes she purchases during Christmas, she feels it is a necessity to do so. In addition, need to wear and buy certain types of clothing for certain events or environments such as work. Such events would even make some interviewees feel the need to purchase new items even if they owned suitable options already in their wardrobe.















GROUP C: BARRIERS

2.1 Product Related

Pricing

Barriers identified in this group included the rising prices of clothes in general, especially more ethical or sustainable choices. Rising prices make cheaper options seem more attractive, but interviewees felt that second- hand items were in general overpriced. The labour and effort of buying second-hand clothing was not seen to be worthwhile, where there were cheaper options, especially with deals and sales campaigns.

Low Quality

Second-hand stores were viewed as having bad conditioned clothes and this lack of quality control makes second- hand stores seem unappealing.

In regard to regular clothing stores, the decreasing quality of clothes was mentioned as being an issue. The constant advertisement and demand for new styles and trends, was seen as putting a strain on the market where the industry was unable to keep up with demand, so quality was being sacrificed.

Hygiene

Concerns over hygiene were also identified is acting a barrier towards purchasing second-hand items. There is fear of parasites such as lice, making second-hand items unappealing, alongside issues with a certain 'smell' that is often associated with second-hand clothing. Even when quality items are found, it was highlighted that it was more appealing if it was guaranteed that the item had not been worn often. Exposure to bad conditioned second-hand clothes or lack of overall quality control, make the other 'quality' clothes also seem less appealing.

Uncertainty of Second-Hand clothing

Security was identified as a big motivator and driver for many interviewees when purchasing clothing items especially online. Sizing was described by many as often being inaccurate and there was sometimes a need to purchase one item in two different sizes. Returns were also common due to items purchased online to being the right size.

Pictures online can often be deceiving, but buying from larger companies provided some interviewees with a level of confidence as they knew they should be able to return the item easily. Lack of quality control or easy returns was associated with second-hand clothing and therefore reduced feelings of security. Second-hand items were seen to have a level of uncertainty about them, as there was no guarantee on how well items had been taken care of by their previous owner, so their quality and durability were questionable.

2.2 Service Related

Limited Selection & Availability

Finding right sizes in second-hand stores had been seen as point of frustration by some of the interviewees. Whilst some flet that larger sizes were not easy to find, others felt that in between sizes were also limited. Some interviewees explained having had feelings of frustration after finding second-hand clothing items which they liked,















only to realise that they were not in their size. The effort needed to find suitable items but with more limitations in terms of size, made the second-hand shopping experience frustrating.

The unique styles of some interviewees also made it difficult for them to find suitable items second-hand, again due to the lack of choice and selection. This was especially highlighted regarding men's clothing, where the availability and selection was seen to be even more limited.

In contrast, another interviewee highlighted that the extensive range of choice and different styles in second-hand stores or second-hand online platforms was overwhelming and made browsing too daunting. Whilst online second- hand stores could provide a form of opportunity to find unique items and more sizes, they can also be unfunctional due to the expansive range of individual items needing to be browsed through.

Access to Modern Second-Hand Stores

The differing range of second-hand stores and their varying degree of quality can create a barrier for first time buyers. A lack of access to modern or high-quality second-hand stores in the area can impact upon the impression consumers have of all second-hand stores in general. In many cases, second-hand stores are placed in the same category as one another, despite them being owned by different people, operating independently from each other, and varying largely in terms of layout, organisation and quality.

Convenience

Fast paced lifestyles and the increasing convenience of buying clothes, especially online, made the more laborious act of buying second-hand items less appealing. Online clothing stores have made purchase process so quick and easy, that this was seen to have increased impulse purchases in general.

Familiar Consumption Habits

Interviewees highlighted how consumption habits and expectations were difficult to break or alter. Buying second- hand clothing requires certain expectations to be altered as the shopping process is different to that of regular clothing stores. This was seen as a significant barrier, especially for first time users and potential buyers. Some were 'sacred' of buying second-hand as had not found many appealing items before, and even after having browsed and potentially found good items, they had not felt confident enough to do so. In addition, for some interviewees brand familiarity was important especially when purchasing online. This meant they were more likely to have brand loyalty and less reluctant to step away from certain stores.

2.3 Societal Related

<u>Marketing</u>

Better advertisement and marketing of second-hand items would attract more interest. The constant advertising experienced regarding regular stores is hard to ignore by many and essentially impacts upon the consumption behavior and choices.

Social Pressure

Social pressure of young people was identified by one interviewee as driving certain shopping choices. Some interviewees felt that young people found it difficult to 'not fit in' and were easily targeted if they did. This meant purchasing the right clothes for children, clothes which are currently on trend, as important. Feels that children from wealthier families set the standard in schools by buying expensive and branded items, making it a burden for less wealthier families to up-keep with these standards.















Transparency

Similar to the other two groups, interviewees form this groups also found it difficult to trust ethical claims, sustainability labels or claims of quality and durability. Brands were not seen as always equating to quality and neither were higher prices. However, many found it had to know if what they had purchased truly was more sustainable or ethical and real transparency was regarded as a need.















DATA VIZUALIZATION

Consumer personas

Sanna Antola & Salla Kuuluvainen







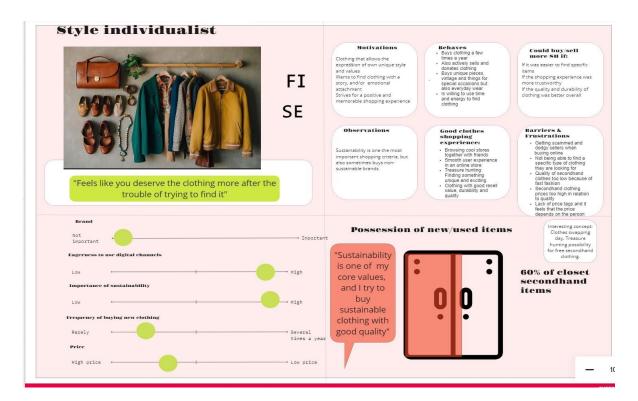




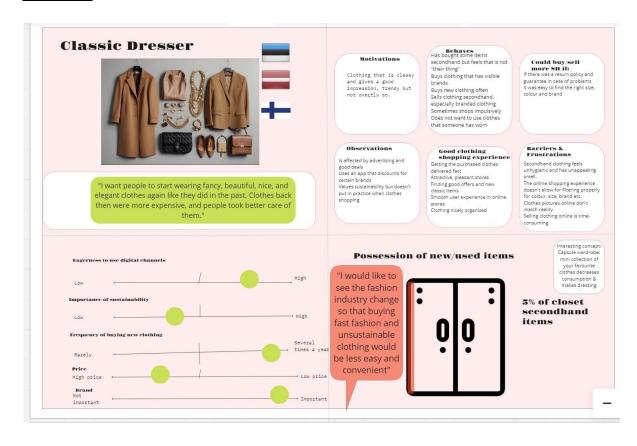




Persona 1



Persona 2









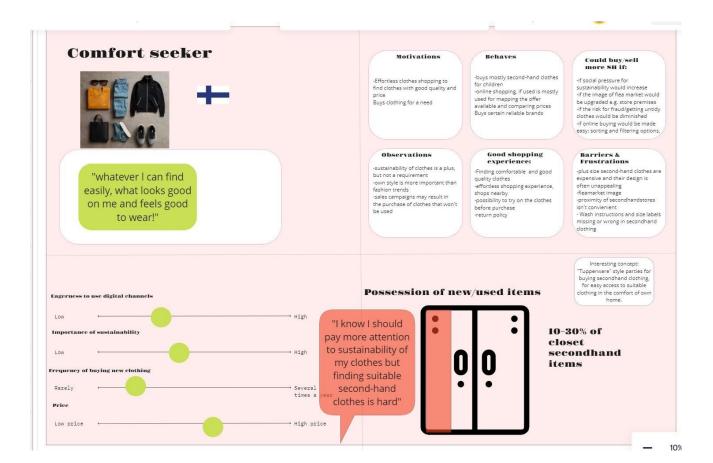








Persona 3







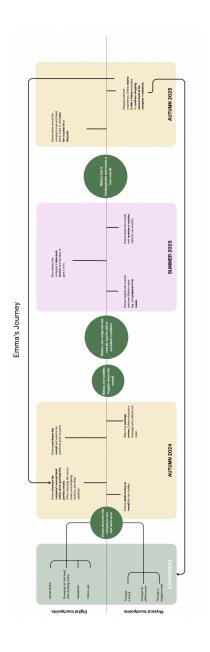






Customer journey map

Raquel Alonso

















Other service design visualizations

Sanna Antola

















1.Store combining 2nd hand and sustainable brands

A store where you can easily buy new and old clothes at the same time to make the best wardrobe for you.

Offer selections from 3-5 brands with 2ndH and new items in "balance".

Near produced. Buy back the products from the same brands.

Dressing guidance service: Recommendations/ ideas to mix and match new and 2ndH.

Online shop

Traditional shop

3-5 selected new item brands

Local, sustainable and ethical brands, no limits

Also 2nd hand selection is curated to the same brands as new clothes













2.Digital wardrobe

Digital wardrobe

Virtual solutions for individual's clothing management.

Ideas to reuse, extend the lifecycle of textiles, upcycle and find the best solutions in every case.

Try on clothes virtually (virtual mirror) with a digital twin from own body

Connection to other people's wardrobes for swapping suggestions

Users rate the clothes based on their quality and the data is visible with new products.

New clothe suggestions from 2nd hand retailers to fit ones wardrobe

Al usage in optimizing the service

Digital Product Passport connection

Styling service, teaching to mix clothes

Counting how many times the clothes are in use















3.Gamification

Gamification of responsible consuming

Educational and fun mobile game to learn sustainable ways to consume specially through textiles.

Ideas to reuse, extend the lifecycle of textiles, upcycle and find the best solutions in every case.

Easily connected to virtual wardrobe concept

Educates on how to care, repair and upcycle owned clothes.

Collecting sustainability points and following the progress

Sharing the results with gaming community

Enjoyable game, easy to use

Digital Product Passport connection













4. Sustainable fashion show

Sustainable fashion show

Part of or during fashion weeks (or similar events) to promote 2ndH clothing and up-cycled products. Including a platform for marketing 2ndH products.

Additional element: to include an online auction for the presented items.

- -to increase sales of 2ndH sell more items / full outfits in short time
- -to increase sales at nearby market regions
- -increase awareness, interest & hype

Live-stream from one location

Event can take place in a selected shop.

A follow up promotions in all the stores.

Collaboration together with various brands / companies

Collaboration with fashion and textile schools, designers, influencers etc.

Cross-border collaboration easily possible

Items in the fashion show either local and sustainable or 2nd hand

Can be connected to repair or upcycle services













5.Repairing services

Repairing services

Services available for customers to make it easier to lengthen the lifecycle of clothes.

Could afford valuable data for the manufacturers.

Repair service offered by the brand by inhouse tailors

Repair service offered by the brands, collaboration with local tailors

Mandatory repair service via legistlation

Digital Product Passport connecting repair information to every garment

Repair services collected to an interactive map

Tips and guidelines for repair, maintain and upcycle collected for the customer to DIY

Trendy repair items and patches to apply to the clothes

Tailoring services in 2nd had shop to quick fixies.













Ideas for collecting textiles















6. Digital platform for textile waste collection

Textile waste collection platform with transport

This digital platform enables consumers and companies to schedule and manage the collection of the textile waste and resale items and streamlining the recycling process.

Target group: Households and companies.

Integrated platform with Wolt / Bolt for pick up and transport

Sorting expertise in partnership with charity shop or recycle center

> Local or cross-border partnerships

The service network offers incentives like discounts and highlight the environmental benefits

Recyclable materials are sold for processing, usable items are sold in 2ndhand













7. Circulating rooms and Textile Tuesdays

Textile circulating rooms and Textile Tuesdays

A centralized collection point and area easily available in the shopping mall.

The collection point is run by several organizations together, concentrating in different textile streams. Area consists containers for recycle, donate to charity and resell with reuse company.

In more rural areas, the collection happens in post office, supermarket or other convenient place once a month or once a week and is called e.g. Textile Tuesday.

Easy for customer who can donate everything at one place

Every textile collector gets what is the most valuable for them

On Textile Tuesdays there would be company representative to take items for resale, guide and educate.

Educative theme days during the year at Textile Tuesdays

Textile Tuesdays can be also swapping or resale events













8.Intelligent collection bins

Easy collaborative collection - intelligent bins

A collection system that is planned to handle all possible variants of used textiles with "intelligent bins".

These bins help consumer to recycle/sort to the right bins.

Helps the work of sorting companies. Supports the implementation of separate collection directive.

Very clear and visual labels on the containers (nudging). E.g. resell clothes, waste, shoes or per material

Integrated with informative website/app.

After emptied these materials would be re-checked and taken to different companies for resell / material

Sensors to alarm collector when becoming full.

Educational campaign to help the collection in the beginning





























9.Zero Waste Concept

Zero waste wardrobe concept guarantees to minimize textile **waste 100%** by lengthening the lifecycles, avoiding excess stock and finally guaranteeing to recycle worn out items to textile re-processing companies.

Company concept

Production only on demand

Take back system

Repair services

Durable, pure materials that can be re-processed finally as materials

Concept for many brands to join, logo identifying the products

Concept for a new brand

Showroom for testing, no instant buying possibility













10.Cloth rental service for travellers

Luxury, designer and local cloth & bag rental service for travelers

An option to rent outfits for special needs.

The concept tackles sustainability issues like travelling with luggage. It decreases waste in form of not need to buy cloths needed very seldom.

Target group:

- -business people travelling a lot & lightly (convenience)
- -needs for special occasions like evening galas
- -seasonal travelling needs: winter clothes

Order online & pick- up from "pop-up" location

Service available at airports and hotels

Rental company offers the rental service and selection and hotel/ airport offers the pick-up service.

Selection of luxury and local brands

Clothes that are suitable for the local weather

Can be offered at different markets as well. E.g. Stockmann operates in Finland, Estonia and Latvia.













11.Secondhand marketing campaign

Marketing campaign for 2nd hand

Increase the awareness of consumers to make reused clothes more acceptable.

Targeted to people who usually don't buy 2nd hand.

Aim is to lengthen the lifecycle of clothes and increase reuse.

Shares the understanding and strengthens the collaboration among different 2nd hand operators

Joint campaign of many 2nd hand brands

Highlight the environmental impacts saved when lengthening the lifecycle

Highlight the uniqueness of 2nd hand items: treasures

Share the stories behind clothes

Can concentrate on certain materials or certain type of clothes at the time

Easily connectable to launching new EU legislations concerning textiles and waste















12. Sales of repair materials

Sales corner for repair kits & materials

A repair supplies area inside a 2ndH cloth store allows customers to purchase supplies together with 2H clothes to customize and personalize them.

This can boost the sales of 2H items as well.

The "corner" can be offered by the same company or alternatively as "shop in shop" collaboration with another entrepreneur.

An assortment of repair products and kits.

Trendy repair items to be applied on the clothes. E.g. patches, pockets, buttons, metals parts.

Co-operation with branded companies like FabPatch, yarn manufacturers etc but also local artisans for individual style.

Occasional events and workshops around the cloth tuning. Sew, print patterns etc.

Links to the repair video by QR codes.

Sewing machines to be rented on the spot or to homes.

Possible service also on a digital platform.











