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Factors Influencing the Demand for Aftermarket Services -

A case study of a shoe manufacturing and retailing firm

Master's thesis in Management and Economics of Innovation

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CHALMERS UNIVERSITY OF TECHNOLOGY
Gothenburg, Sweden 2022
www.chalmers.se
Report No. E2022:105

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Cover:

Illustration on cover page is provided by Icebug Press and Media Images, it shows the sometimes extreme usage that shoes are put through.

Gothenburg, Sweden 2022

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SUMMARY

The trend for sustainability and circular economy are currently changing the clothing and apparel industry. By implementing business models profiting on the reuse phase of the products, circularity and business growth can be combined. But in order to succeed with this, the services provided in the aftermarket must be based on the demands from customers. This study investigates which factors influence the demand for aftermarket services in the clothing and apparel industry. This was investigated through a survey sent out to general consumers of shoes and the customers of the company Icebug's high quality grip shoes. The results showed that there is a general reluctance towards using shoes second-hand, and six factors could be derived as to why; preference for hygiene and comfort, transparency of the user chain, preference for owning the shoes, frequency of usage, area of usage and the cost of the service. The thesis discusses how these factors influence the demand for aftermarket services, and are developed around the case company Icebug's operations. The study hence contributes both empirically and in practice, through the implication for practitioners.

Keywords: Circular Economy, Aftermarket Services, Business Model development, Clothing and Apparel Industry, the shoe market, reuse of shoes, customer demand.

ACKNOWLEDGEMENTS

This study has been conducted in collaboration with the company Icebug, and I would like to direct a thank you to the company for this opportunity. It has been most interesting investigating a business with such a direct impact on both customers and the environment. It has also been inspiring to have witnessed the efforts Icebug makes to change the sustainability in a heavily environmentally questioned business.

A special thanks to my supervisor Mariell Bjuhr at Icebug, who provided me with both stimulating conversations, contacts and inputs throughout my work during this spring.

This master thesis could not have been done without my supervisor from Chalmers, Karolin Sjöö. She always kept me going, pushing me to investigate further. But above all she made me enjoy writing this thesis, and I always walked away from our meetings with renewed energy.

And of course, my eternal gratefulness to family and friends, who has been my support throughout my entire study time at Chalmers.

Thank you,
Malin Jonsson
June 2022

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SHORTENINGS USED

B2B	Business to Business
B2C	Business to Consumer
BM	Business Model
C&A	Clothing and Apparel
CE	Circular Economy
CLSC	Closed Loop Supply Chain
EOL	End of Life
OEM	Original Equipment Manufacturer
PSS	Product Service System
RDM	Redistributed Manufacturing
SC	Supply Chain
SH	Second-Hand
T&A	Textile and Apparel

1 Introduction

1.1 Sustainable pressures and an unknown aftermarket

Over the last decades, consumption levels within the clothing and apparel (C&A) industry have increased. This has been driven by fast fashion, and low utilization of resources (Koszewska, 2019), (Rosling, Rosling, & Rosling, 2018). Fast fashion, characterised by high volumes and low margins, has led to high impact on the environment. With limited or absent structures for recycling of products, the industry has been one of the highest contributors to landfill and burnable waste (Ellen MacArthur Foundation, 2022). The industry is also currently questioned for its extensive role in the global warming (Kucera & Neurath, 2021), (Ellen MacArthur Foundation, 2022). A shift is however occurring, through the enhanced focus on circular economy (CE). CE means developing the economy based on three principles, eliminating pollution and waste, circulate products and materials, and finally regenerate nature (Ellen MacArthur Foundation, 2022). The ultimate goal of CE is to decouple economic growth and environmental dependence (Ghisellini, Cialani, & Ulgiati, 2016). As previous literature regarding the C&A industry mainly researches the possibilities of making established Business Models (BM's) and processes sustainable, there is a lack of information on how aftermarket services can create CE (Bouzon & Govindan, 2015), (Blackburn, Guide, Souza, & Van Wassenhove, 2004), (Korhonen, Honkasalo, & Seppälä, 2017). This study aims to contribute on enlightening the meaning of customer's preferences and demands when creating CE in the C&A industry, and not only considering the operational side. Refurbishing and recovery of clothes and shoes after usage are not sufficiently investigated on today's market. Neither are the reuse possibilities of C&A, i.e. the attitudes for second-hand (SH) usage of the products. These attitudes and demands for SH usage of shoes are also unexplored by literature. Therefore, the customers' demands in the aftermarket will be investigated in this study.

Previous research shows that there eventually exists more products in circulation on the market, than sold new annually, especially for durable goods. This is the case according to research about the aftermarket in the automotive industry (Waldman, 2003). The potential value in the aftermarket is therefore growing over time and is often hidden and untapped. This creates a need for investigating the demand of aftermarket services corresponding with the products. Especially if the circularity in the business is to be further developed. This applies to the C&A industry as well. The definition of aftermarket services is activities adding value during the usage phase of a product (Grönroos, 1990). Current literature describes how pressures for exploring the aftermarket are now erupting from multiple directions (Bouzon & Govindan, 2015), (Koszewska, 2019). New companies in the industry are starting to focus on providing BMs for reuse of C&A. This puts competitive pressure on established companies. The pressure for circularity and sustainability also erupts from societal trends, as customers become more aware of their environmental footprint. The governmental pressure for sustainable development is also forcing companies to evaluate their strategies and growth options, as legislations such as the Paris Agreement come in place (UNFCCC, 2022). But the literature fails to explain how to answer to these pressures, and how to best develop businesses in the aftermarket. The study aims to contribute to this, by displaying how a C&A company can design processes based on demand in the aftermarket.

In addition to the sustainability trend, demands from consumers are increasing to modernise offers and services around the products. Digitalisation offers more possibilities of designing BMs for companies to leverage on their products even further than just at one point of sale. Simultaneously they can continue a closer relation with the customers over a longer period.

There is an ongoing trend of servitization of product based BMs. Previous research displays how providing services with the product soon not only will be appreciated, but expected (Baines & Lightfoot, 2014), (Porter & Heppelmann, 2014). Companies are using servitization of products to differentiate themselves (Porter & Heppelmann, 2014). This previous research applies mainly for B2B situations, and the servitization of B2C solutions is not covered in literature to the same extent. Therefore this study aims to contribute to display how servitization and exploitation of the aftermarket can be possible in the B2C market as well.

There are currently only limited structures for EOL management of C&A products. The structures for product recovery that exist are not recycling all the materials in the collected products. Examples of available take back solutions are municipalities' recycling centres (Tekniska Verken, Linköping, 2022) or organisations for second-hand (SH) (Myrorna). In today's SH organisations, a lot of items collected are still thrown away. The quality of many SH products is too bad to reuse, and instead they end up in burnable waste, or in landfills (Ellen MacArthur Foundation, 2022). This only applies for the products actually collected. Only about 3kgs out of 8kgs of used textiles per person are recovered annually in Sweden (Bouzon & Govindan, 2015). The rest is stored by consumers or ends up in landfills or burnable waste (Bjuhr & Wargsjö, 2017). Of the products stored at home, research suggests that people spend little time on refurbishing and taking care of clothes and shoes at home (Bjuhr & Wargsjö, 2017). Getting customers to further use the scarcely available recycling and refurbishing services is crucial. Previous literature explains how a customer centric focus is needed when entering the aftermarket and delivering services (Grönroos, 1990) (Baines & Lightfoot, 2014). Further aftermarket structures for these activities need to be developed and have to be based on customer's preferences. Therefore, there is a need for mapping the demand for aftermarket services. High performing services in the aftermarket can be developed through adaptation to customers' demand, but only if the demands are known. Therefore the following research question will be answered in the report:

Which factors influence the demands for aftermarket services in the shoe industry?

Servitization of products has been investigated in the B2B market, but this study displays how the service concept can be developed in the B2C industry as well. The study aims to enlighten the meaning of customer's preferences and demands when developing CE and aftermarket services, since mostly the operational side has been investigated so far. It also aims to contribute to actual conceptualisation of methods to fulfil the increasing requirements for CE in the C&A industry. This will be displayed in the implications for practitioners – section.

The study results in six factors influencing the demand for aftermarket services. By applying the this empirical result to the case study, the practical usage of the findings can be displayed. The case company Icebug's small size and niche products sets prerequisites on the development of services, and the results and strategy development are adapted to this. The purpose with the implications for practitioners, is to show how the factors can be developed and adapted into a strategy. The results may be implemented on generic shoe manufacturing firms or contribute to developing demanded services around shoes. The study can also be used to describe the shoe specific consumer usage patterns, and how these usage patterns are connected to demands in the business. By investigating the suitability for aftermarket monetization in the shoe industry, more C&A actors may follow this path, and a more sustainable consumption of C&A can be developed.

1.2 Report Structure

The report is structured as follows. Chapter 2 presents a theoretical framework which explains the current literature and research on factors affecting purchase and demand within C&A industry. Chapter 3 explains the method used in the study is presented and the data analysis method explained. The case company used for reference point to the identified factors in the study is presented in Chapter 4. The results from the study, and the identified factors which affects the demand for aftermarket services, are presented in chapter 5. A discussion on how this can be interpreted and developed are raised in chapter 6. A final summarizing conclusion ends the report in chapter 7.

2 Exploring new options of aftermarket services

This chapter describes current literature on aftermarket services, and how they can create CE in the C&A business. The importance of using customer centric focus when developing services leads to further deepening of what affects the customer's demand in aftermarket services. Factors that literature has described as influence the demand of a product are therefore lifted. The demand after initial point of sale has not yet been thoroughly investigated in the C&A industry by literature. Therefore, connections of findings from other industries and from the product's production phase are made to the C&A industry and its aftermarket. The factors presented in this section sets the main reference point to later discussion of the results regarding the aftermarket.

2.1 Developing business models for aftermarket services

Changes in current BMs are currently undertaken, in order to achieve more circularity. Ghisellini, Cialani and Ulgiati (2016) describes this through how companies' strategies for sustainability often are based upon clean production (CP) or design for environment (DFE). But these are mainly efforts for sustainability in already existing processes, and may still stimulate high consumption volumes and non-circular flows. Radically changing the entire BM for profiting on reusage, refurbishing and recycling instead, are larger steps to take. New technologies goes hand in hand with extended control and monitoring – creating opportunities for adding service around products (Porter & Heppelmann, 2014). Technology, services and CE can be used together. One example of this is the Shoe Lab (The Shoe Lab, 2022). Their business idea is to collect old shoes and fix them up, using digitalisation to gather user data while doing so, and simultaneously contributing to less consumption (Moreno, et al., 2017). Another example is the shoe company On's new leasing model of remanufactured previously worn shoes (On, 2022). These examples of BMs shows how sharing economy are entering the shoe businesses, where the product previously has been directed towards personal use and ownership.

An interdisciplinary lens is important to use when addressing service challenges, as multiple aspects of the product are involved and several actors are engaged (Ostrom, et al., 2010). CE affects activities throughout the entire value chain, but an important step of it regards the aftermarket. In the aftermarket of today's current products activities such as Product recovery, Reverse Logistics, and EOL management needs to be implemented to create CE (Bouzon & Govindan, 2015). Remanufacturing of the previously used products and Open Systems with Collaboration across the value chain and across different industries, are the next activities required to achieve Closed Loop Supply Chains (CLSC) and EOL management (Blackburn, Guide, Souza, & Van Wassenhove, 2004). Changed consumer behaviour is also an important "activity" in CE (Korhonen, Honkasalo, & Seppälä, 2017). When implementing this multifaceted perspective to CE the OEM's role and knowledge of the products becomes a major competitive advantage when it comes to designing the activities around the product (Wynstra, Spring, & Schoenherr, 2015). But collaboration with the actors closer to the consumer's usage of the product is still required for the aftermarket services to succeed.

For clarifying purposes, the mentioned aftermarket actions are presented in the Table 1 below. The activities can be used to make current established BMs circular and more sustainable, but would in most cases entail the development of aftermarket services. Specifically for the shoe industry, the activities can mean services such as; take-back structures of shoes, mending stations and opportunities of worn shoes, collaboration between shoe sellers, cobblers or material recyclers, and new models of providing shoes to the consumers.

Table 1: Examples of activities from literature, that creates CE during the usage phase in already established BMs.

Examples of activities creating CE in already established BMs
Remanufacturing
Open systems with collaborations
Product recovery
Reverse logistics
Closed loop supply chains
EOL management
Changed consumer behaviour

2.1.1 Aftermarket services can create CE

Services is a growingly important part of the society's economy (Ostrom, et al., 2010) and so is CE (Ellen MacArthur Foundation, 2022). As business models previously have relied on economies of scale for profitability they are not sustainable (Moreno, et al., 2017). Instead, services implemented around products and a shift to a profit-on-reusage mindset, could contribute to the future green industries. Complementary goods with high quality and low prices makes the primary product higher sought-after (Shapiro & Teece, 1994), and exploring the aftermarket could therefore generate new profits for the company. New business models based on advancing technologies can create alternatives to the linear product flows established today. These new BMs can create substitutes for product ownership through product as a service and shared economies alternatives (Porter & Heppelmann, 2014). The lack of asset ownership transfer is increasing the opportunities to reusage, and creates a more sustainable approach to how value is created (Baines, et al., 2007). The theory of the customer as the value creator (Grönroos, 1990), is highly applicable to CE implementation as much of the reuse and recycle efforts can be made by the customers themselves. By adding services to a product, one can extend its lifecycle, refurbish the materials and minimise waste – all established processes and goals within CE (Ellen MacArthur Foundation, 2022). Services of the existing products on the market does not only contribute to the value proposition, it is a necessary development of the products in order to achieve CE. Through aftermarket services, a strengthened brand distinctiveness and prestige can be achieved (Donovan, Janda, & Maxham III, 2015). A strong brand also increases the willingness from other actors in the industry to cooperate and collaborate. Cooperation and integration with partners and other actors in the SC network are crucial for smaller companies when developing circularity and aftermarket services (Bouzon & Govindan, 2015).

The strengthened relationship between user and manufacturer that services creates, goes hand in hand with what CE requires to function (Moreno, et al., 2017). The increased interaction is necessary to understand the user's problems and barriers towards using return and recycling services. In conclusion, service perspective could be used to build CE on traditional BMs. But also to highlight the consumers' perspective on the processes through the close interactions and cooperation's that service provision entails.

2.1.2 Understanding the customer when developing services

Companies in the C&A industry are leveraging their sustainability as a competitive advantage, and methods for green production is advancing within the field. But as the processes are designed with the companies' profitability in first priority (Waldman, 2003), the user

appropriation is lagging, and the processes are not adapted in the same rate that they are generated. As Grönroos (1990) describes, in the joint sphere where the service is created, the customer is equally contributing to delivering the value as the service provider (Grönroos, 1990). This displays furthermore the importance on designing customer appropriate processes. Hence, when the customer centric focus is lost, there is a risk that companies are establishing processes that are not being used. The result may be that the lack of usage of existing structures and services, are interpreted as lack of demand for aftermarket solutions.

Through their cocreation of service, the consumer plays a vital role in the Textile and Apparel (T&A) industry. Customers are currently responsible for the use phase activities in the product's life cycle (Koszewska, 2019). This includes later stages of activities in the CE value chain, such as product recovery and EOL management. Koszewska (2019) describes how the consumers in the T&A industry stands for both a direct and indirect impact on the development of businesses. The activities therein needs to be adapted to the consumer, through their service co-creation role in the user phase (Grönroos, 1990). The consumers are also a driving mechanism for business development, through consumer awareness and pressure (Jia, Yin, Chen, & Chen, 2020). This too, strengthens the customer's influence over activities in the aftermarket (Porter M. E., 2008). In conclusion, this displays how important the shift to a customer centric focus is in the aftermarket, if the operations therein are to succeed. Something also encouraged by literature when managing aftermarket services (Lervik Olsen, Witell, & Gustafsson, 2014). In conclusion, exploring new options for value creation, aftermarket services and building for sustainability – the customer and its' demand has to be the focal point.

2.2 Aspects influencing the aftermarket in C&A industry

The value in the aftermarket is often untapped (Waldman, 2003). Reaching this value is therefore important for companies to succeed in the aftermarket, as it may create more revenue streams but also cause lock-in effects of the customers (Coppi, 2007). In order to capture the value a customer centric focus needs to be adapted in the activities. However, the demand for services or complementary products during the C&A product's usage phase are not yet thoroughly investigated. The below stated aspects are identified from literature as factors and processes which are important for designing a functional aftermarket. These aspects ultimately affects the demand for services in the aftermarket.

2.2.1 Durability and quality of product affects the need for service

According to a study of decision factors regarding a shoe purchase in Kolkata, India, the durability and quality of the shoes were the highest regarded decisive factor for consumers (Saha, Dey, & Bhattacharyya, 2010). This is in line with Cotler's marketing aspect "Product", as the quality and characteristics of the product is decisive for the perceived value (Cotler, 1964). Both these studies evaluates the durability and quality for the initial sell point, but can be applied to the demand for aftermarket services as well. Of course, the way the shoes are used and torn creates the need for mending opportunities. This is closely depending on the durability and quality of the shoe as well. Today there are a system for refurbishing in the C&A industry of independent actors, cobblers, often not vertically integrated to the original manufacturer of the shoes. Product warranty options and repair possibilities were also highly preferred in the purchasing decision study (Saha, Dey, & Bhattacharyya, 2010). These services also indicates that the durability and quality of the product is important for the customer.

2.2.2 Consumer awareness of sustainability directs the demand for services

The companies' main drivers for CE, and requirements on the processes this entails, has previously been mapped in several literature and researches. But the requirements and user demands is not mapped in the same extent, even though the customer plays a vital role for the success of implementing CE in T&A industry (Koszewska, 2019). The main drivers behind implementing reverse logistics as a step towards circularity within the clothing industry in Brazil was mapped (Bouzon & Govindan, 2015). The study displayed several drivers for the CE efforts, divided into organizational drivers, institutional drivers and customer driven pressures. Main drivers for implementing CE in the T&A industry were mapped by Jia, Yin, Chen and Chen (2020). Different categories of drivers were presented, from organizational, institutional and drivers form customer side. Organizational drivers could be employee inspiration and participation, or competitive pressure. Institutional drivers could be governmental legislations for both manufacturers and suppliers, or financial support. The customer drivers could be consumer awareness or community pressure. (Jia, Yin, Chen, & Chen, 2020).

The fast fashion has created a reality of fast disposed products within the C&A industry (Bouzon & Govindan, 2015). But a strive towards developing circularity within the industry is advancing. End of life (EOL) management and reverse logistics (RL) solutions are starting to be explored within the C&A industry. The main driver for the growth and implementation of RL and EOL management is regulatory pressure on industries, companies and customers (Bouzon & Govindan, 2015). The second most important driver is financial support for companies, when building systems and infrastructure for RL. Thirdly most important is economic stimulation of the customer side. By implementing EOL levies or financial incentives for returning products after usage, circular efforts can be facilitated (Bouzon & Govindan, 2015). The regulatory pressure is stimulated by trends for sustainable solutions from consumers and society. To summarize, this displays how consumer awareness of the sustainable trends are driving the development of aftermarket services, and therefore affecting the demand of them.

2.2.3 Customer Satisfaction in the aftermarket incentivises further demand for services

Although durability and quality were deemed the most important for a consumer when purchasing a pair of shoes, the same study displays how elements such as design, luxurious packaging and marketing still are highly considered when purchasing shoes (Saha, Dey, & Bhattacharyya, 2010). These are elements that influence the customer satisfaction to a high degree. The availability for after sale services are one of the factors stimulating the customer satisfaction the most (Saha, Dey, & Bhattacharyya, 2010). Hence, promotion of the potential aftermarket services can stimulate the demand for the product itself, and not just the services offered in the aftermarket.

Donovan, Janda and Maxham describes how customer satisfaction, brand distinctiveness, brand prestige, and aftermarket spending are all connected. The higher the brand identification is – the higher the aftermarket spending, especially for durable goods. People using the aftermarket services often becomes ambassadors for the brand. They are encouraging others to also purchase the products. As a result, the strategic importance of customer intimacy to the brand is crucial, as high brand intimacy increases the aftermarket spending. By focusing on personalised relationships and spending, along with higher regarded prestige of the brand, the customers connections to the brand are heightened (Donovan, Janda, & Maxham III, 2015). Therefore, a higher regarded brand with attended customer relationships often leads to higher customer satisfaction. A high brand integrity can create higher customer engagement among

the consumers and therefore more activity in the aftermarket. The other way around, the aftermarket provides a good way to enhance the brand image, increase the customer relationships and create touchpoints for the consumers and the products (Donovan, Janda, & Maxham III, 2015). In conclusion, the higher the customer's brand identification is, the more demand for aftermarket services there are.

The aftermarket has long been neglected for the production market, as the profitability opportunities in the aftermarket has been overlooked (Waldman, 2003), (Cohen, Agrawal, & Agrawal, 2006). This neglect has resulted in a low customer satisfaction rate in the aftermarket. The services available after sell point are not adapted to the consumers, but rather built to minimize cost and resource utilization for the companies (Cohen, Agrawal, & Agrawal, 2006). In other consumer goods industries, there is a clear link between reoccurrence of purchase and fast response rate to customer's issues (Cohen, Agrawal, & Agrawal, 2006). This suggests that high service quality in the aftermarket stimulates customer loyalty. Using MVT (marginal value of time) as a variable for evaluation, the customer satisfaction can be increased. This means that measuring how important the delay or gain on the customer's perceived value is in the aftermarket, can lead to more loyalty and purchases. The perceived value of the product and service is an important decision factor in the aftermarket, something supported by other authors as well (Blackburn, Guide, Souza, & Van Wassenhove, 2004), (Cohen, Agrawal, & Agrawal, 2006). This means that the response rate and quality of the service are more important, than delivering cheap products with no regard to the customer's usage pattern in the aftermarket. The customers' behaviours and usage of the products needs to be in focus. In conclusion, this displays how the customer satisfaction directly influences and stimulates the demand for further services in the aftermarket.

3 Case description: the company Icebug

This section describes the shoe manufacturing and retailing company of Icebug further in depth, which the findings from the study will be applied to and developed around. The case will be used to provide a reference point in the study, as it is the Case company's product and customers that the results will be related to. The case company also sets the frames and situation for the strategic development, in order to better understand the results. In the end, the case will be used as an example to provide guidelines for general practitioners in the field. This will aid in answering the research question of the thesis.

3.1.1 The company Icebug

Icebug is a company within the C&A industry and was established in 2001. They provide high quality traction footwear, a niche shoe that provides good grip in slippery conditions. The HQ is currently based outside Gothenburg, Sweden, and today there are about 35 employed at the HQ of the company. Their core values are; Quality, Grip, and the value proposition is currently fulfilled in all of these areas since they are the world first climate positive shoe manufacturing and retailing company. The company is established in many countries worldwide through resellers, and owns one concept store located in Gothenburg, Sweden. Within Sweden, Icebug has its largest customer base in the northern parts of the country, where slippery conditions and icy weather are more common.

3.1.2 The Icebug brand and customer relationship

Icebug is a company uniquely directed towards sustainability, with its close connection to the forest. They are currently tracking and measuring their carbon dioxide footprint throughout the production and logistic value chain, and using these measurements in their strategic development. Otherwise they are competing in a niche market for high performing shoes with good grip in slippery conditions. This regards both everyday shoes and work shoes for people, or special athletic competing shoes in sports such as orienteering or trail running. Icebug is providing shoes both for summer and winter, and models with and without studs. Current channels to customers are social media, email and physical events in the shape of trail running races, sponsored by the company. Icebug is perceived as a quality shoe, with high comfort and beneficial support to the body, simultaneously providing extraordinary grip (Appendix 1).

3.1.3 Current aftermarket services on the shoe market and from Icebug

The shoe industry has not been the first industry that comes to mind when thinking of close customer relationships, with low switching costs for the customers and only rare and minor services required of the product after sale. The current aftermarket in the shoe-industry in Sweden consists mainly of mending actors, (often independent), and product recovery services, such as waste collections, or second-hand and aid-organisations. Services around the shoes can however be everything from recycling opportunities, refurbishing and mending opportunities, or just new ways of providing the shoes. Examples are the emerging leasing opportunities (On, 2022) and new ways of providing clothes and shoes on (Sellpy, 2022), (Hack Your Closet, 2022), (thredUp, 2022). Some solutions for recycling have started to emerge (I:CO, 2022), (The Shoe Lab, 2022). I:CO is a company in Germany currently specializing in collecting containers of clothes from different stores and then recycling the material (I:CO, 2022). But the system is limited in size and not yet established in a larger scale. Yet remains a disrupting change in the

processes around the shoes, and innovating the usage phase within the shoe industry. This affects Icebug, as well as competing companies in the business.

Icebug today, similarly to other C&A companies on the market, has relatively few aftermarket services. A customer service division with contact opportunities for the customers, options for return and change of purchased products, and the opportunity to achieve spare studs if one is broken on the shoe, are the main offered services. Icebug has also chosen to extend the customer interaction to physical events such as trail running competitions (Backyard Trail, West Coast Trail) and communities for training (Forest Femmes - Icebug, 2022). These events provide a channel for communication and joint usage of the product (service provider and user together), but most of all it is a community that creates brand identification.

3.1.4 Challenges at Icebug

As the pressure for circularity increases, Icebug are forced to manage the EOL management of their products by themselves – as there are no current functioning systems or structures in the society or from governmental side of disassembly and recycling of shoes. This requires new capabilities and resources far outside their original activities. For a smaller company, such as Icebug, the responsibility for EOL management of the product is particularly straining. The capabilities of smaller companies are often limited compared to larger organizations. The explore-exploit trade-off often experienced in companies are harder to balance for a smaller company with limited resources (O'Reilly III & Tushman, 2011). In larger organizations divisions of the companies functions are possible, and both explore-exploit actions can be sustained simultaneously.

Another rather uniquely challenge for Icebug is its local limitations, it is first of all based in Gothenburg, with its' only physical store. The distribution of shoes are spread nationwide through primarily resellers, shoe-shops and through Icebug's web shop. This leads to limited interaction with the final consumers of the product, as in most cases the front line worker is not one in Icebug's staff, but from a reseller. Despite this, Icebug has a large customer base in northern Sweden where the winters are longer, and slippery conditions more common.

Although sustainability is important to Icebug, the efforts for circularity from the company has so far been focused to the manufacturing and design phase of the established products and processes, as is the case for most actors in the business. By using conscious materials and aiming towards only using green energy in their manufacturing facilities, the products are as circular as possible in today's standards. The impending goal for Icebug as a company would be to continue develop and lead the sustainable direction of the shoe industry by implementing reuse processes. Both for the sake of the environment, but also to strengthen the brand and competitive advantage of Icebug. Implementing a BM profiting on reuse instead of consumption multiplies the revenue streams, while achieving full circularity.

4 Method

The following section describes the method of the study. This entails developing the survey, reaching the target consumers and thereafter the process of analysing the results.

4.1 Formulation of survey

To answer the research question of the thesis, which factors influences the demand for aftermarket services in the shoe industry, a customer survey was conducted. The survey had to investigate different usage patterns and preferences for usage of shoes in order to enable conclusions of demand patterns or factors influencing the demand for aftermarket services. A large part of aftermarket services in shoe industry consists of reusage, hence the SH usage of shoes and customer's willingness to use previously worn shoes needed to be mapped. Building the survey, the programme SurveyMonkey was used. The questions were divided into three sections, one general page for information collection about the respondent, one Icebug specific page about the shoes – directed toward the customers that owned Icebug shoes previously. The third and final section aimed to map the current opinions and usage patterns of shoes, and to investigate preferences regarding potential take-back structures of shoes.

Five questions were added in the first section, with the purpose of providing general information of each respondent. The filtering information questions regarded; age, gender, current location of living, living in a city, rural area or in the countryside, and monthly salary. These filters could then be applied to compare factors and results between different target groups, to deeper understand the consumer's demand. The Icebug-specific questions in the second section were based on information the case company needed. The third section of current usage patterns and preferences were divided into four divisions for clarifying purposes: current consumer usage of shoes, current preferences of SH shoes, current preferences of structures around acquisition of shoes, and incentives for purchase.

Table 2: The different sections covered in the survey.

The outline of the survey
General information about respondent and filtering options
Icebug-specific questions
Current consumer usage of shoes
Current preferences of SH shoes
Current preferences of structures for acquisition of shoes
Incentives for purchase

4.1.1 Item construction

The complete survey with answers can be found in Appendix 1. The survey was constructed and sent out in Swedish since the thesis is limited to Sweden only. The questions will be translated to English in the thesis text, but a copy of the original survey questions can be found in the appendix.

When formulating the questions, an informal tone was used for answering alternatives in order to avoid misinterpretations. As the target group was general people of all ages, simple language had to be used in order to give every respondent the opportunity to understand. All quantitative

measuring questions in the survey were constructed using Likert-scales. What was measured in the questions and with the Likert-scales varied from “how often” something were used, to “how likely” they were to use something. Questions regarding information collection were constructed as multiple choice questions, if no positioning between options were needed from the respondents. Likert-scales in quantitative questions enabled attitude perception among the respondents. Combined with different models of shoes as options, Likert-scales-matrixes enabled a good understanding of how customer demand is varied depending on different shoe models. Open ended, qualitative questions provided deeper understanding of the consumer’s thoughts and behaviours. It gave the respondent opportunity for explaining their preferences.

Table 3 below contains all the questions in the survey, and how they are designed.

Table 3: Overview of the survey and the questions therein. The type of question is described in the column to the left.

Question Nr.	Question	Type of question
1	Where do you live? (geographically)	Single select question
2	Where do you live? (type)	Single select question
3	What gender do you identify yourself as?	Single select question
4	What do you earn in monthly salary)	Single select question, intervals
5	What age are you?	Single select question, intervals
6	Where do you buy new shoes?	Multiple choice
7	How would you prefer to get access to and use the following types of shoes?	Multiple choice matrix
8	Motivate your answers in the previous question? Why did you answer like you did?	Open ended question
9	How likely/not likely would you rent or borrow the following types of shoes?	Multiple choice matrix, Likert scale
10	What type of rental of the following shoe models would be most suitable according to you?	Multiple choice matrix
11	Would you consider renting or leasing shoes instead of buying them? Motivate your answer.	Open ended question
12	What do you usually do with your worn out shoes?	Multiple choice
13	How do you think one really/ought to do with your old worn out shoes?	Open ended question
14	Do you have shoes from Icebug?	Single select question, yes/no.
15	Why did you buy shoes from Icebug?	Multiple choice
16	How often do you use Icebug's shoes? Choose the most suitable alternative.	Single select question
17	Do your shoes have studs?	Single select question, yes/no.
18	What do you use Icebug's products for?	Multiple choice
19	Where did you buy your Icebug shoes?	Multiple choice
20	Did you know you can receive new studs and spare parts if your Icebug shoe breaks?	Single select question, yes/no.
21	Do you think you received sufficient and relevant information about care and repair opportunities of the shoes upon purchase?	Open ended question
22	What do you shop second-hand and how often?	Multiple choice matrix, Likert scale

23	Through these stores and platforms have I acquired second-hand.	Multiple choice matrix
24	Did you know that you can rent outdoor clothes, shoes and equipment in certain stores?	Single select question
25	If you responded yes in the previous question, where did you rent and where?	Open ended question
26	Do you see any problems using previously owned shoes?	Open ended question
27	Does it happen that you borrow shoes from friends? Why/why not?	Open ended question
28	Can you describe an opportunity where you have borrowed shoes from friends? Why did you do it? What type of shoe was it? How did it feel?	Open ended question
29	How likely do you borrow the following shoe models from friends?	Multiple choice matrix, Likert scale
30	What part of the shoes feels the most worn out after usage?	Open ended question
31	Have you ever ordered shoes online?	Single select question, yes/no.
32	What did you think about ordering shoes online? What were the largest concerns?	Open ended question
33	What do you think is most deterring when returning shoes ordered online?	Open ended question
34	What would you wish Icebug offered you as a customer?	Multiple choice
35	There is a system today, where you can return worn shoes and clothes in physical stores, to a discount on next purchase - have you ever seen or used this?	Open ended question
36	Are you interested in becoming a test person for Icebug?	Single select question, yes/no.

4.1.2 Validity in the study

In order to best answer the research question, which entailed mapping of the market, a customer survey had to be made. These often entails a large populations of respondents, and large data sets of information. Therefore, a survey was considered the most appropriate way to manage this (Wallén, 2011).

The survey was a combination of quantitative and qualitative questions as they complement each other, allowing both data to be collected and simultaneously diving deeper in understanding of the respondents than just a quantitative survey could do (Wallén, 2011). In order to confirm the validity of the survey, both quantitative questions were asked, and then the respondents were asked to explain their response qualitative. The questions were formulated so that the respondents first had to position themselves in a quantitative multiple options question, and then it was followed up by an open ended qualitative investigative question, to allow the respondents to motivate their position.

With the purpose of not leading the respondents to certain answers, some questions directed towards asking about the customer's current usage patterns of shoes, instead of asking about a potential imaginary situation. The main idea behind the idea is that respondents always adapt their answer to the question, and the only way to get truthful data about demand are to ask questions about current behaviours and then identify gaps for value creation as the investigator (Fitzpatrick, 2013).

In order to validate the results from each question regarding the SH usage of shoes, multiple different ways of using a shoe SH were asked about in the survey. Borrowing, renting, leasing

and purchasing SH shoes all provides different conditions or situations for using a shoe SH. By comparing the results from the different situations, a general picture of the demand for SH shoe usage could be displayed and verified. Factors influencing the demand could also be identified.

Before the survey was launched for the public a test group of seven people tried the survey to control potential unclarities and to check the validity of the questions. The results from these seven respondents were not included in the final population.

Purposive sampling were used when gathering data and finding channels to the respondents. This might have influenced the validity negatively. However, the aim of the purposive sampling was to avoid a homogenous population, and therefore might actually instead support the validity by ensuring a representative population of customers.

The case company used in the study is rather similar to other companies in the business with regards to structure, activities and revenue streams. The results can therefore be applied to general companies within the C&A industry. However, since Icebug operates in a niche market within the C&A industry the general validity of the results may be somewhat decreased. With the specific conditions and some unique features of the product, the customers answers may vary somewhat the market average. To improve the validity, general questions not only directed towards Icebug's shoes were added, and customers from several different sources reached.

4.2 Data collection methods

Purposive sampling were used when choosing the data collection channels. The data was gathered by sending out the link to the survey through Icebug's customer channels, Icebug's own Facebook. Through Icebug's channel, customers of the company's products could be reached. But in order to also reach consumers with no previous interaction or preference for Icebug's products, the author's own Facebook page were used for sending out the survey. As the author also have access to specific private groups for elite athletes in Gothenburg and Östersund in Sweden, these groups were also used as channels for posting the survey. Elite athletes' usage were interesting as they tend to wear the shoes more extremely, and might have other preferences than an average person. Therefore, three specific private groups for elite athletes were used on Facebook, one in the national athletic university association at Chalmers (RIU), the middle and long distance project in Gothenburg Athletic Association (GFIF) and also the national university for cross country skiing in Östersund. Getting access to elite athletes usage of shoes, which is more extreme than "normal users", motivated for using the author's own Facebook as a data collection method. The purposive sampling meant that the researcher of the study judged which members of the population were suitable for the study.

The survey went live 22-03-25, and closed in 22-04-12. All together 146 respondents participated in the survey, with a 85% completion rate. 68 from Icebug's channels, and 77 from the author's personal channels. 36 of the respondents were elite athletes, and 40 from the regions considered as northern Sweden. 95 of the respondents were females (66%) and 50 were men (34%). Out of the respondents 101 had Icebug shoes previously (69%), and 45 did not (31%). As a reward for completing the survey, the respondents were offered the opportunity to sign up to become test persons for Icebug's new shoes, where they get to try and keep shoes in return for answering surveys about the usage – 102/124 respondents signed up for this.

Table 4: General information about the survey's respondents

General information about the survey	
Number of respondents:	146
Completion rate:	85% (124)
Respondents from Icebug's channels:	68
Respondents from author's channels:	77
Female respondents	96
Male respondents	50
Previously owned a pair of Icebug shoes	101
Signed up to become test persons of shoes from Icebug	102

Below, a table of the monthly salary dispersion among the respondents are displayed. The filter was used when investigating the data.

Table 5: The monthly salary of the respondents.

Answer Choices	Responses	
Below 15 000	28,08%	41
Between 15 000 and 29 999 SEK	14,38%	21
Between 30 000 and 49 999 SEK	41,78%	61
Between 50 000 and 74 999 SEK	10,96%	16
Between 75 000 and 99 999 SEK	1,37%	2
Between 100 000 and 150 000 SEK	0,68%	1
Above 150 000 SEK	0,00%	0
I decline to answer	2,74%	4
TOTAL		146

Below, the age dispersion of the respondents are displayed. People of all ages, from 18 to and beyond 65 were reached. No respondents were under 18, which may indicate that this age group does not purchase the shoes themselves, but close adults do it for them.

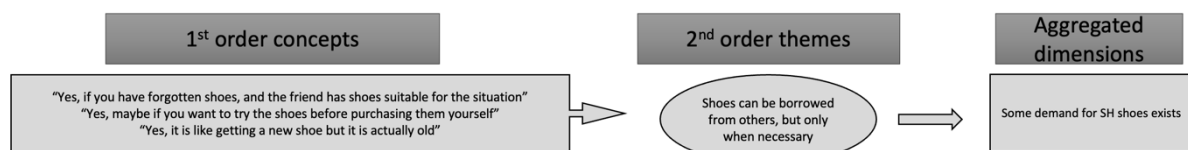
Table 6: The age of the respondents of the survey.

Answer Choices	Responses	
Under 18	0,00%	0
18-24	14,38%	21
25-34	26,99%	54
35-44	13,70%	20
45-54	18,49%	27
55-64	11,64%	17
65+	4,79%	7
TOTAL		146

4.3 Analysing the results

The survey generated both qualitative and quantitative results. Therefore, different analysis methods needed to be used. When analysing the collected qualitative data from the survey, Gioia-methodology were used. First, when starting to analyse the open-ended responses, many different categories and codes of answers were identified. In this first step, it is important to just formally note what is said by the respondent, without interpreting the result in any way as analyser (Gioia, Corley, & Hamilton, 2012). Then, the answers are conceptualised after topic. Based on similarities and differences, the answers are structured into second order themes. Little attempt is however made to sort out categories from the answers, they are mainly written down. Following, the answers are grouped after patterns, trying to answer the research question. A synthesis is drawn from the patterns, and the broader topics are distilled into aggregated dimensions (Gioia, Corley, & Hamilton, 2012). In this study, the aggregated dimensions are the final factors influencing the demand, and are presented in the result chapter. Below figure 1 displays a simplified example from the data analysis, and how the Gioia-methodology is applied to aggregate the influencing factor of demand. In the first order concepts the answers from each survey question were noted. In the second order themes broader similarities and differences from these answers identified. The aggregated dimensions that appeared for each individual questions, were sometimes reoccurring in several questions. The reoccurring dimensions were therefore the factors that mostly influenced the demand, and are presented as the factors influencing the demand for aftermarket services

Figure 1: An example of the Gioia-methodology and the usage of the qualitative answers. The question answered in this case was question 27 from the survey; "Does it happen that you borrow shoes from friends?"



For the quantitative answers SurveyMonkey's filters and programs were used, as these answers were sorted out automatically (SurveyMonkey Enterprise, 2022). After the qualitative answers had been analysed with Gioia- methodology, it was matched with the quantitative data to build the picture of the demand patterns presented below in the result chapter. From the combination of quantitative and qualitative results, clues to consumer's problems, and areas where the current market fails in delivering enough value could be found (Wallén, 2011). Thereby, lead to a result answering which factors that are influencing the demand.

5 Factors influencing the demand for aftermarket services

In this chapter the findings from the customer survey are displayed. The key insights are lifted, and significant trends displayed. As an introduction, usage data and trends of the shoe market are presented, to provide an overview of the current market. Following are the responses to the qualitative open-ended questions in the survey, with short descriptions of what these responses entails. From these questions, a more general picture and explanatory results for several of the factors could be derived. Therefore, they are presented in a separate section. From these, factors influencing the demand for aftermarket services in the shoe industry are identified and presented one by one in each following section below. Quantitative data specifically supporting a factor are presented under that resulting factor's section.

5.1 General overview of the market

First, the needs for buying new shoes were mapped among the customers. General information about current consumer behaviour were collected, as table 7 displays, the main reasons for why people buy new shoes are that the old ones are broken (66%) and disgusting (18%). This indicates that shoes are a consumption product, with an expiration date. The data also shows that physiological consideration is a popular reason (34%) for purchasing shoes. This suggests that shoes are a product with high individual adaptation and importance. That people has found shoes with new functions is also a major reason (34%) for buying new shoes. This means that the shoe market to some extent are still affected by fashion changes and developments.

Table 7: The results of survey question 6: "Why do you buy new shoes?"

Answer Choices	Responses	
The old shoes are not fresh/ disgusting	17,81%	26
The old shoes are broken/worn out	66,44%	97
The old shoes are out of style	0,00%	0
It is nice to be able to change shoes	11,64%	17
It is important and healthy to be able to change shoes	34,25%	50
I have found newer shoes, with better and other functions than my present	34,25%	50
Other (please specify):	10,27%	15
Total Respondents: 146		

The results in table 8 below describes how people would prefer to acquire different types of shoes. A majority of the respondents would prefer to buy and own the shoes for themselves, no matter what type of shoe it is. Leasing and borrowing shoes were only selected by a minority of the respondents. This initial data and insights indicates that there are no demand for SH usage of shoes. Reasons why this is the case are presented under each following section of this chapter. These reasons are also the factors influencing the demand for aftermarket services.

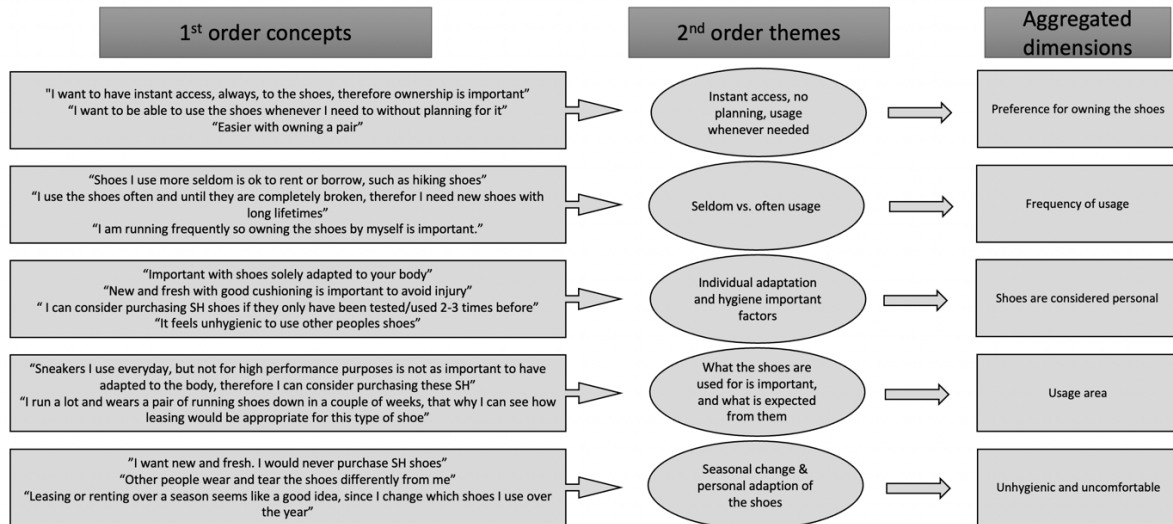
Table 8: The results from survey question 7 – “How would you prefer to acquire the following types of shoes?”.

Answer Choices	Renting	Buying new ones	Subscribe/lease	Borrow	Buy Second-Hand	I do not have usage of this model	TOTAL
Running shoes - no studs	1,37%	76,03%	5,48%	1,37%	4,11%	11,64%	146
Running shoes - with studs	10,42%	53,47%	6,94%	5,56%	3,47%	20,14%	144
Everyday sneakers	0,69%	77,24%	6,21%	2,76%	11,03%	2,07%	145
Warm winter shoe without studs	3,45%	71,72%	4,83%	2,76%	11,03%	6,21%	145
Warm winter shoe with studs	13,79%	48,28%	3,45%	6,21%	8,97%	19,31%	145
Hiking shoe	21,92%	54,79%	5,48%	5,48%	6,16%	6,16%	146

5.2 Qualitative results from the survey

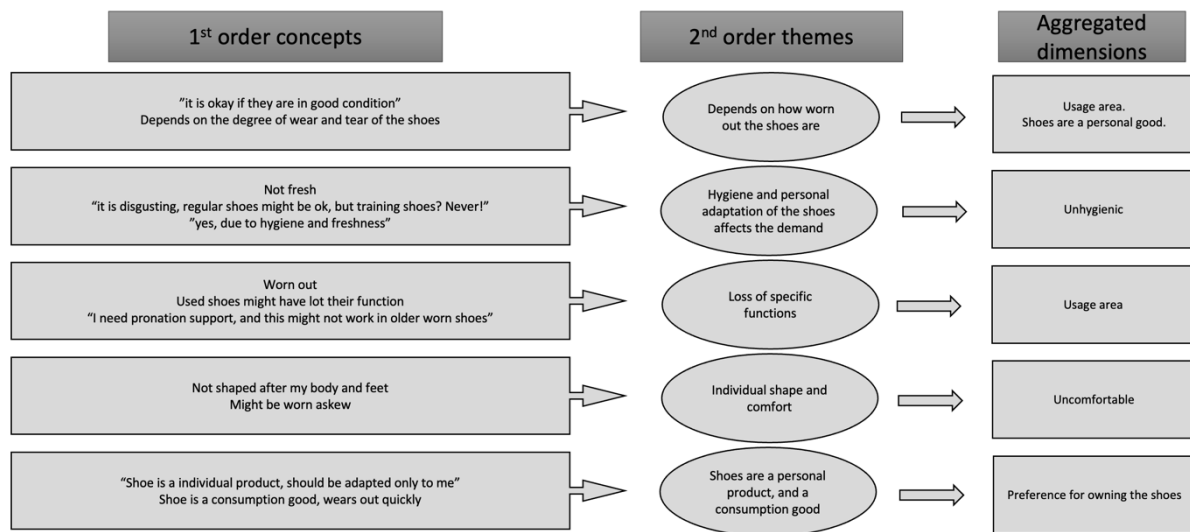
First, the respondents were asked to motivate their position regarding the preference for acquisition models of the different types of shoes. The result displayed several different aggregated dimensions of factors influencing the demand for acquisition preference; preference for owning the shoes, frequency of usage, shoes are considered personal, the usage area of the shoe and that shoes are unhygienic and uncomfortable.

Figure 2: The results from survey question 8 - "motivate your answer to question 7".



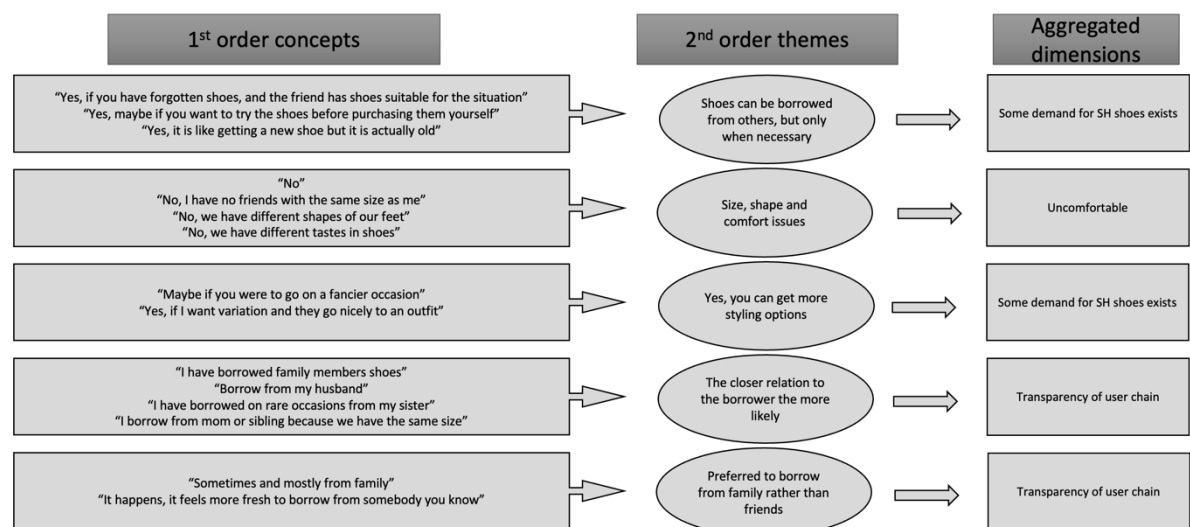
The results to question 26 displayed the general reasons for the reluctance towards using SH shoes. The respondents gave different reasons for the reluctance, but main aggregated dimensions from question 7 were repeated.

Figure 3: The results from survey question 26, "Do you see any problems using previously worn shoes?"



When asked if the respondents borrow shoes from friends, a rift among the responses could be noticed. Some respondents said confirmed the picture from previous qualitative questions of not wanting to use shoes SH, due to the same lifted reasons as above. It is considered uncomfortable and unhygienic. The other group of respondents provided a more positive attitude towards using shoes SH from friends. The key insight from question 27 was therefore that it might exist some demand for SH shoes as positive reasons for using friends' shoes were lifted – if it is necessary, or better styling and outfit options. However, a disclaimer was frequently noticed among the results, people tend to be more willing to use a shoe SH if they know the person that owned the shoe previously. This is presented under the factor of "transparency of user chain" below.

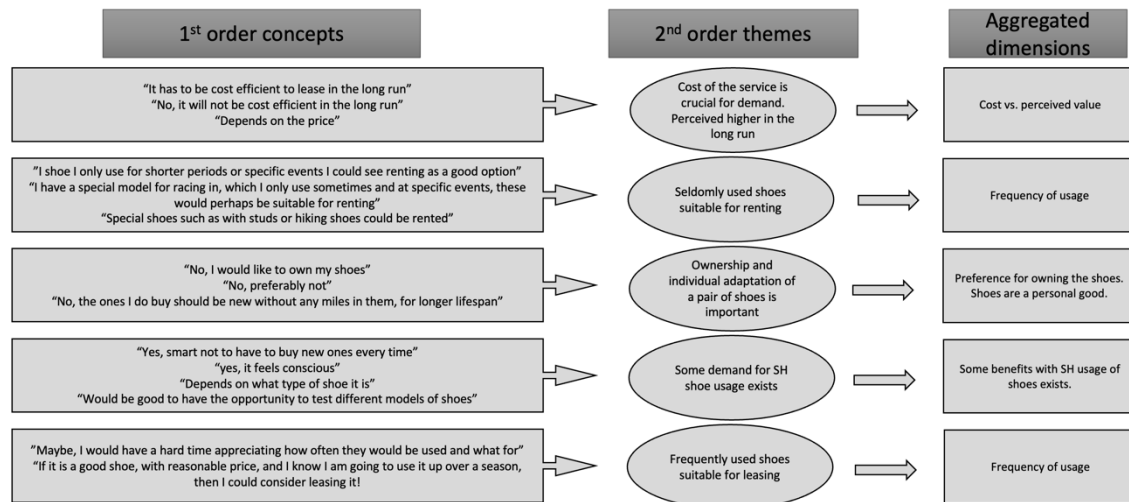
Figure 4: The results from survey question 27 - "Does it happen that you borrow shoes from friends?"



Some situations seem more appropriate for SH usage or sharing of shoes, according to the answers in question 11. When asked whether they would consider renting or leasing shoes instead of buying them, the respondents confirmed the results from previous questions. A reluctance towards using the shoes SH were displayed, referring to the same reasons as to why; that "shoes are personal goods", frequency of usage, and preference for owning the

shoes. It was also lifted that the cost aspect of renting or leasing is not sustainable in the long run. However, some respondents were positive to the aspect of renting and leasing shoes with refers to the sustainable consciousness, and the opportunity of testing new functions and models before purchasing them.

Figure 5: The results to survey question 11 - "Would you consider renting or leasing the shoes instead of buying them?"



To summarize, the following reasons to the reluctance of using shoes SH were aggregated in the final dimensions repeatedly in the displayed results above. These are now presented and further explained in each following section.

Table 9: The factors influencing the aftermarket services in the shoe market. From the collected data in the survey.

The factors influencing the demand of aftermarket services
Perceived unhygienic and uncomfortable after usage
Transparency of previous user chain increases demand for reusage
Frequency of usage affects the acquisition and ownership models
Different usage areas for the shoes affects the acquisition and owning model
The cost of acquisition versus perceived value
Preference for owning the shoes

5.3 Shoes are perceived unhygienic and uncomfortable after usage

How individually adapted the product is, or how comfortable, were lifted as an important factor influencing the demand for SH usage. The individual adaptation of shoes is rather high, due to the shaping from each person's different anatomy and physiology. People does not feel comfortable in shoes shaped from another person. Results in figure 2 and figure 3 shows that people think it is discomfortable and harmful to the body, as "uncomfortable" is a reoccurring aggregated dimension in several question's answers. People motivated this by stating that other people wear and tear the shoes differently than them, or that the shoes are worn askew.

5.3.1 Transparency of user chain affects the hygiene factor

Somewhat contradicting to the comfort and hygiene issues brought up by the results, a factor affected the willingness to borrow used shoes was identified. Respondents tend to be more willing to borrow a previously used shoe from someone they already know, family foremost, but also friends in some cases. In question 27 the respondents were asked to answer if they had ever borrowed shoes from friends. Transparency in the chain of usage is a factor that influences the demand to use shoes second hand. This may be connected to the hygiene issue and perception that the shoes are fresher if they know the person that has previously used the shoe. This indicates that the hygiene factor may be due to prejudices and learned behaviour rather than a fact.

5.4 Preference for owning the shoes

The preference for owning the shoes alone was repeatedly lifted in the qualitative responses. One mentioned reason for this was the preference for instant access of the shoes. Depending on shoe model, some shoes are used sporadically and other used frequently or every day. The respondents are also switching between different shoes often. They want to be able to do this without having to plan ahead for the usage. This was displayed as one of the major impediments against renting or borrowing shoes for shorter periods. The aspect of “owning” the shoes therefore becomes very important, and something that affects the demand for aftermarket services. The exception regarded shoes used over singular activities, requiring special equipment. Then it was perceived as more valuable to rent or borrow the special shoe.

Respondents also stated that what shoe models they use vary throughout the seasons (figure 2, 5, and table 10). For example, winter shoes only need to be worn during the colder months of the year, or shoes with studs and good grip are only needed over specific events such as trail-races. This indicates that despite owning the shoes, the need for exchange of shoe models still exists, and current market solutions does not consider this.

Table 10: The results from survey question 10 – “What type of renting would you think suitable for the following different types of shoes?”.

Answer Choices	At vacations	Seasonal usage	One week/year	At races/over a day	Never	Total Respondents
Running shoes - no studs	6,85%	26,71%	8,90%	18,49%	52,05%	146
Running shoes - with studs	3,45%	42,76%	10,34%	16,55%	37,93%	145
Everyday sneakers	7,53%	27,40%	3,42%	0,68%	63,01%	146
Warm winter shoe without studs	9,66%	48,97%	10,34%	2,07%	39,31%	145
Warm winter shoe with studs	15,17%	46,21%	19,31%	4,83%	26,90%	145
Hiking shoe	31,03%	20,00%	31,03%	7,59%	26,21%	145

Seasonal usage of certain models was displayed in other results as well. In question 9, the respondents were asked “How likely/not likely are you to rent or borrow the following types of shoes”. Shoes used often by persons have a majority responses of “never” or “preferably not”. However, there are one type of shoe that stands out some, the dubbed, warm winter shoe. This type of shoe is not used often, only a few times each depending on where in the country you live. 13.15% of the respondents would always rent or borrow this type of shoe if they could. About 20% of the respondents are openminded to renting or borrowing the shoes (column and option 4 in table 11 below).

Table 11: The results from survey question 9 – “How likely/not likely are you to rent or borrow the following types of shoes?”.

Answer Choices	Never	Preferably not	If I did not have another choice	Sure, I see no major ..	Would always rent	TOTAL
Running shoes - no studs	32,88%	30,14%	26,03%	10,27%	0,68%	146
Running shoes - with studs	26,71%	25,34%	20,55%	21,92%	5,48%	146
Everyday sneakers	34,93%	30,82%	18,49%	14,38%	1,37%	146
Warm winter shoe without studs	22,60%	25,34%	27,40%	22,60%	2,05%	146
Warm winter shoe with studs	19,31%	19,31%	20,00%	30,34%	11,03%	145
Hiking shoe	18,06%	19,44%	20,83%	33,33%	8,33%	144

5.5 Frequency of usage affects the acquisition and ownership models

The frequency in usage is another factor that influences the demand for aftermarket services. The quantitative data from the initial mapping of acquisition and usage preferences among shoe models, suggested that shoes used more often were preferred to be bought and owned (tables 8, figures 2 and 3). The data shows that the majority of respondents are more open to other types of acquisition methods for shoe models that are more seldomly used. Ownership of the shoes was perceived more important for shoes used often, due to hygiene, comfort, and instant access. Special kind of shoes, used for shorter periods of time and for special activities, is more likely to be rented or borrowed (tables 8, 10 and figure 5).

The factor of “frequency of usage” effect on the demand seems to be a wedge issue among the respondents. The data indicates that shoes used more frequently, such as running shoes or everyday sneakers, have higher percentages of respondents wanting to own the shoes. Shoes used more seldom (such as winter shoes with studs) or on singular occasions are more prone to be rented. There were however a few extreme users, elite athletes that used running shoes twice a day and therefore worn them down in a few weeks, that were open to leasing options. They reasoned that receiving a new shoe of the same model after a few weeks would suit them as they already bought new shoes quite often. Subscription would only make this process easier.

5.6 The usage area of the shoes affects the acquisition preference

The shoe’s usage area was a repeated aggregated dimension, and the next factor influencing the demand for aftermarket services. In question 10, the respondents were asked “What type of renting would you think suitable for the following different types of shoes”. This data supports the results from previous questions as the majority still prefers to never use the shoes SH at all. The interesting trend is however that a large part of the respondents also is open for longer period of renting certain shoes, such as seasonal renting (similar to what would be provided in a leasing program). What the shoe are used for does affect this preference, as the results varied between different shoe models.

Table 12: The results from survey question 10 – “What type of renting would you think suitable for the following different types of shoes?”.

Answer Choices	At vacations	Seasonal usage	One week/year	At races/over a day	Never	Total Respondents
Running shoes - no studs	6,85%	26,71%	8,90%	18,49%	52,05%	146
Running shoes - with studs	3,45%	42,76%	10,34%	16,55%	37,93%	145
Everyday sneakers	7,53%	27,40%	3,42%	0,68%	63,01%	146
Warm winter shoe without studs	9,66%	48,97%	10,34%	2,07%	39,31%	145
Warm winter shoe with studs	15,17%	46,21%	19,31%	4,83%	26,90%	145
Hiking shoe	31,03%	20,00%	31,03%	7,59%	26,21%	145

The results from the question regarding the preference to borrow different shoe models from friends are presented below (table 13). The data strengthens the result that the demand for aftermarket service and SH usage is depending on which type of shoe it is regarding, and for what purpose the shoe should be used for. The will to use the shoe SH varies between different models as people are more prone to borrow fancier shoes, hiking shoes or everyday shoes, rather than training and competition shoes. Concern regarding that “specific functions of the shoes” only last for a limited time, and using SH shoes may mean that these functions are already gone. Owning and using the shoe as much as possible during a limited period is therefore important for the customer (figures 2 and 3 above). Shoes with the purpose of high performance, such as competing or training shoes are less popular to be used SH, as people want them new, with long lifetime, and their functions fully potential unviolated and not disrupted. Shoes used more seldom and for not so high performing activities, such as warm winter shoes with studs are more likely to be used SH by the respondents. Some respondents mentioned benefits of leasing certain types of shoes, as it would entail test of function and a conscious usage of shoes (figure 5 above).

Table 13: The results from survey question 29 - "Which of the following shoes would you prefer to borrow from a friend?"

Answer Choices	Not at all	Preferably not	Occasionally	Glad to share if opportunity arise	We always borrow	TOTAL
Fancy wears	36,64%	11,45%	28,24%	22,90%	76,00%	131
Everyday sneakers	48,85%	25,19%	17,56%	7,63%	76,00%	131
Running shoes	54,20%	26,72%	17,56%	1,53%	0,00%	131
Competition shoes	65,65%	19,85%	12,98%	1,53%	0,00%	131
Boots	47,33%	15,27%	25,95%	11,45%	0,00%	131
Winter shoes	41,22%	19,85%	29,01%	9,92%	0,00%	131
Hiking shoes	42,31%	17,69%	27,69%	12,31%	0,00%	130

5.7 The cost of acquisition versus perceived value affects the demand

That the cost for the product affects the demand were stated as the results were filtered after monthly income among the respondents. As the two tables (14 and 15) below displays, the will

to purchase SH shoes was significantly higher among the lower monthly income respondents (less than 15,000 SEK/month), than those who made more (over 50,000 SEK/month). SH shoes are often cheaper than new shoes. This tendency applied to all types of shoes. The option that would entail frequent changes of models, but also perhaps perceived as somewhat more expensive (leasing shoes) were more popular in the group with higher monthly income. This supports the result that cost versus perceived value affect the demand of aftermarket services.

Table 14: The results from survey question 7 – “How would you prefer to acquire the following types of shoes?”, filtered and displaying only respondents making less than 15,000 SEK/month.

Answer Choices	Renting	Buying new ones	Subscribe/lease	Borrow	Buy Second-Hand	I do not need this	TOTAL
Running shoes - no studs	0,00%	90,24%	2,44%	0,00%	2,44%	4,88%	41
Running shoes - with studs	17,50%	60,00%	5,00%	2,50%	0,00%	15,00%	40
Everyday sneakers	0,00%	75,61%	0,00%	2,44%	21,95%	0,00%	41
Warm winter shoe without studs	2,50%	72,50%	0,00%	2,50%	15,00%	7,50%	40
Warm winter shoe with studs	12,20%	39,02%	2,44%	9,76%	4,88%	31,71%	41
Hiking shoe	21,95%	41,46%	4,88%	9,76%	9,76%	12,20%	41

Table 15: The results from survey question 7 – “How would you prefer to acquire the following types of shoes?”, filtered and displaying only respondents making more than 50,000 SEK/month.

Answer Choices	Renting	Buying new ones	Subscribe/lease	Borrow	Buy Second-Hand	I do not need this	TOTAL
Running shoes - no studs	0,00%	78,95%	5,26%	5,26%	0,00%	10,53%	19
Running shoes - with studs	5,56%	55,56%	5,56%	11,11%	0,00%	22,22%	18
Everyday sneakers	0,00%	83,33%	0,00%	5,56%	5,56%	5,56%	18
Warm winter shoe without studs	5,26%	73,68%	10,53%	5,26%	0,00%	5,26%	19
Warm winter shoe with studs	16,67%	55,56%	0,00%	5,56%	0,00%	22,22%	18
Hiking shoe	26,32%	68,42%	0,00%	5,56%	0,00%	0,00%	19

As for any consumption driven product, the consumer’s personal economy and buying power influences the demand for it. The data suggests how cost of the provided aftermarket services is crucial when deciding the attractiveness of the service provided. Several respondents answered that a SH renting option would indeed be good for the environment, but for them personally it would not be cost efficient to continuously rent shoes (figure 5). The issue of cost versus perceived value of the product and service, was also brought up considering a potential leasing program option, as respondents objected to a leasing program due to higher cost. It was perceived to entail higher costs in the long run than purchasing one pair of shoes one time only and using these until broken. However, if the perceived value of the product and the services provided are increased, the option would be more attractive despite continuous payment.

Perceived value can be increased in several ways, discounts, services and additional designing opportunities for the customer are just some suggestions. As the table 16 below describes,

customers wished for both discounts and mending services around the products. Repair kits and design selections were also popular incentives for customers.

Table 16: The results from survey question 34: "What would you prefer to be offered when purchasing a pair of Icebug shoes?"

Answer Choices	Responses	TOTAL
Stations for repair and service of the shoes	54,26%	70
Discounts on upcoming purchase when returning used shoes	82,95%	107
Access to exclusive events with Icebug and other users of the shoes	6,98%	9
Repair kit and spare parts when broken	47,29%	61
Total discharge of responsibility, all repairs, washing, recycling and delivery of shoes are included	22,48%	29
Possibility to adapt the shoes according to your wishes (design and special parts)	33,33%	43
Other (please specify)	7,75%	10
Total respondents:		129

5.8 Demand of Aftermarket Services in the shoe market

The results indicates that shoes are a consumption good whose function is worn out quickly, and the need for high production volumes in the shoe industry may never be avoided. Instead, the reusage and recycling patterns in the industry must be enhanced. The results lifted some benefits for SH usage of shoes, and this suggests that value can be extracted from the aftermarket in the shoe's lifecycle. By mending opportunities, BMs that allows for individual adaptation based on usage patterns, test of new shoes and functions before purchase, or by loyalty programs connected to the brand of the shoe, the perceived value of shoes as products can be increased. Some respondents mentioned that an exchange of models would provide a larger closet, and shoes only being worn during a specific season could with benefit be exchanged through a leasing program (figure 2, 4 and 5). This way, fast fashion concepts with high product exchange could still be available, despite adjusting the BM to circularity. Respondents stated the benefits with making a conscious choice, and this is a clear indication that the "consumer awareness as a driver for CE" mentioned in the literature, is present in the C&A industry. As the results displays above, the aspect of instant access, unlimited usage and lack of planning contributes as factors to why owning a pair of shoes is important for the customers (figure 2). Together with results from question 7 (table 8) above, this illustrates how a potential SH usage models of should be designed – over longer renting periods or through leasing. The results from question 26 do however indicate that the issues of hygiene and function must be solved first, as these are impediments for reusage (figure 3). Through a leasing program, shoes that otherwise would have gone to burnable waste or landfill would collected and reused.

6 Discussion

In this chapter, discussion about the findings of customer demands will be analysed and compared. The discussion will be divided into two general parts. The first one contributing to academic literature and the empirical findings, connecting the aspects identified in the literature with the factors from the results. The second part contributes to general practitioners within the C&A industry. Interpretations of the empirical findings are presented in this section. A further strategy development and adaptation of the data to Icebug's prerequisites will be displayed.

6.1 Interpreting the identified factors' effect on demand

The investigation shows that the following factors influence the demand for aftermarket services within the shoe industry. The factors directly affect the usage pattern and attractiveness of the products. At a first glance at the results, the aftermarket for shoes seems limited, the customer are accustomed to the business models of purchase and owning the shoes. The identified factors influences the decision to use shoes SH, or rather why not (Table 8).

The factors influencing the demand of aftermarket services
Perceived unhygienic and uncomfortable after usage
Transparency of previous user chain increases demand for reusage
Frequency of usage affects the acquisition and ownership models
Different usage areas for the shoes affects the acquisition and owning model
The cost of acquisition versus perceived value
Preference for owning the shoes

Table 8: The factors influencing the aftermarket services in the shoe market. From the collected data in the survey.

Literature so far is relatively scarce regarding the aftermarket of shoes, as are the established aftermarket services. But the factors identified by the results indicates that there are potential problems to be solved by aftermarket services in the C&A market and especially within the shoe market. The identified factors needs to be managed in order to stimulate demand as they are directly connected to the perceived value of the product after usage.

The factors explains why the quantitative data suggests that there are no demand for SH usage of the shoes. The factors above hinders the development of new BMs based on reusage of shoes. This may be an effect of ladders, people stuck in since long established behaviours on the old shoe market (Rogers, 1962). If the challenges are removed or solutions to the customers' objections brought up, reusage solutions can still be developed. There were data indicating that there are benefits for the customers with reusage models. In relation to the old shoe market, the circularity and sustainability trend is still rather new, and this may explain that only a few people expressed the direct approval of using previously worn shoes. Early adopters move before the rest of the market (Rogers, 1962).

6.1.1 Durability and quality

That durability and quality of the shoes were highly relevant aspects for the demand of initial sales of shoes were established since before (Saha, Dey, & Bhattacharyya, 2010). The aspects of durability and quality of the product are corresponding to all the brought up factors in the results: hygiene, comfort, ownership, frequency and usage area in the aftermarket demand. The results in this study confirms that services in the aftermarket that prolongs the durability of the shoes and increases the quality of the product is indeed demanded as well. People wish for shoes

to be functional and present instantly. The results also describes how people prefers to buy shoes as they wish to own and use them for as long time as possible. Aftermarket services that enhances the durability and quality of the shoes are demanded. A long lifetime of the shoes was highlighted as important in the results. This is directly connected to the durability and quality factors brought up by literature. This is one major reason for wanting the traditional owning model of shoes, and not perceiving alternative solutions as a possibility. As the results clearly indicates that people desires more mending opportunities, this too supports the fact that aftermarket services for prolonging the shoe's lifetime are demanded.

6.1.2 Customer satisfaction

Customer satisfaction might be increased through brand identity. Aftermarket services can achieve this brand identity and increase the monetary spending at the same time. As the results displayed, customer were willing to pay more for shoes if the perceived value of the product increased. By adding aftermarket services and concepts around the shoes in the aftermarket, this enhanced value can be achieved. (Raddats & Easingwood, 2010) (Porter & Heppelmann, 2014). The results displays that some demand for aftermarket services do exist in the shoe industry. However for these to increase in demand and market share, the customer satisfaction has to be increased.

By performing in the services around the product in the aftermarket, the customer satisfaction may be increased. As Saha, Dey and Bhattacharyya (2010) stated, aftermarket services is the most important factor to provide for increased customer satisfaction. Several of the identified factors in the results contribute to the aspect provided by the literature of customer satisfaction as influencing the demand. The quality of the product is directly connected to the customer satisfaction. That the shoes are perceived unhygienic and uncomfortable after someone else's usage, lessens the perceived value and satisfaction. The frequency of usage and the area of usage are also affecting the customer satisfaction, as it sets the limitations to what could be provided in potential services. Depending on what the shoe is meant for, different actions of aftermarket services could be designed. For example, seldomly used competing shoes are suitable for short period renting, while winter shoes are more valued if they are rented or leased seasonally. Hence, the factor of frequency and area of usage, delivers the frames under which the service should be adapted and provided.

A strong brand connection and identity increases the aftermarket spending (Donovan, Janda, & Maxham III, 2015) which makes the brand a promotion factor for the aftermarket. By strengthening the brand the attractiveness for collaborations with other actors are strengthened as well, a key activity when building aftermarket services and CE. In the survey the brand's specific significance for the demand was not investigated. Therefore, no significant differences between brands of shoes were identified in the study, and other factors seem to have more importance for the demand in the aftermarket, such as usage, function, and durability and quality, as these were more often mentioned in the results. However, the brand of a shoe can be connected to the frequency of usage factor, as the brand may affect how much and in which situations the shoe is used. The factor of cost versus perceived value can also be related to the brand, as the perceived value can be heightened by a strong brand. Through the brand, the incentives to stay loyal to the brand is increased as well (Coppi, 2007), (Donovan, Janda, & Maxham III, 2015).

If the customer satisfaction is heightened the perceived value of the shoes as a product and the services will be heightened. Therefore the price of the service can also be increased. As the

results describes, the cost of acquisition model for the shoes are connected to the perceived delivered value. By a strong brand and promotion factors, the demand for aftermarket services can be increased. The results also displayed that the higher income group more frequently bought new shoes due to new functions on the market or that it was stylish to be able to change shoes. Through promotion factors, and the brand, the perceived value of aftermarket services could be enhanced, and the demand thereby increased.

6.1.3 Customer awareness of sustainability

The customer's awareness of sustainability, and the increasing importance of this factor were significant throughout all the results. People steadily responded that recycling and mending options were preferred yet absent from the current market. Several respondents described their usage patterns as "until the shoe no longer can be used due to wear and tear" as the results in both question 7, 8, 13 and 26 indicates. The respondents lifted however the possibility to mend shoes or recycle them as advantageous and something they wished for. This indicates that customers' awareness of sustainability trends are in fact a driving factor for aftermarket services, and something currently stimulating the demand for aftermarket services.

The sustainability aspects of potential aftermarket services were displayed in the results, as several respondents motivated their answers to leasing or renting SH shoes as a "good and conscious choice". This confirms the literature (Koszewska, 2019), (Jia, Yin, Chen, & Chen, 2020) which states that customer awareness for sustainability currently is one of the major driving forces for development in the C&A market.

6.2 Implications for practitioners

By applying the identified factors to the example case in the study, this section aims to display how interpretation of the factors can aid in strategic development for general actors in the C&A industry. The results in this section is however related to the niche products of Icebug, and the adapted to the special situation for Icebug's unique market position. This needs to be taken into consideration when applying the findings generally.

The sustainable trends in today's society all points to one direction within the C&A industry, that it needs to develop towards a more circular future. As described in the theoretical framework, not only the established processes of the business needs to be made sustainable – but the entire BM needs to encourage and profit on reuse, refurbishing and recycling in order to achieve circularity (Ellen MacArthur Foundation, 2022), (thredUp, 2021). The results indicates that if the factors above are managed, new circular ways of providing and owning shoes may be developed. New BMs can take shape. This in turn will provide access to the previous untapped value of aftermarkets (Waldman, 2003) and provide new differentiation opportunities for the previous product-focused company (Baines & Lightfoot, 2014). Establishing new BM's with a customer centric focus while providing services. is however a complex issue, and needs addressing in creative and multifaceted ways, based on the demand for aftermarket services.

So far the customer centric perspective have not been adapted in the C&A industry when developing aftermarket services, as the processes are more focused to minimize cost for the companies (Cohen, Agrawal, & Agrawal, 2006). This is displayed in the of lack of vertical integration regarding the shoe mending actions. It is also witnessed in the lack of structures EOL management of the products. By extending the value proposition beyond the product to

aftermarket services through servitization, development in the direction of CE as well as business profitability can be achieved. At least if the resulting factors influencing the demand are managed. The results clearly states (in the factor costs versus perceived value) that alternative solutions to suggested BM around shoes are accepted on the market if the perceived value is higher than current offering of shoe purchase. By untapping the aftermarket, by adapting the services to the factors influencing the demand identified in this study, additional revenue streams can be created for the company. If the C&A industry are to develop CE, activities such as product recovery, RL, EOL management, increased collaboration among actors and changed customer behaviour must be initiated. The suggestion below describes how structures for these activities can be built through managing the factors identified as influencing demand for aftermarket services.

6.2.1 Possible options for Icebug based on results

SH usage of clothes and goods are not widespread among the users, as the results suggests. This may be due to that the circularity within the C&A industry is rather novel (thredUp, 2021), and those that has incorporated SH usage of goods may be early adopters (Rogers, 1962). Providing a customer adapted solution to this circularity issue on the C&A market would make Icebug a rather early initiative taker but could also provide first mover advantages over a longer time period (Reis, 2011), (Rogers, 1962). However, if CE is to be implemented in the shoe industry, reuse of the shoes needs to be incorporated despite the reluctance among the users. In order to maximize the potential usage of the services, the identified factors above needs to be managed.

The factor of preference for ownership of the shoes were prominent throughout the results. In order to fulfil this factor, yet still provide a BM for reuse of shoes, leasing is the best option. Leasing simulates ownership, as the shoe are rented over a longer period of time. As witnessed on the shoe market right now, some initiatives are made to include the reuse phase of the circular economy. The shoe company On's Cyclon initiative (On, 2022), where a fully recyclable shoe is leased and exchanged twice a year for the customer is perhaps the most innovative movement on the shoe market. This does however require large amount of shoes in circulation and an expensive facility for recycling of the shoes, which a smaller company as Icebug do not have the capabilities nor the resources for. Therefore other options needs to be evaluated. Renting of shoes is rejected by the respondents, or deemed most suitable for shoes for seldomly used, and during temporarily performed activities. Between the users of the shoes, the factors of hygiene and comfort needs to be managed. Icebug can provide refurbishing and resoling of the shoes. By developing a mending and refurbishing function within the company, Icebug could take responsibility for making the shoes as new between users. The inner and middle soles of the shoes which are the parts mostly adapted to the individual should (Appendix 1) be replaced with new ones between each user. By refurbishing some parts of the shoe, and remanufacturing others, the costs of this activity can be reduced compared to producing new shoes entirely.

An alternative solution would be to provide shoes without inner sole in the leasing program, and that every customer of the program is assigned and fitted for a individually moulded insole to be transferred between shoes when they are exchanged. A way for a smaller company such as Icebug to achieve this would be to partner up and have close collaboration with actors specializing on making insoles, orthopaedic clinics or Löp&Sko for example. This is also supported and discussed in literature, in order to achieve CE, as open collaboration between actors is a vital activity for success (Blackburn, Guide, Souza, & Van Wassenhove, 2004). From

a circular perspective this would ensure that the shoes and materials are in a loop where Icebug control the material and also can in a larger scale develop and control the recycling of different part of the shoes in the longer run.

Icebug sells models that are used both for seldom situations, for example hiking shoes, or warm winter shoes with studs, but also sells shoes meant to be used every day, for work, everyday sneakers, or training shoes (summer and winter edition). This means that some of the product portfolio of Icebug could be rented for vacation situations. But the more frequently the shoes are used, the data strongly depicts that the respondents want to own their own shoes, both for hygiene and individual adaptation but also for instant access of the shoes without planning. Leasing of shoes during a longer period of time would fulfil this requirement and simulate actual ownership of the shoes. The leasing program should also be individually adapted, or several different cost levels available. The lowest subscription should only provide access for, for example, four different weeks of the year. This program might be adopted by consumers only needing special shoes at few occasions. A higher subscription level could be considered for those leasing four shoes annually, keeping the shoe over several months. This option can be directed towards users more frequently using the providing shoes. A layout such as this would also provide additional value for the consumers, as they can individually adapt the solution to their specific needs and preferences. Hence the factor of cost versus perceived value is also somewhat managed.

Some respondents may be early adopters in their mindset considering the wedge issue regarding the frequency of usage. The majority of the respondents said that shoes which they used often they preferred to own. But there was a few respondents that turned the logic around – shoes they used often are worn out quickly and were therefore more suitable to be replaced within a leasing program. According to the results, seasonal exchange of the models included in the leasing program can be beneficial as people deemed seasonal renting an option for several types of shoes, such as sneakers, winter shoes, or shoes with studs. The need of the shoes' functions are also altering during the year depending on where you live geographically. Different adjustments of what the leasing program offers can therefore be personalized based on individual preferences for additional value. The factors of frequency and area of usage are managed through individualization of the services, and by providing a range of services, all adapted to the customer.

6.2.1.1 Potential struggles when scaling the BM

The preference for transparency of user chain is hard to achieve in larger scale. The data suggested that people were more inclined to borrow shoes from someone they knew, or even more so from family. This was perceived as more hygienic. Allowing transparency of user chain is however not scalable nor appropriate, but this issue is preferably solved through extensive and high quality refurbishing of the shoes.

When developing their BM in order to achieve the leasing program, the amount of refurbishing performed will grow with the number of users. How should a small company such as Icebug achieve this? A potential solution of a leasing program would also entail establishing product recovery and RL of the products. Through the concept of Redistributed Manufacturing (RDM) the manufacturing operations is moved closer to the point of care (RiHN - Redistributed Manufacturing in Healthcare Network, 2022). In Icebug's case, this concept would entail several smaller central units for refurbishing could be established throughout the country to cover all the customer base within reasonable distance. The logistics from user to refurbishing central and then to warehouse would also be minimized in a RDM structure, but balancing the

degree of centralisation is a hard trade-off for any company in this situation, especially a smaller one. However, as stated, a strong customer interaction and brand image can aid in the implementation of RL (Bouzon & Govindan, 2015). The brand and aftermarket services are as stated connected in multiple points apart from the RL, as the services provided directly reflects on the brand of the product.

To improve the customer satisfaction in order to reach better brand identification and customer loyalty, the service in the aftermarket needs to be in focus. From the company's perspective, using quality and delivering time of the service as measurements, is better for affecting the customer satisfaction in the aftermarket. One way to do so according to literature is by setting MVT as the measurement for operations control instead of cost efficiency this can be achieved (Blackburn, Guide, Souza, & Van Wassenhove, 2004). A challenge lies in changing the mindset for measuring success in production volumes or sold number of shoes. When adapting servitization, Icebug instead should focus on measuring the customer's satisfaction, or time until the customers are aided with their issues.

As a final note on the solution for Icebug, the cost issue needs to be discussed. Making a leasing program suitable for the market will according to the data depend on the cost of the service. If it is cheaper than owning a pair of shoes today it might become more accepted, or to a more expensive price the perceived service provided within the leasing program has to be superior to what is offered today in relation to shoe purchase. This can be achieved through closer contact to customer after purchase, physical mending stations, discounts on other products or events in Icebug's portfolio, smooth and user friendly shipping process, seasonal change of products in the leasing program and previews or earlier access to new features and functions of models and shoes. Individual design and choosing opportunities of the leasing program's content could also be an incentive, increasing the customer's perceived value. Through this closer customer connection, and developed incentive models for higher perceived value of Icebug's product and services, the brand image and identity will be increased. Increased customer loyalty will follow this (Donovan, Janda, & Maxham III, 2015).

6.3 Need of future research

Some issues are brought up during this thesis as unexplored in the study, and these require future research. This study was limited to not including the marketing aspects of demand influence, as this is a major section in itself. By investigating the correlation between promotion factors and the demand for aftermarket services, the results in this study could be deepened further. Most likely there are a connection between promotion factors and the demand in the aftermarket, as the brand was lifted as stimulating aftermarket spending by literature (Donovan, Janda, & Maxham III, 2015), (Saha, Dey, & Bhattacharyya, 2010). But since no questions were specifically directed towards the brand influence or around marketing efforts in the survey, this connection cannot be confirmed.

The factor of transparency of the user chain was confirmed as influencing the demand for aftermarket services, but to which degree could not be told in this study. Future research needs to investigate how much this will influence the demand, and also if it is feasible to practice transparency in user chains in larger scales in practice.

The results in this study also indicates that it is perceived by the customers as more environmentally sustainable with reuse of shoes, than dispatching them after usage. However, this needs to be calculated and empirically proven, as all reuse models entails multiple

transports of the products in the usage phase. Therefore, it is not certain that a BM based on reuse of shoes reduces the actual footprint of carbon emissions or waste than the current take-use-waste BM of shoes.

The study suggests that several factors are involved in affecting the demand of potential aftermarket services in the shoe industry. The results display that the factors that influences the demand for aftermarket services are; preference for hygiene and comfort, transparency of user chain, frequency of usage of the shoe model, the area of usage or what the shoe is used for, preference for owning the shoe, and the cost versus perceived value of the service or product. Some similarities and connections between the factors for demand in aftermarket. Likewise could connections between aspects affecting demand according to literature, and factors brought up by this study be made. The factors correspond to each other, the brand are affected by the cost and perceived value, and the durability and quality of the product affect the usage and hygienic factors. The most significant difference between the factors in literature and the identified in this study, is the nature of the product. Since the shoe already have been used when operating in the aftermarket, this entails a brand new set of complications and hinders for the demand of services. Factors such as hygiene, comfort and transparency of user chain, the frequency of which the shoe has been used and for what is has been used for – are all factors rather specific for the SH shoe market. They might therefore not be relevant for all businesses' aftermarket demands.

The pressure for CE and sustainability on the market is confirmed by this study. Results indicates that there are demand for aftermarket services in the shoe industry, but the identified factors hinders or influences the development of this market. Providing aftermarket services managing these factors will be filling a current gap in the value delivery in the shoe industry. This will simultaneously create more circular flows in the shoe industry, as materials are recollected and reused. These services and new BMs, will provide a new way of shoe acquisition and owning. It will disrupt the traditional shoe industry, thus creating competitive advantage. Right now in the shoe industry, mostly established processes in BMs are made sustainable, but in order to really make a difference for the environment, the need to establish BMs operating upon reuse, recycling and refurbishing instead. And through the section of implications for practitioners, this thesis has showed that through aftermarket services – CE is possible in the C&A industry, and in a previous consumption based business.

For practitioners, exploring and implementing options in the aftermarket can generate both new revenue streams and strategic advantages. While strengthening customer loyalty and brand integrity, sustainability and CE can be achieved through services in the aftermarket. By designing solutions with a customer centric focus and after identified factors influencing the demand as in the case example in this thesis, the success of aftermarket services can be secured.

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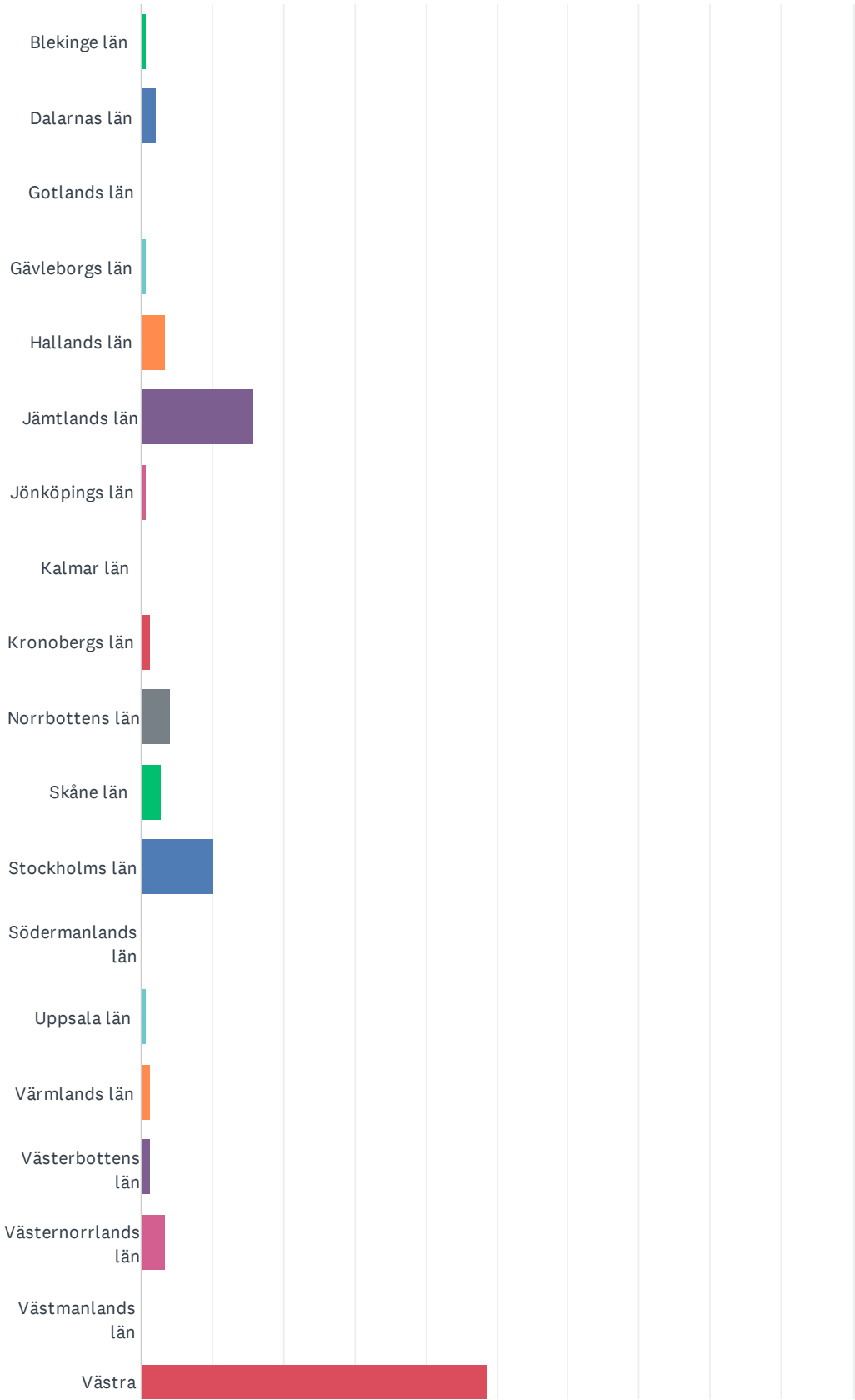
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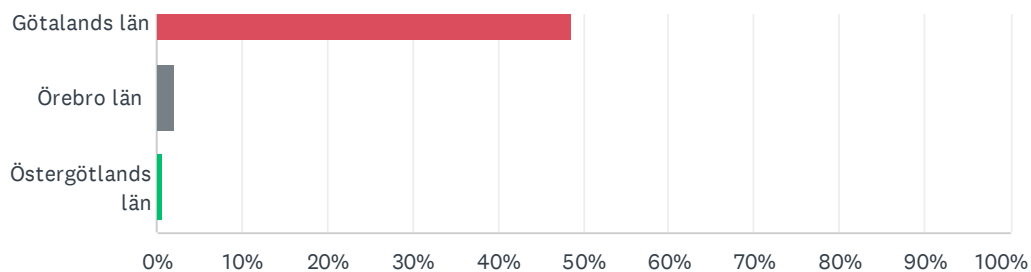
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Q1 Vart bor du?

Answered: 146 Skipped: 0



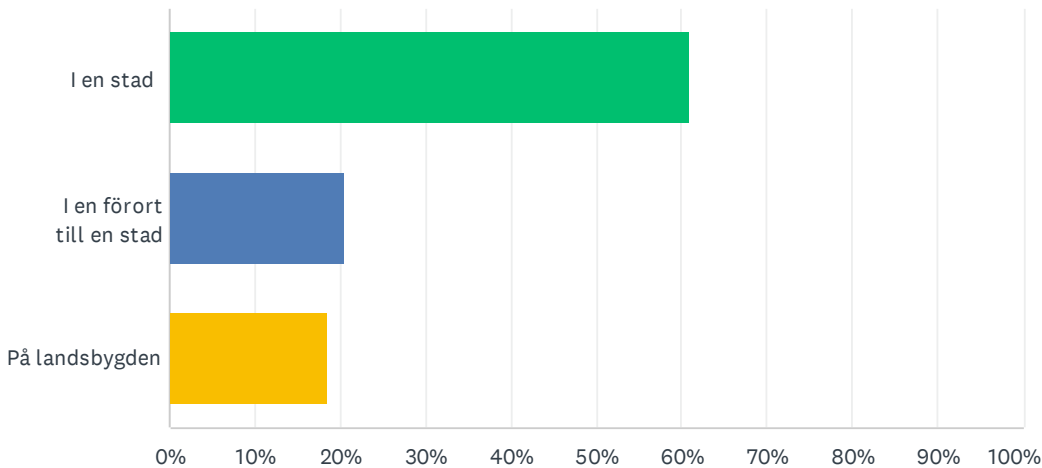
Customer investigation - aftermarket services



ANSWER CHOICES	RESPONSES	
Blekinge län	0.68%	1
Dalarnas län	2.05%	3
Gotlands län	0.00%	0
Gävleborgs län	0.68%	1
Hallands län	3.42%	5
Jämtlands län	15.75%	23
Jönköpings län	0.68%	1
Kalmar län	0.00%	0
Kronobergs län	1.37%	2
Norrbottnens län	4.11%	6
Skåne län	2.74%	4
Stockholms län	10.27%	15
Södermanlands län	0.00%	0
Uppsala län	0.68%	1
Värmlands län	1.37%	2
Västerbottens län	1.37%	2
Västernorrlands län	3.42%	5
Västmanlands län	0.00%	0
Västra Götalands län	48.63%	71
Örebro län	2.05%	3
Östergötlands län	0.68%	1
TOTAL		146

Q2 Vart bor du? (kryssa i ett alternativ)

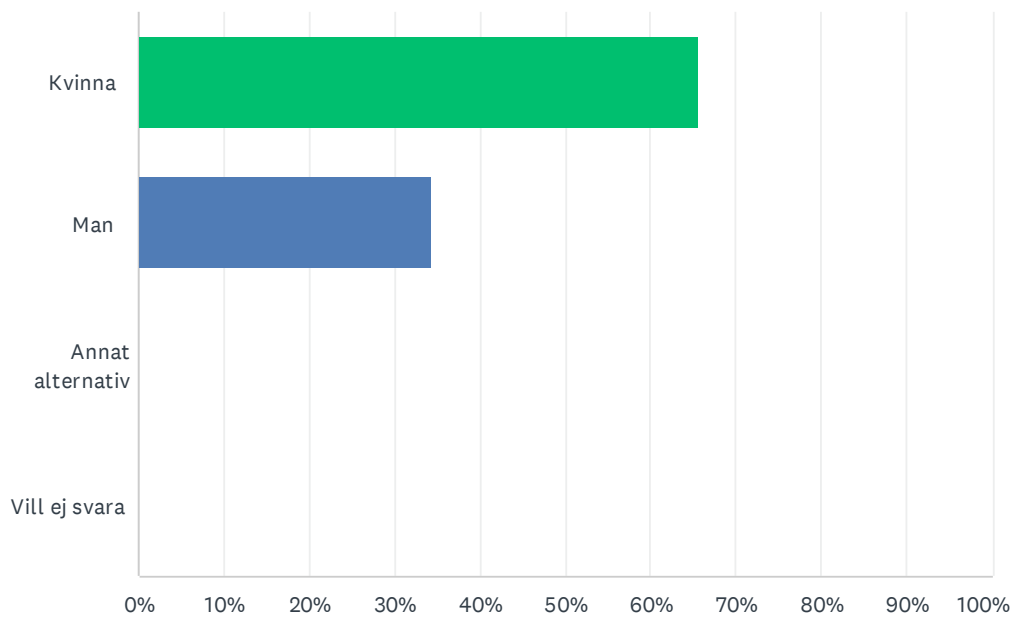
Answered: 146 Skipped: 0



ANSWER CHOICES		RESPONSES	
I en stad		60.96%	89
I en förort till en stad		20.55%	30
På landsbygden		18.49%	27
TOTAL			146

Q3 Vilket kön identifierar du dig som?

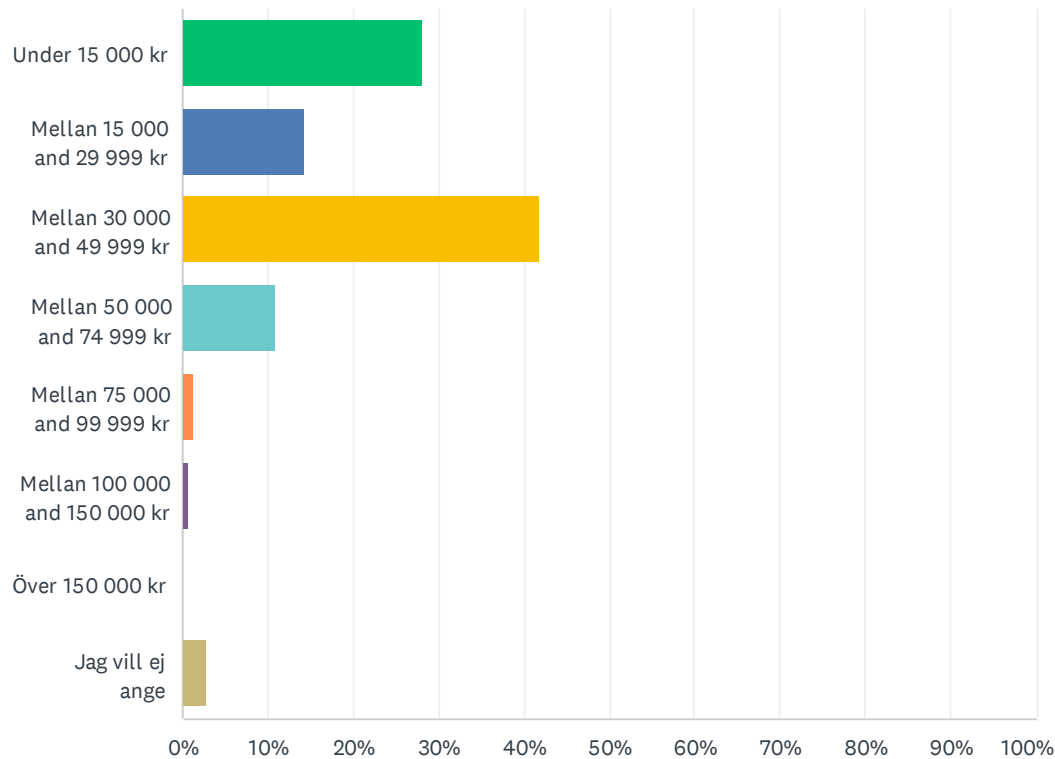
Answered: 146 Skipped: 0



ANSWER CHOICES	RESPONSES	
Kvinna	65.75%	96
Man	34.25%	50
Annat alternativ	0.00%	0
Vill ej svara	0.00%	0
TOTAL		146

Q4 Vad tjänar du i månadslön?

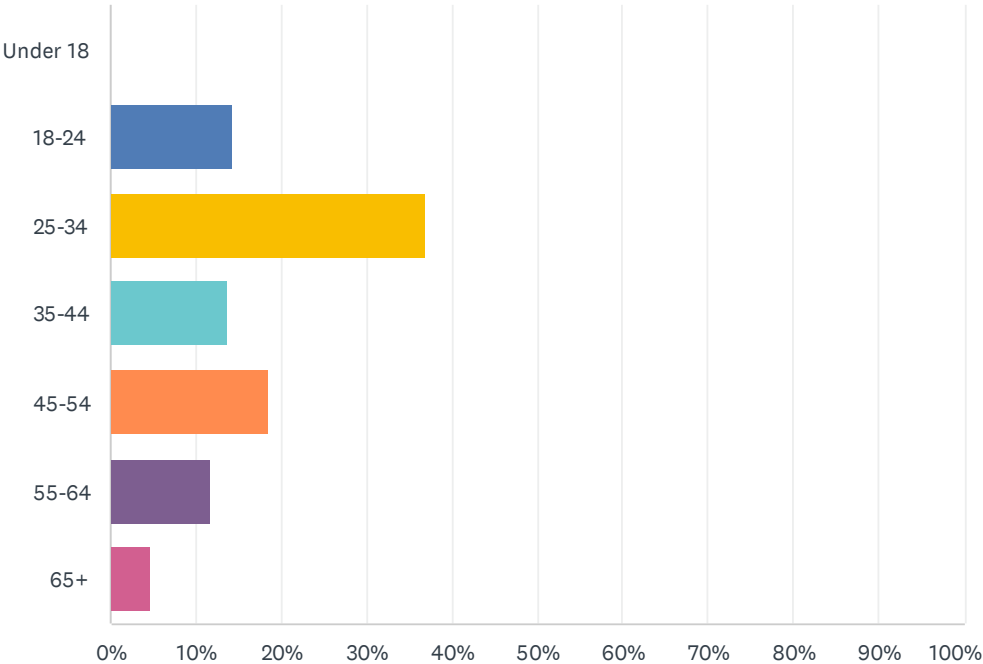
Answered: 146 Skipped: 0



ANSWER CHOICES	RESPONSES	
Under 15 000 kr	28.08%	41
Mellan 15 000 and 29 999 kr	14.38%	21
Mellan 30 000 and 49 999 kr	41.78%	61
Mellan 50 000 and 74 999 kr	10.96%	16
Mellan 75 000 and 99 999 kr	1.37%	2
Mellan 100 000 and 150 000 kr	0.68%	1
Över 150 000 kr	0.00%	0
Jag vill ej ange	2.74%	4
TOTAL		146

Q5 Ålder:

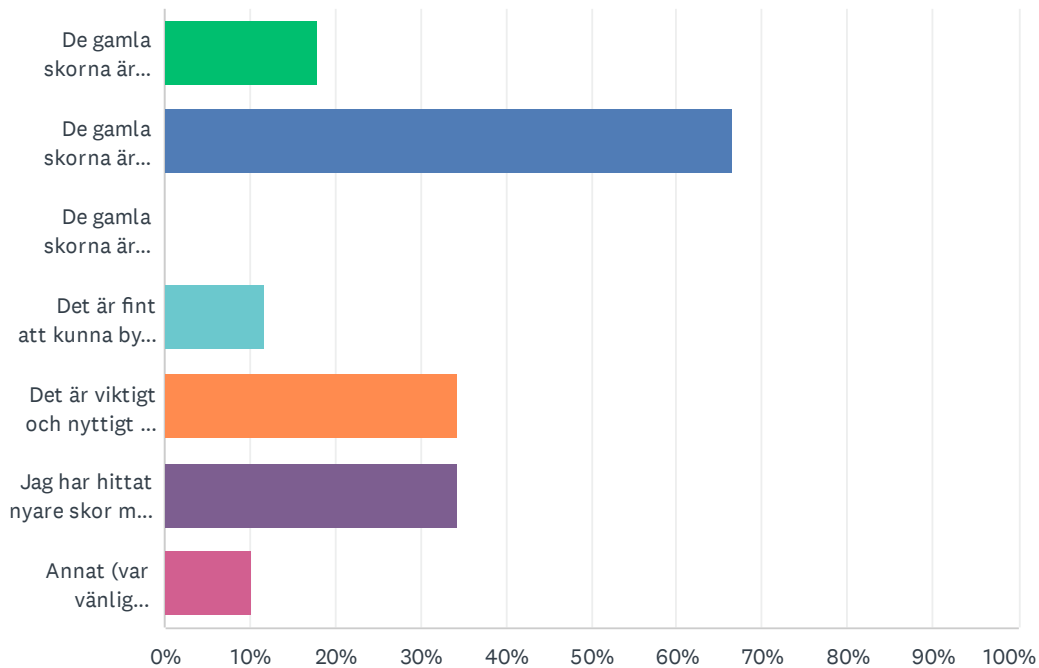
Answered: 146 Skipped: 0



ANSWER CHOICES	RESPONSES	
Under 18	0.00%	0
18-24	14.38%	21
25-34	36.99%	54
35-44	13.70%	20
45-54	18.49%	27
55-64	11.64%	17
65+	4.79%	7
TOTAL		146

Q6 Varför köper du nya skor?

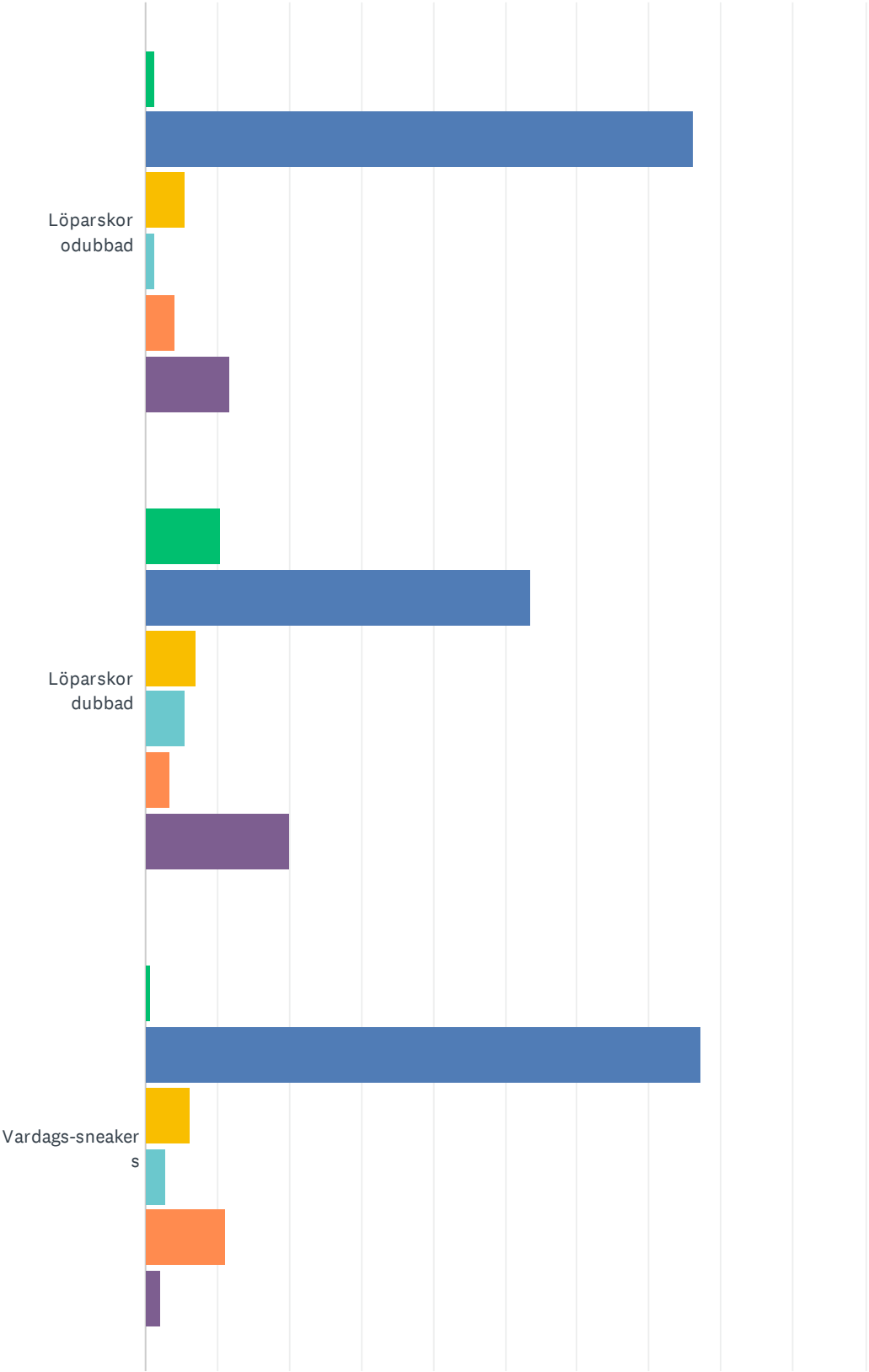
Answered: 146 Skipped: 0



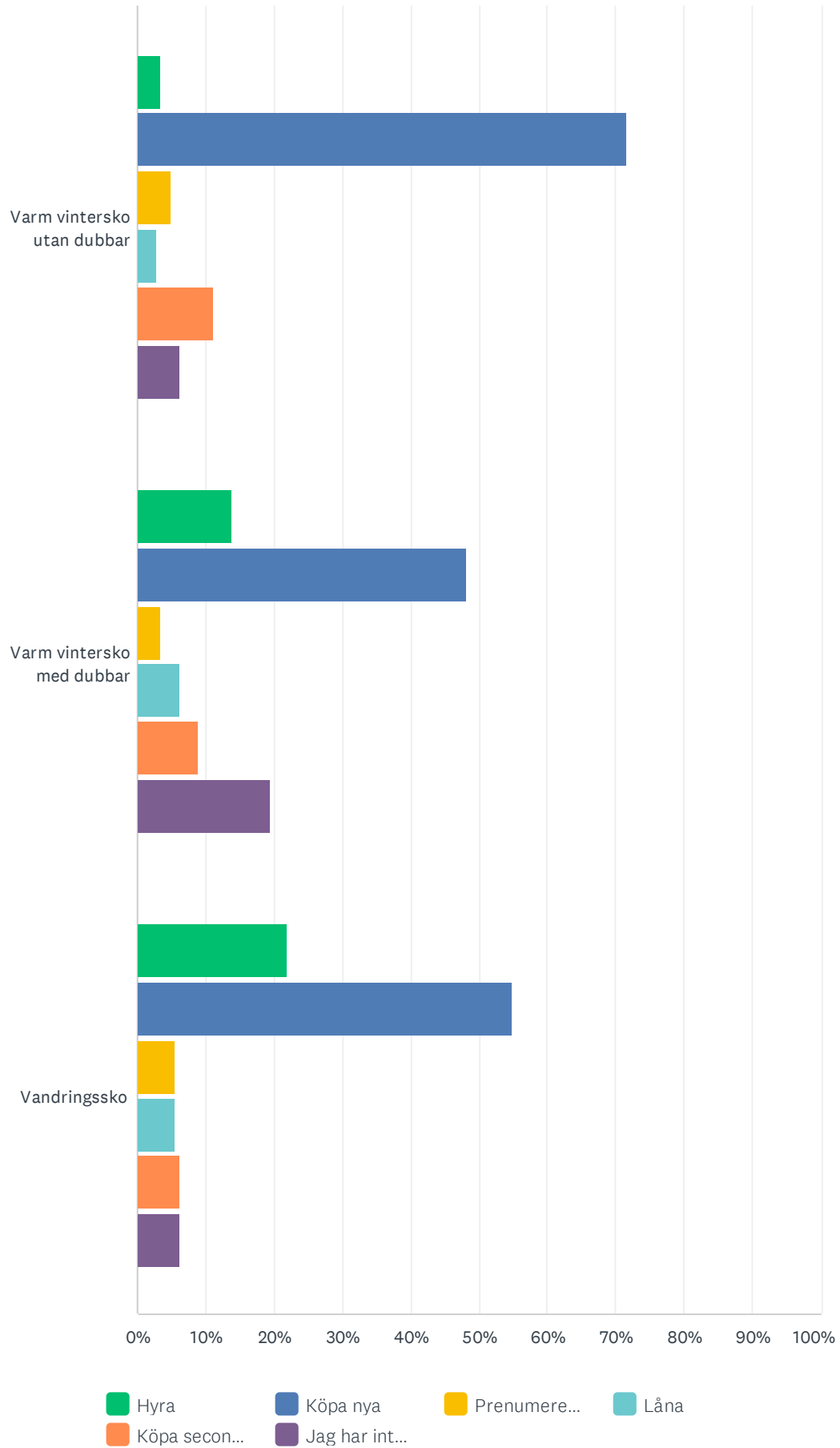
ANSWER CHOICES	RESPONSES	
De gamla skorna är ofräscha/äckliga	17.81%	26
De gamla skorna är trasiga	66.44%	97
De gamla skorna är omoderna	0.00%	0
Det är fint att kunna byta skor	11.64%	17
Det är viktigt och nyttigt för kroppen att kunna byta skor	34.25%	50
Jag har hittat nyare skor med bättre och andra funktioner än mina nuvarande	34.25%	50
Annat (var vänlig specificera):	10.27%	15
Total Respondents: 146		

Q7 Hur skulle du kunna tänka dig att få tillgång till och använda följande skor?

Answered: 146 Skipped: 0



Customer investigation - aftermarket services



Customer investigation - aftermarket services

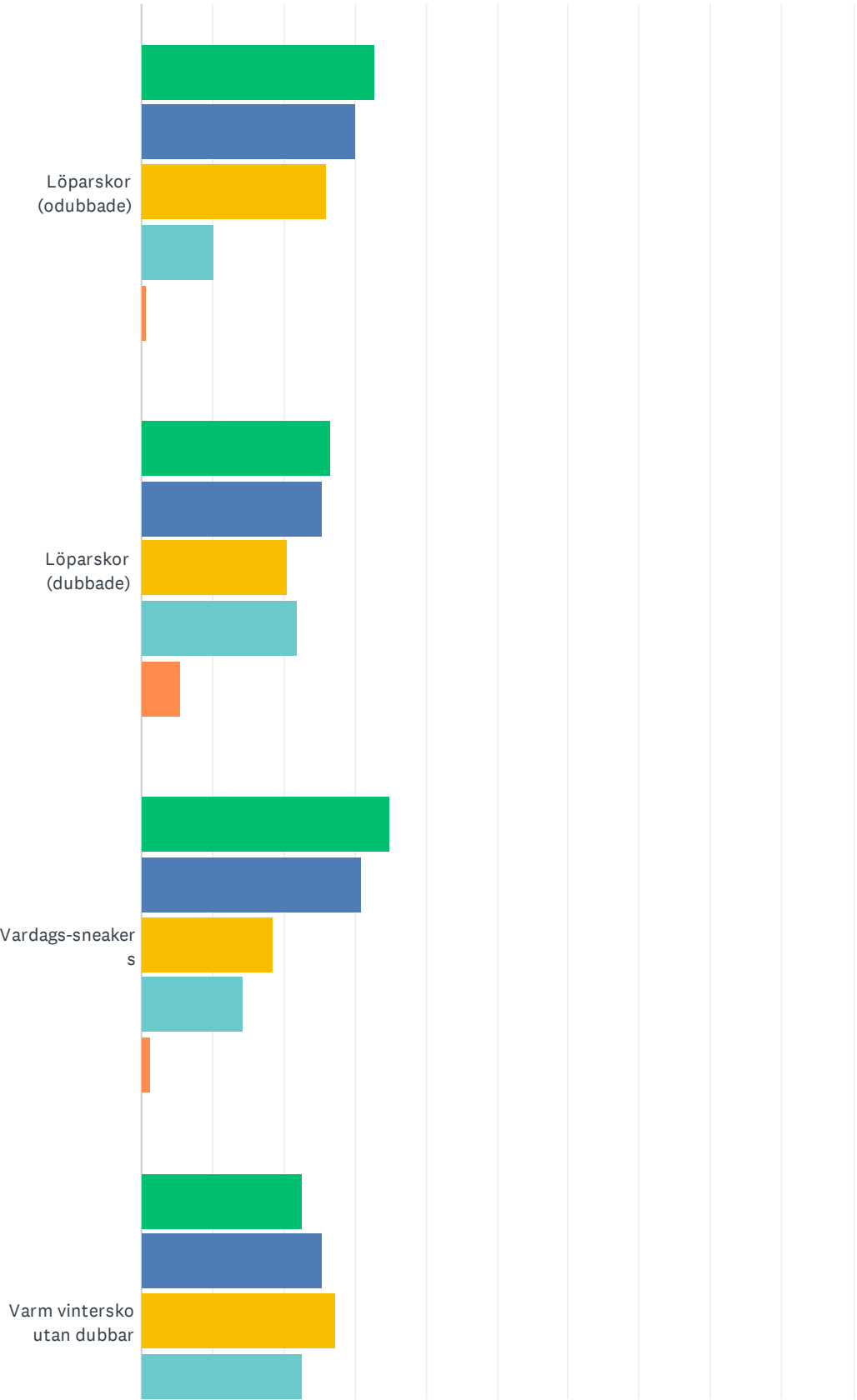
	HYRA	KÖPA NYA	PRENUMERERA/LEASA	LÅNA	KÖPA SECOND- HAND	JAG HAR INTE ANVÄNDNING FÖR DENNA SKO	TOTAL
Löparskor odubbade	1.37% 2	76.03% 111	5.48% 8	1.37% 2	4.11% 6	11.64% 17	146
Löparskor dubbad	10.42% 15	53.47% 77	6.94% 10	5.56% 8	3.47% 5	20.14% 29	144
Vardags-sneakers	0.69% 1	77.24% 112	6.21% 9	2.76% 4	11.03% 16	2.07% 3	145
Varm vintersko utan dubbar	3.45% 5	71.72% 104	4.83% 7	2.76% 4	11.03% 16	6.21% 9	145
Varm vintersko med dubbar	13.79% 20	48.28% 70	3.45% 5	6.21% 9	8.97% 13	19.31% 28	145
Vandringssko	21.92% 32	54.79% 80	5.48% 8	5.48% 8	6.16% 9	6.16% 9	146

Q8 Motivera dina svar i föregående fråga: varför svarade du som du gjorde?

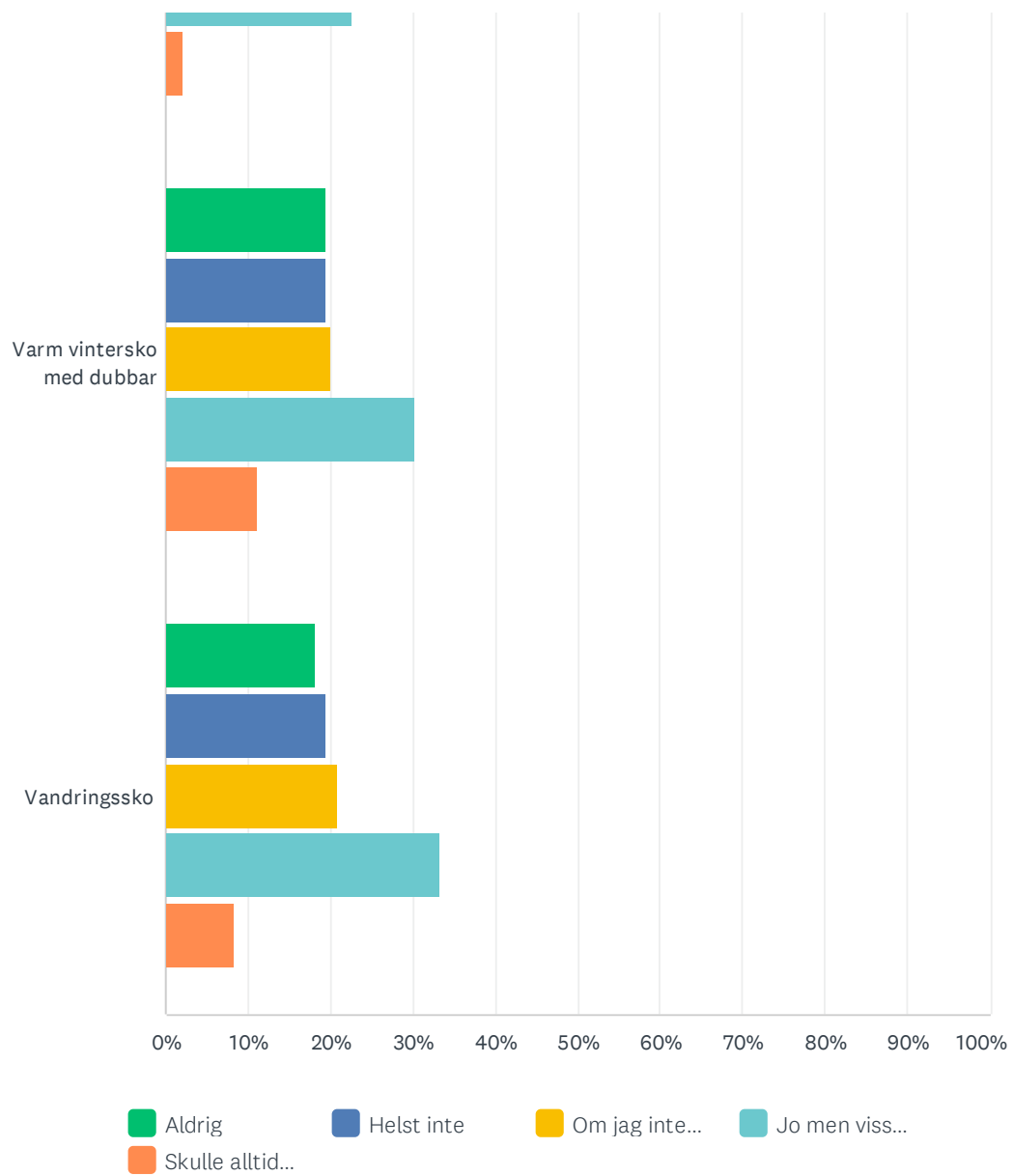
Answered: 146 Skipped: 0

Q9 Hur gärna/ogärna skulle du hyra eller låna följande typer av skor?

Answered: 146 Skipped: 0



Customer investigation - aftermarket services

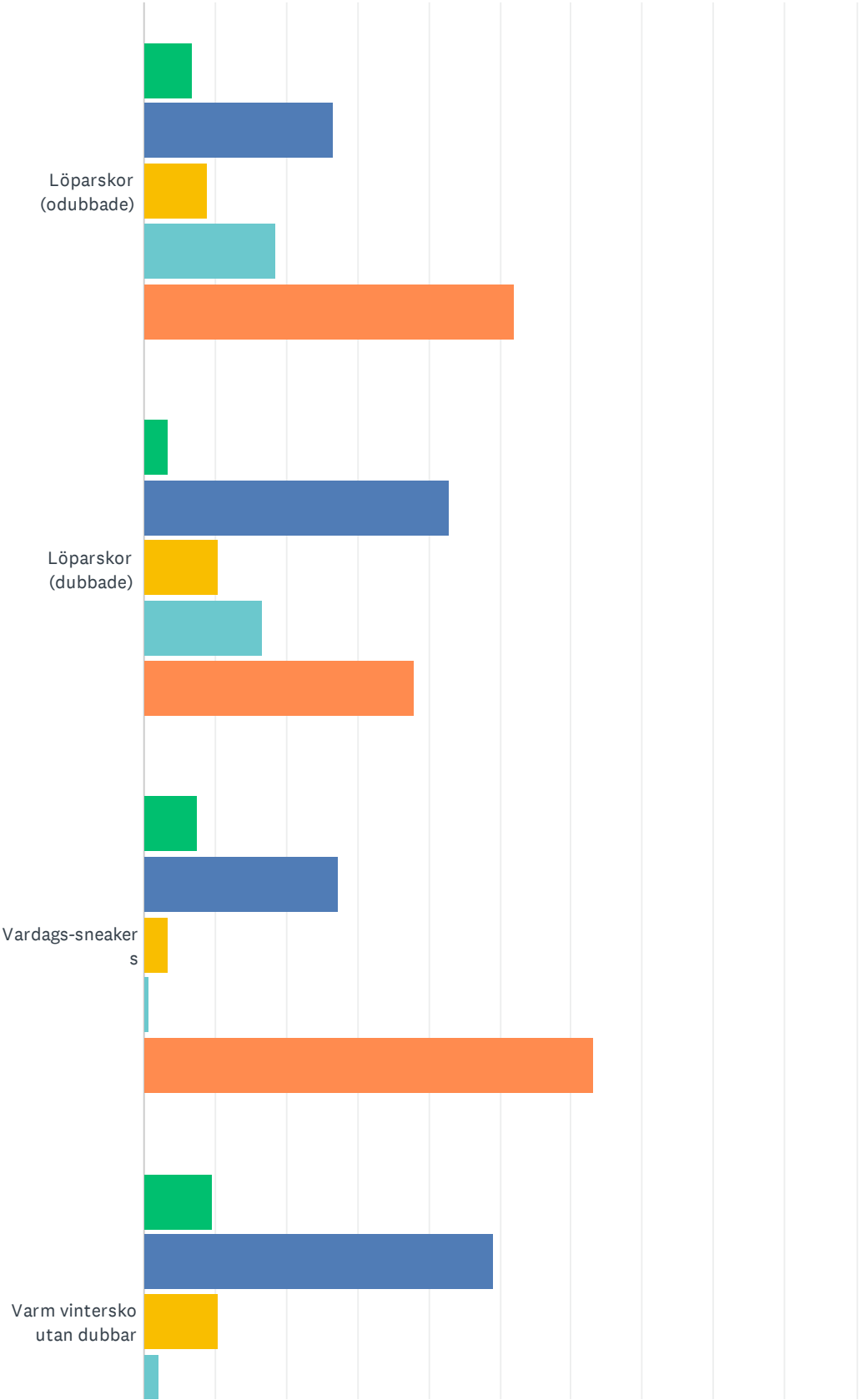


Customer investigation - aftermarket services

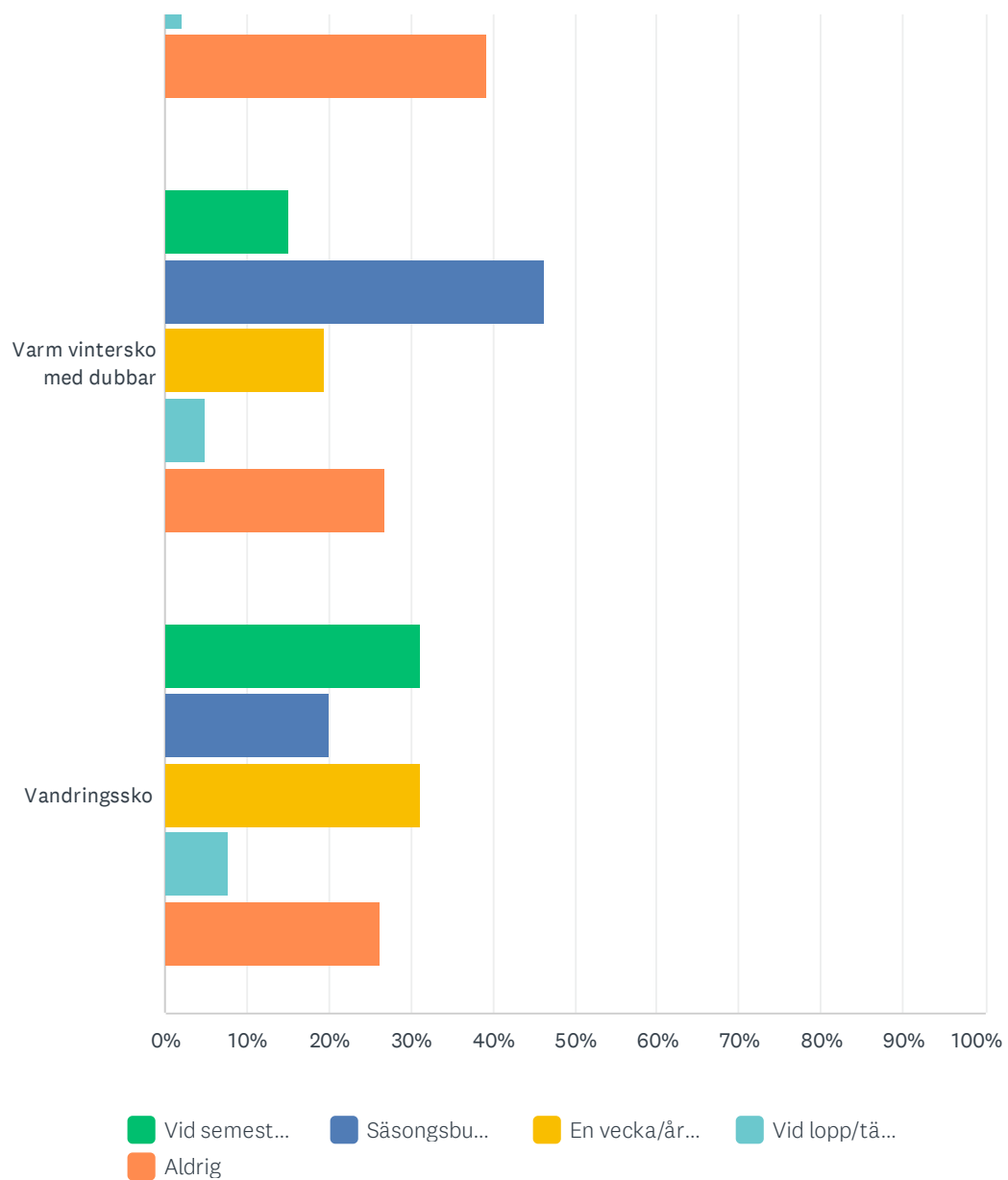
	ALDRIG	HELIST INTE	OM JAG INTE HADE NÅGOT ANNAT VAL ÄN HYRA/LÅNA	JO MEN VISST, SER INGA STÖRRE PROBLEM MED ATT HYRA/LÅNA	SKULLE ALLTID HYRA ELLER LÅNA OM JAG KUNDE	TOTAL	WEIGHTED AVERAGE
Löparskor (odubbade)	32.88% 48	30.14% 44	26.03% 38	10.27% 15	0.68% 1	146	2.16
Löparskor (dubbade)	26.71% 39	25.34% 37	20.55% 30	21.92% 32	5.48% 8	146	2.54
Vardags-sneakers	34.93% 51	30.82% 45	18.49% 27	14.38% 21	1.37% 2	146	2.16
Varm vintersko utan dubbar	22.60% 33	25.34% 37	27.40% 40	22.60% 33	2.05% 3	146	2.56
Varm vintersko med dubbar	19.31% 28	19.31% 28	20.00% 29	30.34% 44	11.03% 16	145	2.94
Vandringssko	18.06% 26	19.44% 28	20.83% 30	33.33% 48	8.33% 12	144	2.94

Q10 Vilken typ av uthyrning av skorna passar bäst enligt dig?

Answered: 146 Skipped: 0



Customer investigation - aftermarket services



Customer investigation - aftermarket services

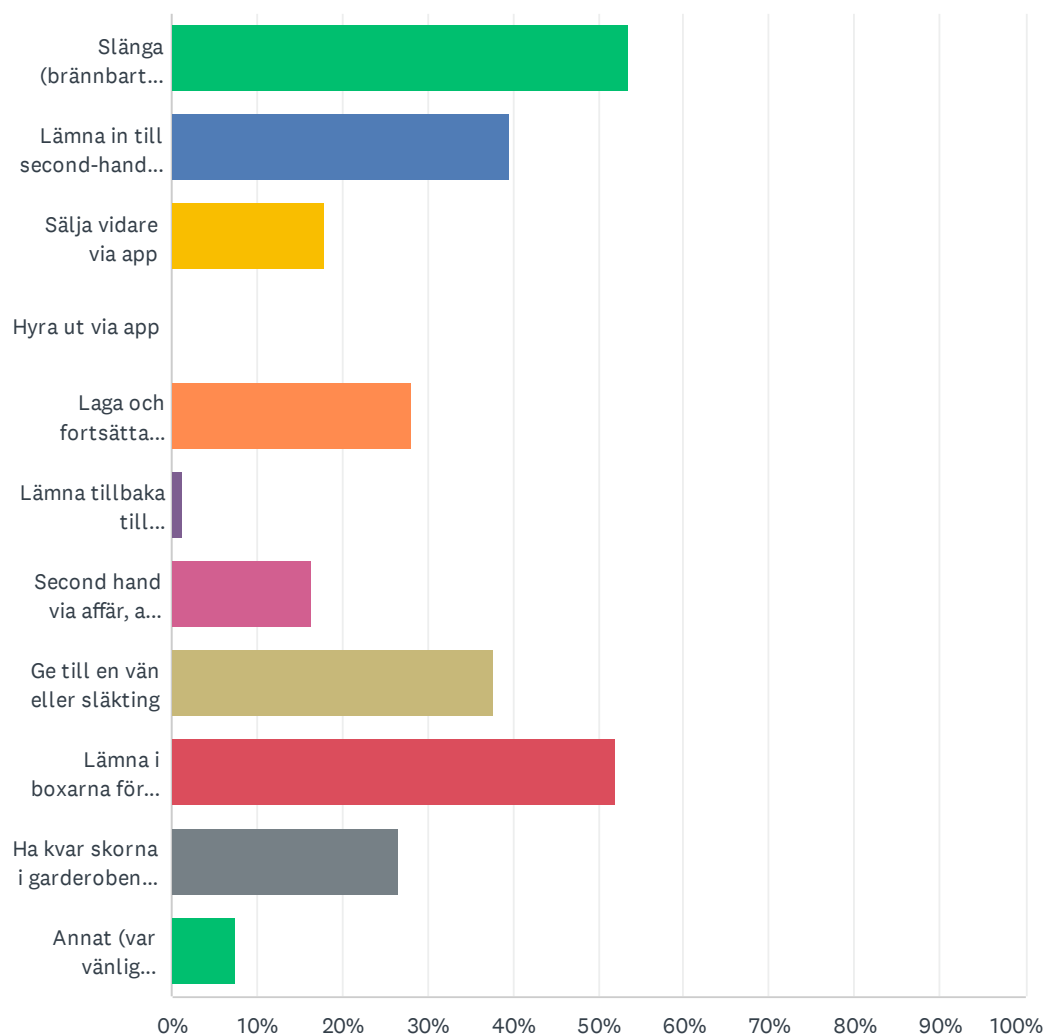
	VID SEMESTERTILLFÄLLEN	SÄSONGSBUNDEN ANVÄNDNING (T EX, KVARTALSVIS ELLER HALVÅRSVIS)	EN VECKA/ ÅR (ENDAST DÅ DU ANVÄNDER EN SÅDAN HÅR SKO)	VID LOPP/TÄVLING, ÖVER EN DAG	ALDRIG	TOTAL RESPONDENTS
Löparskor (odubbade)	6.85% 10	26.71% 39	8.90% 13	18.49% 27	52.05% 76	146
Löparskor (dubbade)	3.45% 5	42.76% 62	10.34% 15	16.55% 24	37.93% 55	145
Vardags- sneakers	7.53% 11	27.40% 40	3.42% 5	0.68% 1	63.01% 92	146
Varm vintersko utan dubbar	9.66% 14	48.97% 71	10.34% 15	2.07% 3	39.31% 57	145
Varm vintersko med dubbar	15.17% 22	46.21% 67	19.31% 28	4.83% 7	26.90% 39	145
Vandringssko	31.03% 45	20.00% 29	31.03% 45	7.59% 11	26.21% 38	145

Q11 Skulle du kunna tänka dig att hyra eller leasa skor istället för att köpa dem? Motivera gärna ditt svar.

Answered: 146 Skipped: 0

Q12 Vad brukar du göra med dina gamla kläder och skor?

Answered: 146 Skipped: 0



Customer investigation - aftermarket services

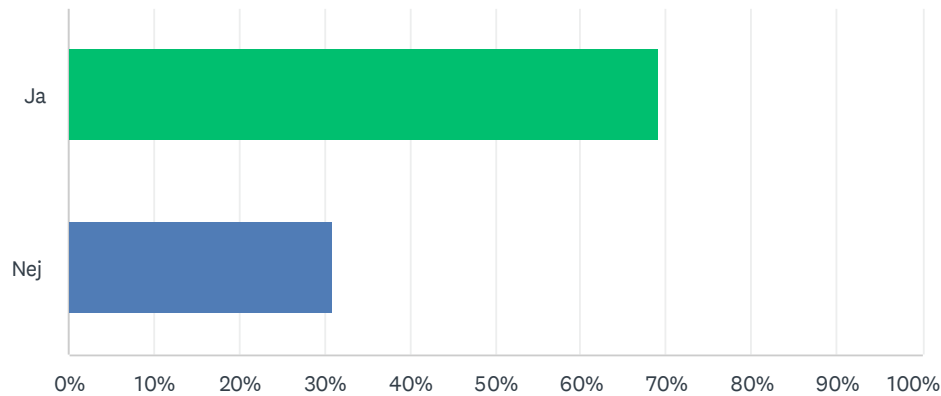
ANSWER CHOICES	RESPONSES	
Slänga (brännbart avfall)	53.42%	78
Lämna in till second-hand återförsäljare	39.73%	58
Sälja vidare via app	17.81%	26
Hyra ut via app	0.00%	0
Laga och fortsätta använda	28.08%	41
Lämna tillbaka till försäljaren	1.37%	2
Second hand via affär, app, plattform eller organisation	16.44%	24
Ge till en vän eller släkting	37.67%	55
Lämna i boxarna för klädinsamling	52.05%	76
Ha kvar skorna i garderoben hemma	26.71%	39
Annat (var vänlig specificera):	7.53%	11
Total Respondents: 146		

Q13 Hur tror du att man borde/skall göra med sina gamla skor när de är förbrukade?

Answered: 146 Skipped: 0

Q14 Har du skor från Icebug?

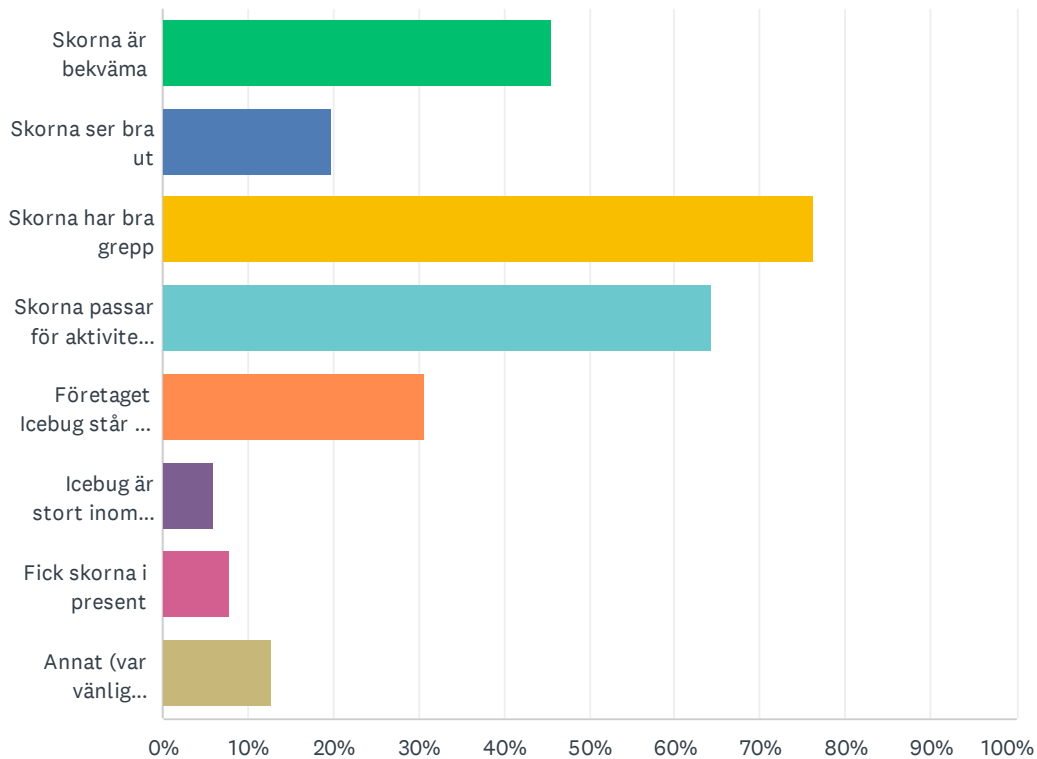
Answered: 146 Skipped: 0



ANSWER CHOICES	RESPONSES	
Ja	69.18%	101
Nej	30.82%	45
TOTAL		146

Q15 Varför valde du att köpa skor från Icebug?

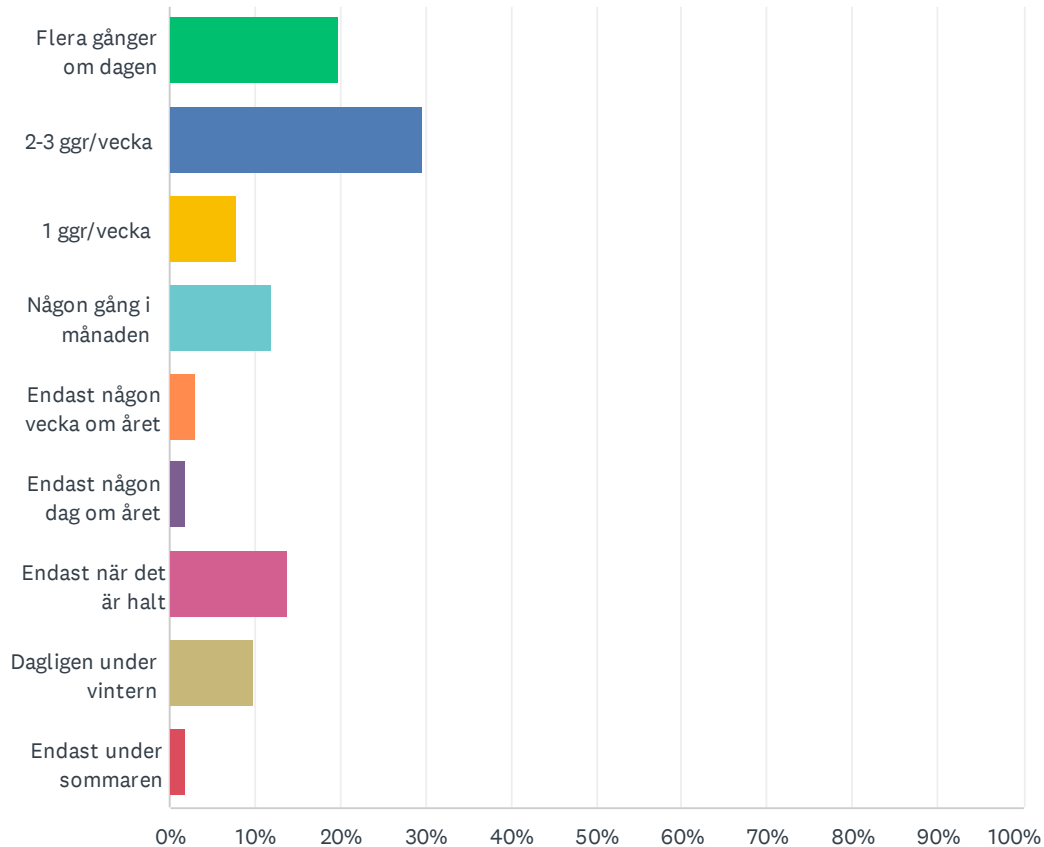
Answered: 101 Skipped: 45



ANSWER CHOICES	RESPONSES	
Skorna är bekväma	45.54%	46
Skorna ser bra ut	19.80%	20
Skorna har bra grepp	76.24%	77
Skorna passar för aktiviteter som jag utövar	64.36%	65
Företaget Icebug står för miljömedvetenhet	30.69%	31
Icebug är stort inom kretsar som jag umgås i	5.94%	6
Fick skorna i present	7.92%	8
Annat (var vänlig specificera):	12.87%	13
Total Respondents: 101		

Q16 Hur ofta använder du Icebugs skor? Välj det alternativ som stämmer bäst.

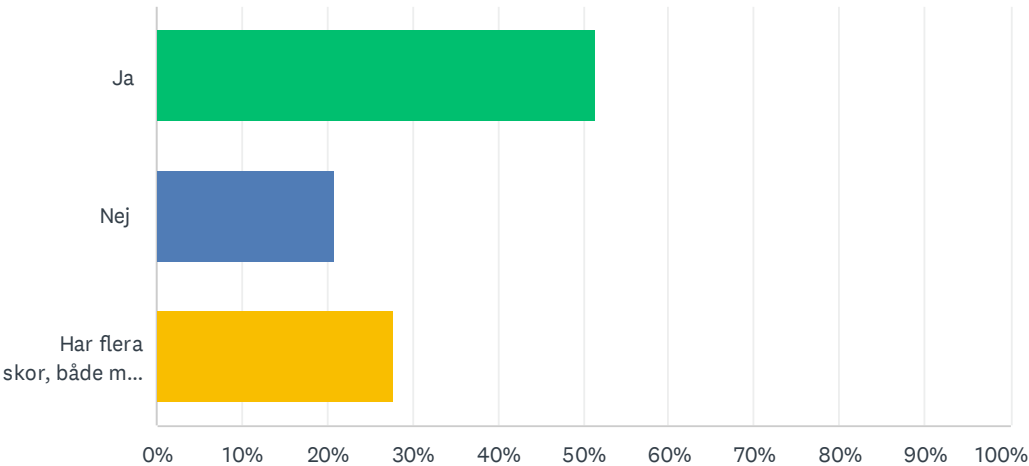
Answered: 101 Skipped: 45



ANSWER CHOICES	RESPONSES	
Flera gånger om dagen	19.80%	20
2-3 ggr/vecka	29.70%	30
1 ggr/vecka	7.92%	8
Någon gång i månaden	11.88%	12
Endast någon vecka om året	2.97%	3
Endast någon dag om året	1.98%	2
Endast när det är halt	13.86%	14
Dagligen under vintern	9.90%	10
Endast under sommaren	1.98%	2
TOTAL		101

Q17 Har din/dina skor dubbar?

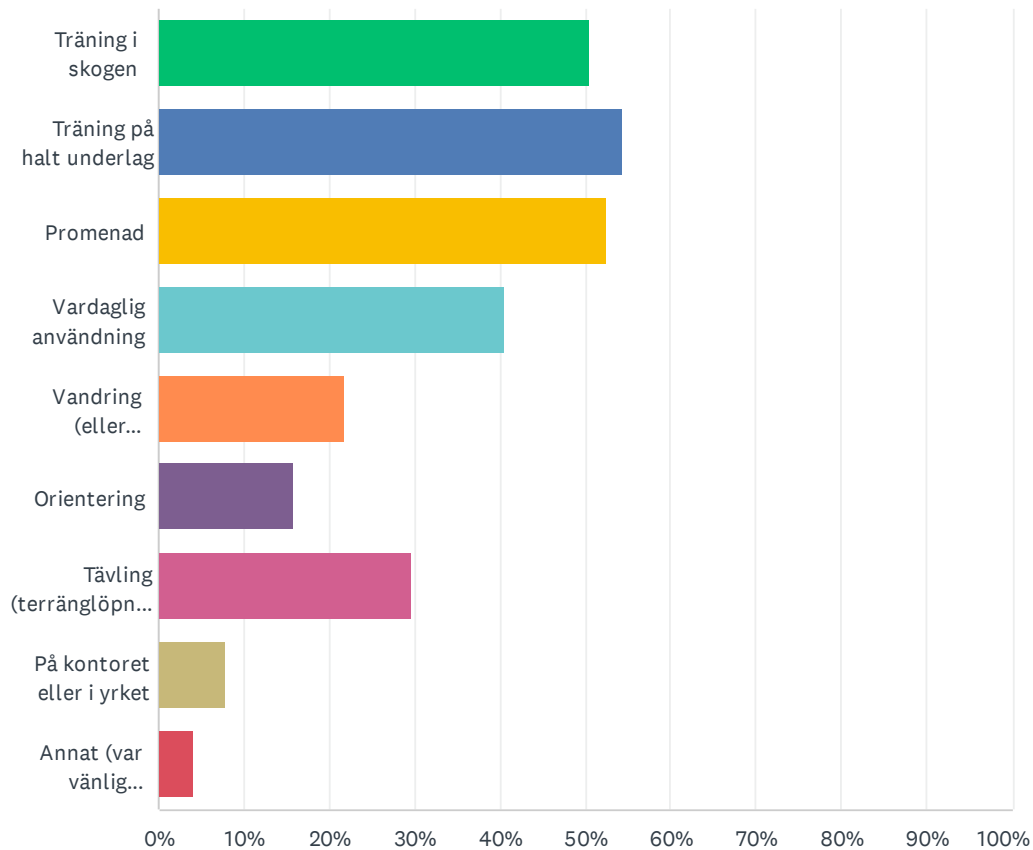
Answered: 101 Skipped: 45



ANSWER CHOICES	RESPONSES	
Ja	51.49%	52
Nej	20.79%	21
Har flera skor, både med och utan dubbar	27.72%	28
TOTAL		101

Q18 Vad använder du Icebugs produkter till? (flera alternativ är möjliga)

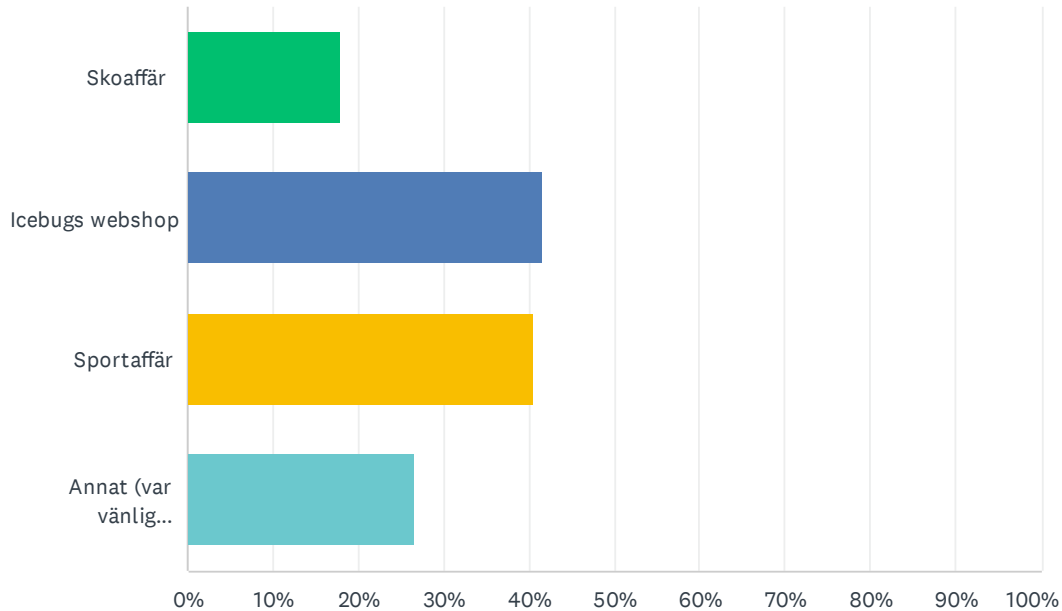
Answered: 101 Skipped: 45



ANSWER CHOICES	RESPONSES	
Träning i skogen	50.50%	51
Träning på halt underlag	54.46%	55
Promenad	52.48%	53
Vardaglig användning	40.59%	41
Vandring (eller friluftsliv)	21.78%	22
Orientering	15.84%	16
Tävling (terränglöpning, trail löpning eller orientering)	29.70%	30
På kontoret eller i yrket	7.92%	8
Annat (var vänlig specificera):	3.96%	4
Total Respondents: 101		

Q19 Vart köpte du dina Icebug skor någonstans? (om du har köpt flera par, redovisa för samtliga)

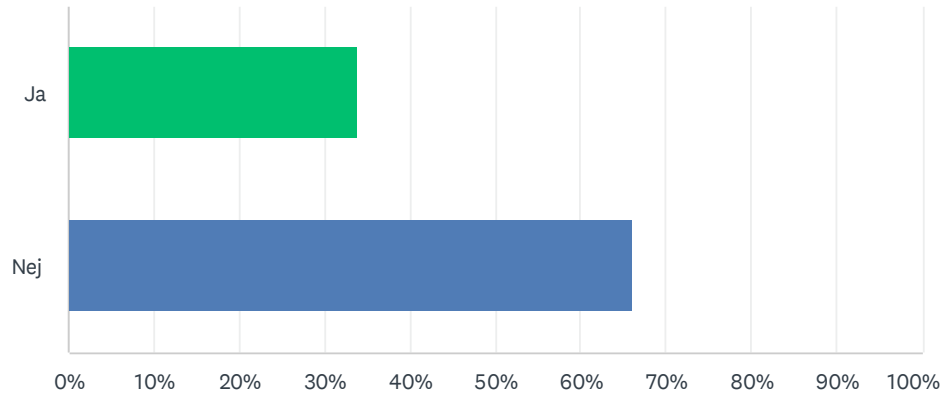
Answered: 101 Skipped: 45



ANSWER CHOICES	RESPONSES	
Skoaffär	17.82%	18
Icebugs webshop	41.58%	42
Sportaffär	40.59%	41
Annat (var vänlig specificera):	26.73%	27
Total Respondents: 101		

Q20 Visste du att du kan få nya dubbar och reservdelar från Icebug om din sko går sönder?

Answered: 100 Skipped: 46



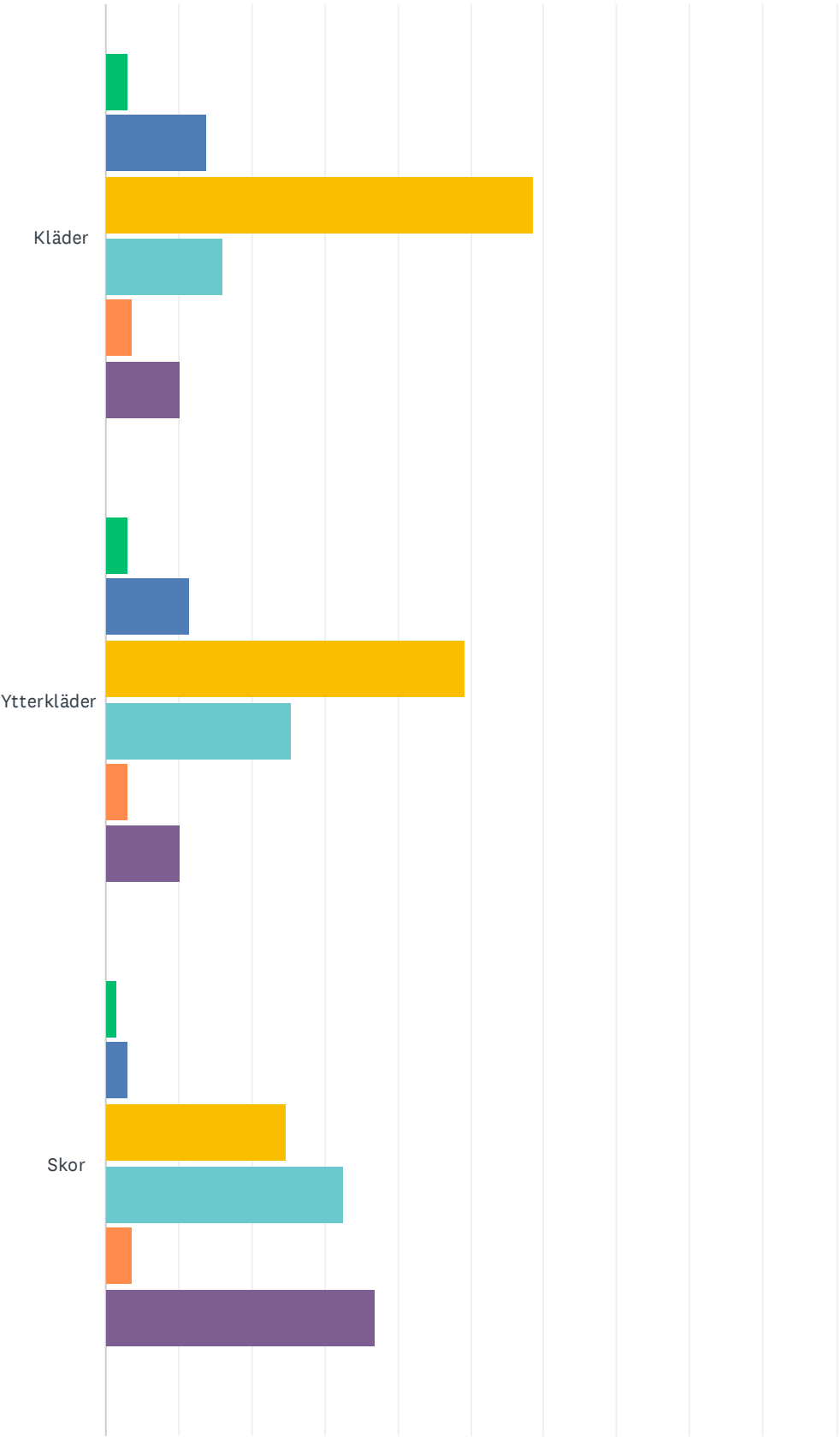
ANSWER CHOICES	RESPONSES	
Ja	34.00%	34
Nej	66.00%	66
TOTAL		100

Q21 Tycker du att du fick bra information om skötsel och reparationsmöjligheter om skorna då du köpte dem?

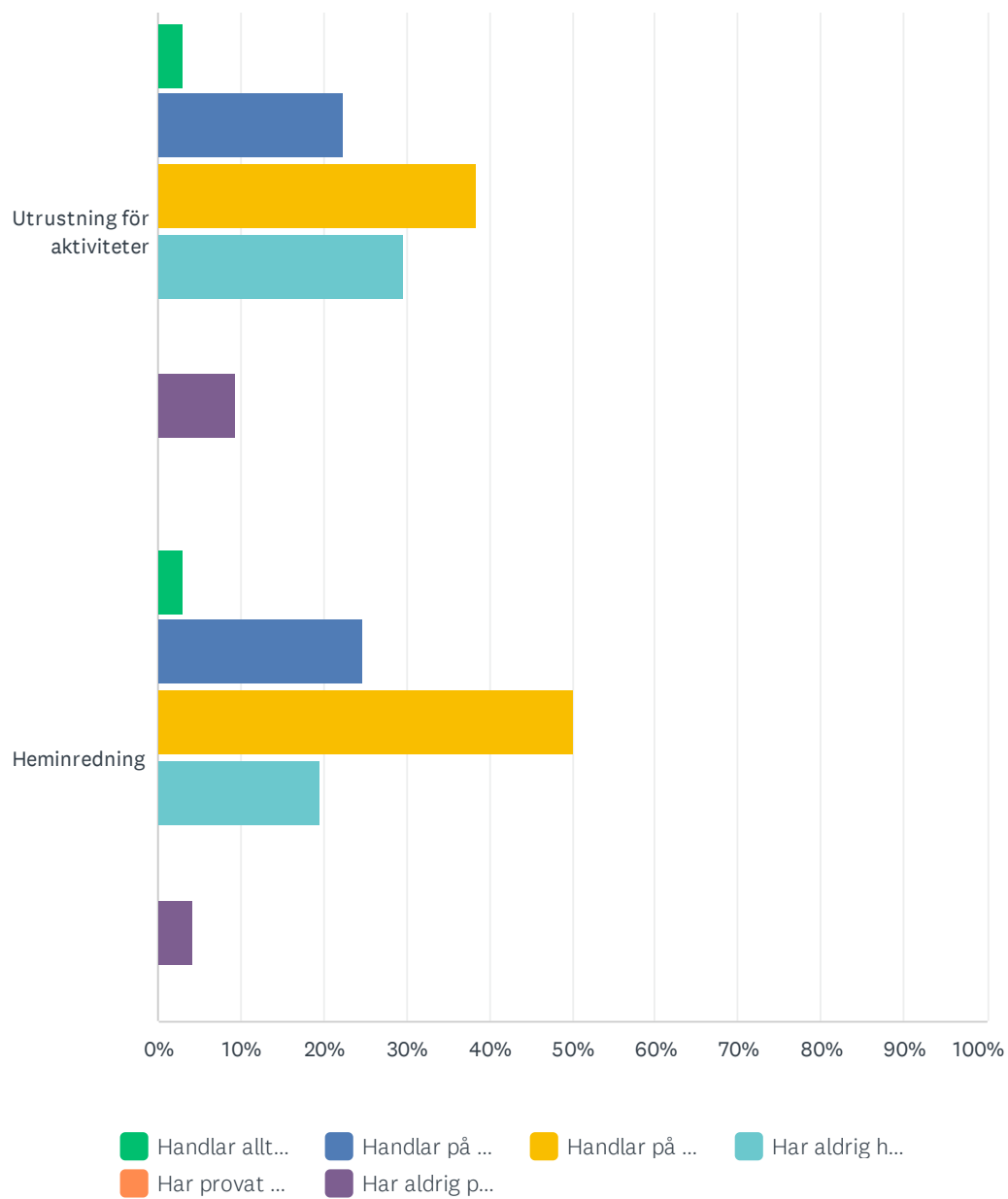
Answered: 97 Skipped: 49

Q22 Vad handlar du på second-hand och hur ofta?

Answered: 138 Skipped: 8



Customer investigation - aftermarket services

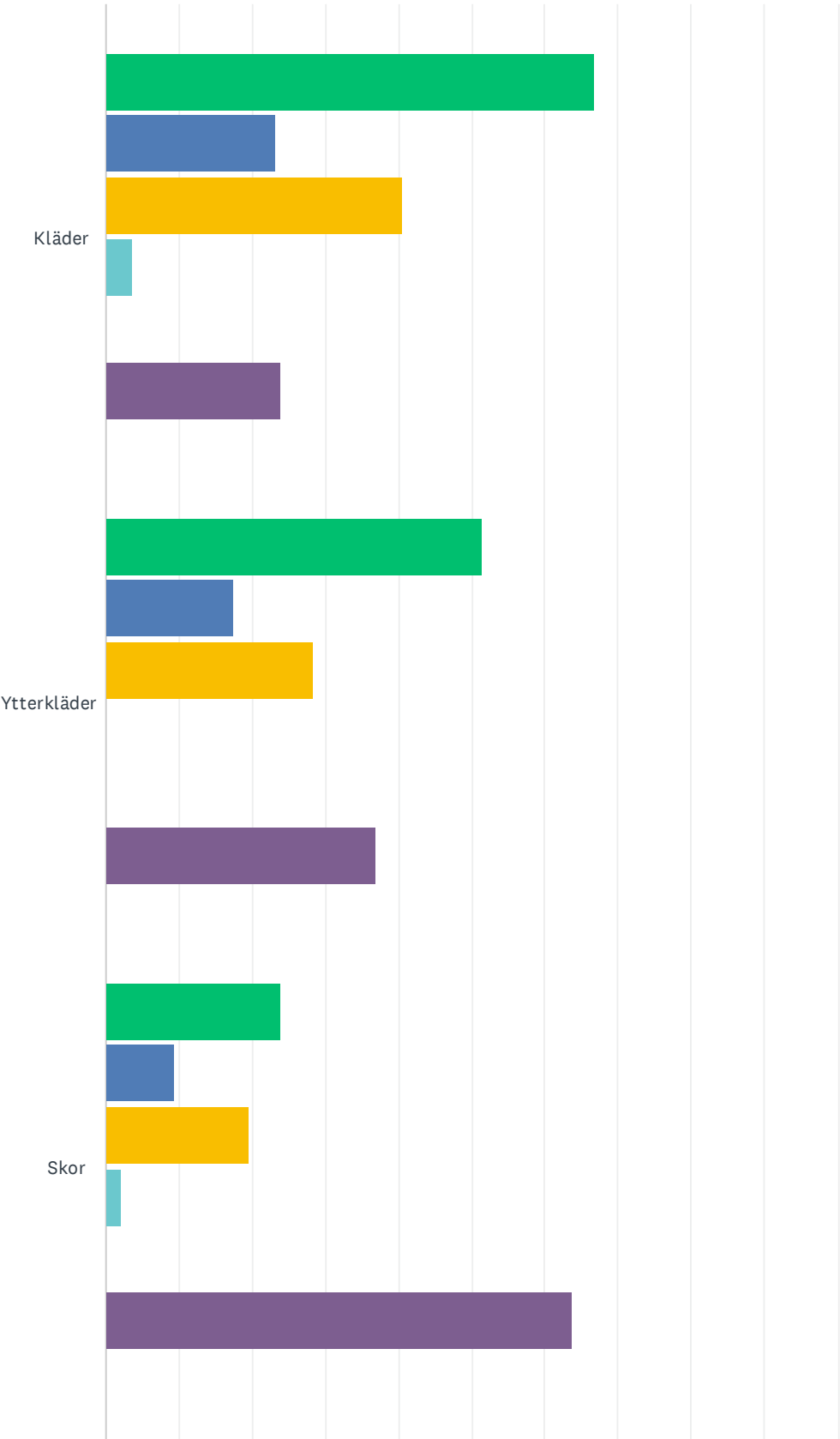


Customer investigation - aftermarket services

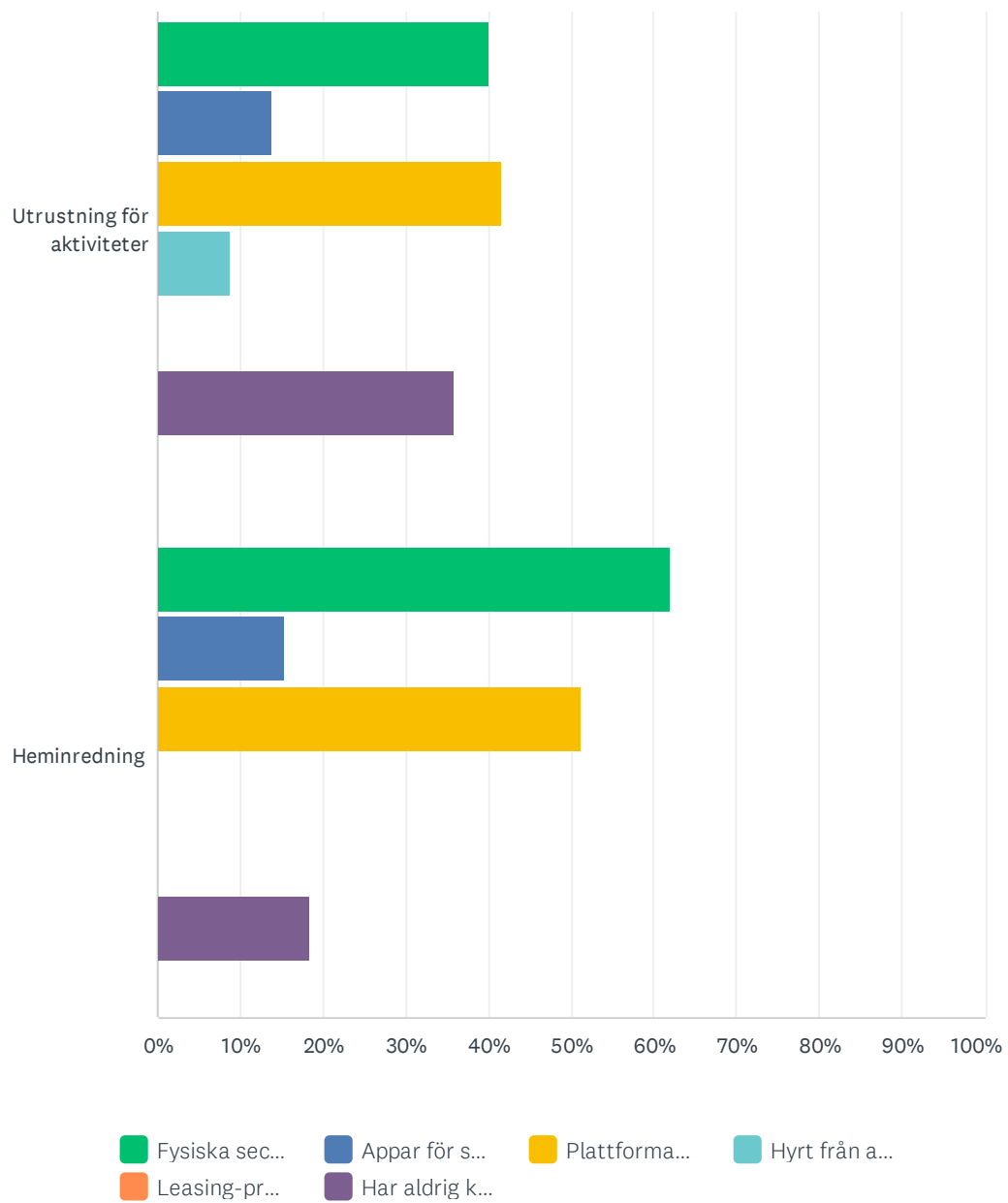
	HANDLAR ALLTID PÅ SECOND-HAND	HANDLAR PÅ SECOND-HAND SÅ OFTA SOM MÖJLIGT	HANDLAR PÅ SECOND-HAND OM JAG FYNDAR (IBLAND)	HAR ALDRIG HANDLAT PÅ SECOND-HAND MEN KAN TÄNKA MIG ATT GÖRA DET	HAR PROVAT SECOND-HAND MEN NOG ALDRIG HANDLA DET IGEN	HAR ALDRIG PROVAT SECOND HAND OCH KOMMER ALDRIG GÖRA DET HELLER	TOTAL RESPONDENTS
Kläder	2.90% 4	13.77% 19	58.70% 81	15.94% 22	3.62% 5	10.14% 14	138
Ytterkläder	2.90% 4	11.59% 16	49.28% 68	25.36% 35	2.90% 4	10.14% 14	138
Skor	1.45% 2	2.90% 4	24.64% 34	32.61% 45	3.62% 5	36.96% 51	138
Utrustning för aktiviteter	2.90% 4	22.46% 31	38.41% 53	29.71% 41	0.00% 0	9.42% 13	138
Heminredning	2.90% 4	24.64% 34	50.00% 69	19.57% 27	0.00% 0	4.35% 6	138

Q23 Genom dessa affärer och plattformar har jag fått tag på second-hand

Answered: 138 Skipped: 8



Customer investigation - aftermarket services

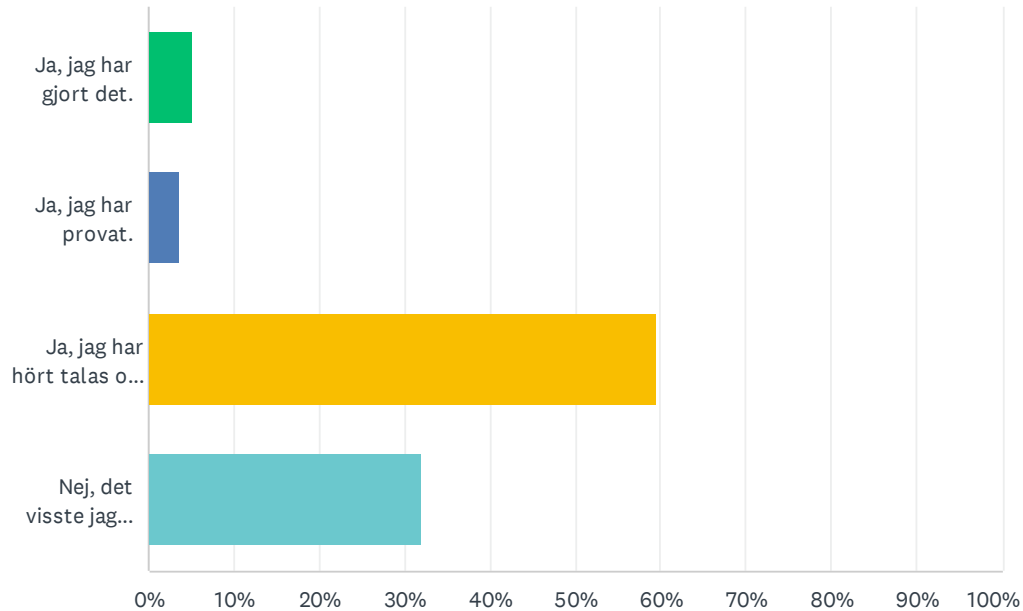


Customer investigation - aftermarket services

	FYSISKA SECOND- HAND AFFÄRER	APPAR FÖR SECOND-HAND HANDEL, T EX SELLPY ELLER SHARING APPAR FÖR PRIVATPERSONER	PLATTFORMAR FÖR SECOND- HAND HANDEL, T EX BLOCKET, FACEBOOK MARKETPLACE, PRIVATA GRUPPER ETC.	HYRT FRÅN AFFÄRER/ UTLÅNINGSTÄLLN	LEASING- PROGRAM ELLER PRENUMERATION PÅ GARDEROBER/ PLAGG/ PRODUKTER	HAR ALDRIG KÖPT DETTA SECOND- HAND
Kläder	66.67% 92	23.19% 32	40.58% 56	3.62% 5	0.00% 0	23.91% 33
Ytterkläder	51.45% 71	17.39% 24	28.26% 39	0.00% 0	0.00% 0	36.96% 51
Skor	23.91% 33	9.42% 13	19.57% 27	2.17% 3	0.00% 0	63.77% 88
Utrustning för aktiviteter	40.15% 55	13.87% 19	41.61% 57	8.76% 12	0.00% 0	35.77% 49
Heminredning	62.04% 85	15.33% 21	51.09% 70	0.00% 0	0.00% 0	18.25% 25

Q24 Visste du att man kan hyra friluftskläder och skor och utrustning i vissa butiker?

Answered: 138 Skipped: 8



ANSWER CHOICES	RESPONSES	
Ja, jag har gjort det.	5.07%	7
Ja, jag har provat.	3.62%	5
Ja, jag har hört talas om det.	59.42%	82
Nej, det visste jag inte!	31.88%	44
TOTAL		138

Q25 Om du svarade ja i föregående fråga, vad hyrde du och vart?

Answered: 11 Skipped: 135

Q26 Ser du några problem med att använda tidigare ägda skor?

Answered: 131 Skipped: 15

Q27 Händer det att du lånar skor från kompisar? Varför/varför inte?

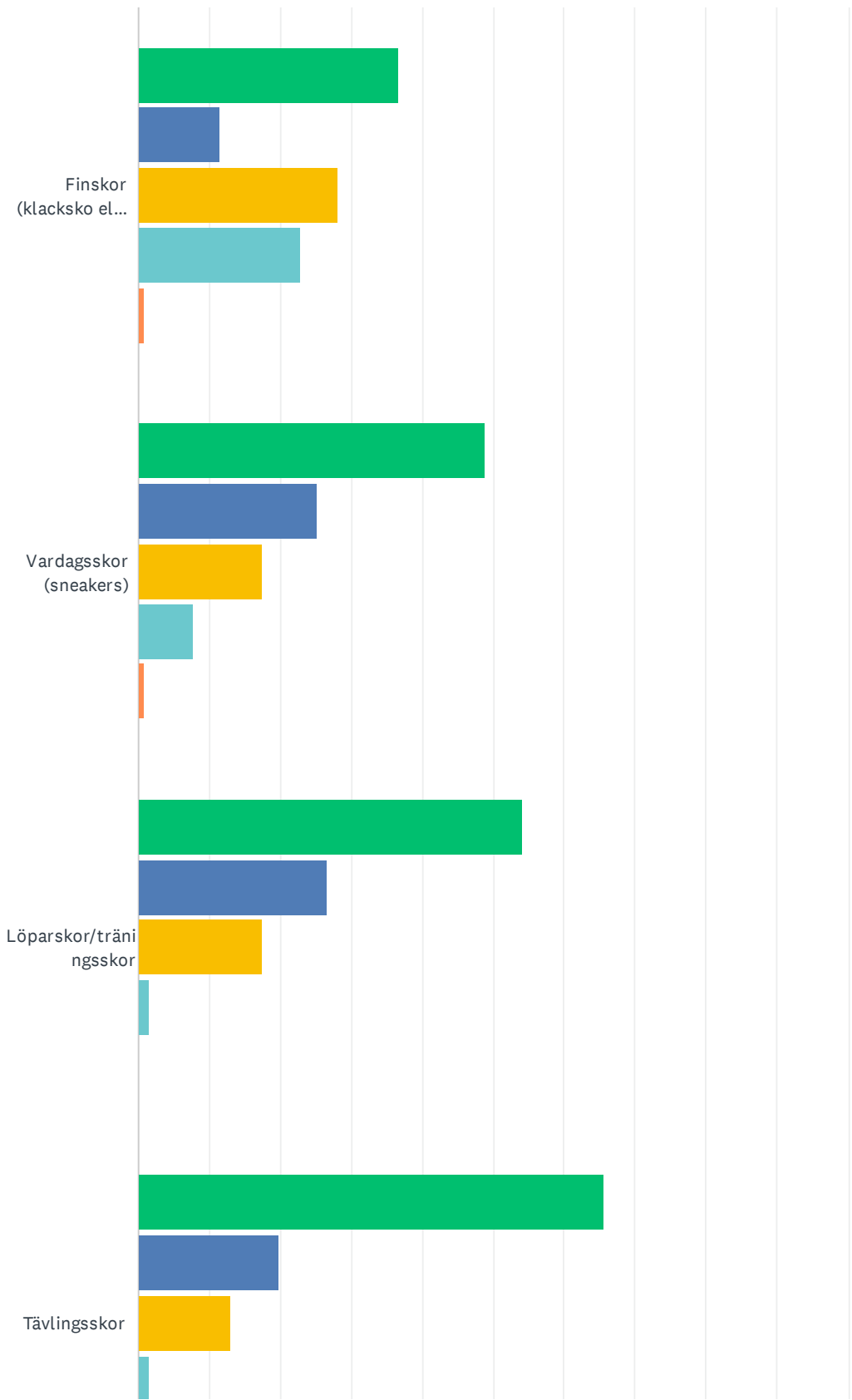
Answered: 131 Skipped: 15

Q28 Kan du beskriva ett tillfälle då du har lånat skor från kompisar? Varför gjorde du det? Vad var det för sko? Och hur kändes det att ha dem på sig?

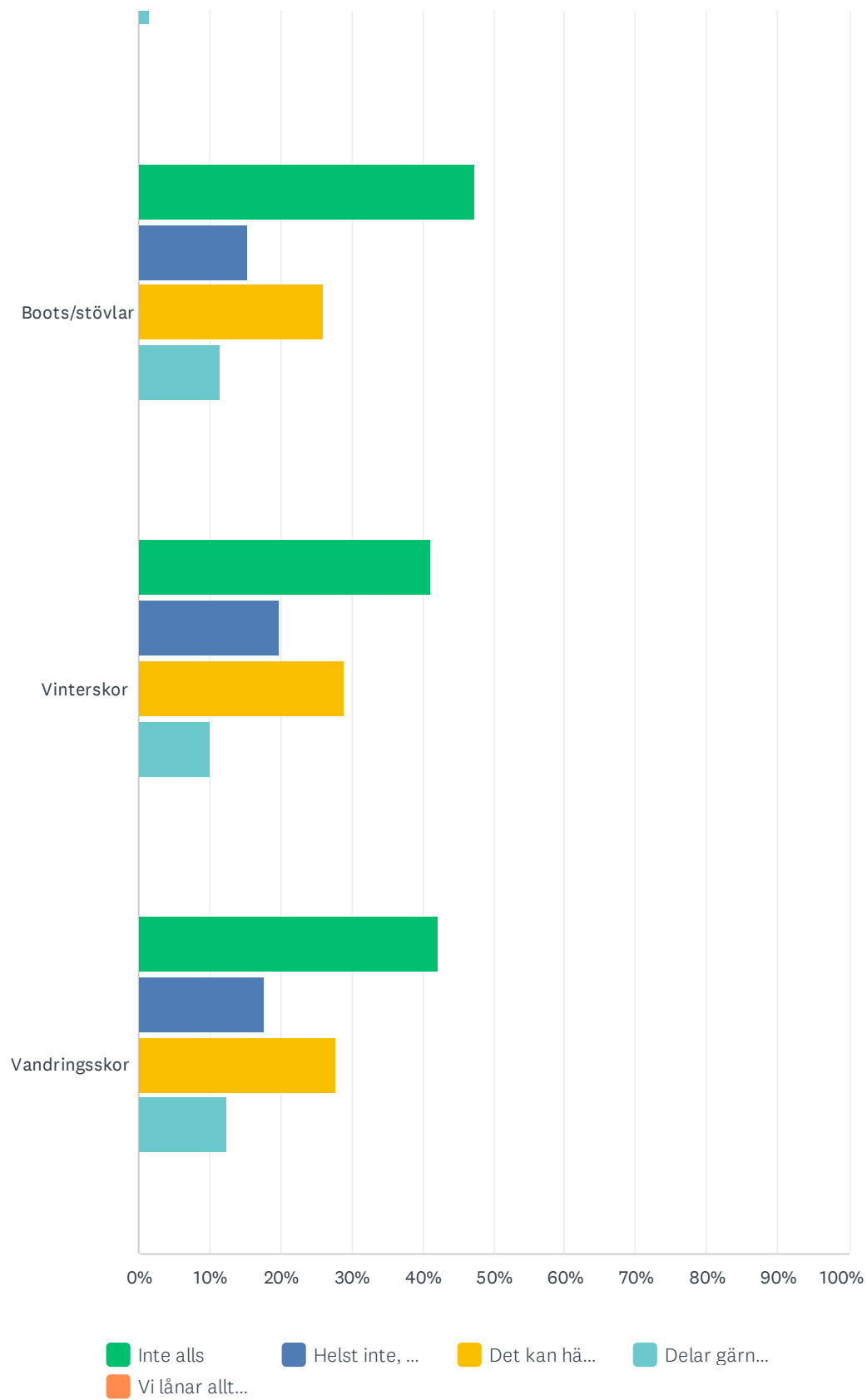
Answered: 131 Skipped: 15

Q29 Hur gärna lånar du följande typer av skor av en kompis?

Answered: 131 Skipped: 15



Customer investigation - aftermarket services



Customer investigation - aftermarket services

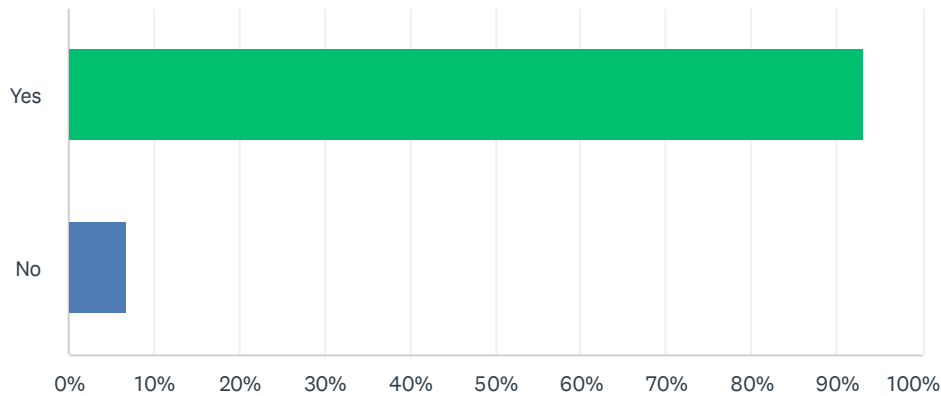
	INTE ALLS	HELST INTE, BARA OM JAG MÅSTE	DET KAN HÄNDA	DELAR GÄRNA SKOR OM DEM ÄR FINA, ELLER NÅGOT JAG VILL HA	VI LÅNAR ALLTID SKOR AV VARANDRA, MAN HAR JU STÖRRE GARDEROB DÅ!	TOTAL	WEIGHTED AVERAGE
Finskor (klacksko eller lacksko)	36.64% 48	11.45% 15	28.24% 37	22.90% 30	0.76% 1	131	2.40
Vardagsskor (sneakers)	48.85% 64	25.19% 33	17.56% 23	7.63% 10	0.76% 1	131	1.86
Löparskor/träningsskor	54.20% 71	26.72% 35	17.56% 23	1.53% 2	0.00% 0	131	1.66
Tävlingsskor	65.65% 86	19.85% 26	12.98% 17	1.53% 2	0.00% 0	131	1.50
Boots/stövlar	47.33% 62	15.27% 20	25.95% 34	11.45% 15	0.00% 0	131	2.02
Vinterskor	41.22% 54	19.85% 26	29.01% 38	9.92% 13	0.00% 0	131	2.08
Vandringsskor	42.31% 55	17.69% 23	27.69% 36	12.31% 16	0.00% 0	130	2.10

Q30 Vilken del/vilka delar av skorna känns mest sliten och ofräschast efter att du har förbrukat skorna och kollar efter nya? (det kan vara vilken typ av sko som helst)

Answered: 128 Skipped: 18

Q31 Har du någonsin beställt skor på nätet?

Answered: 130 Skipped: 16



ANSWER CHOICES	RESPONSES	
Yes	93.08%	121
No	6.92%	9
TOTAL		130

Q32 Vad tycker du om att beställa skor på nätet? Vilka är de största problemen med att beställa skor på nätet enligt dig?

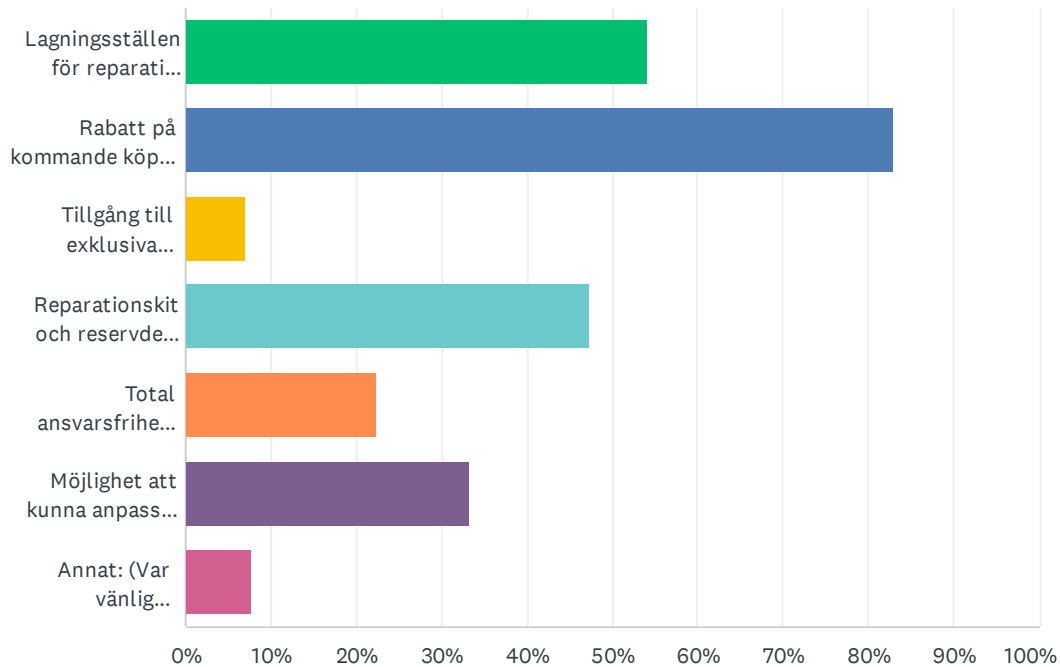
Answered: 130 Skipped: 16

Q33 Vad tycker du tar emot mest med att returnera och skicka tillbaka kläder och skor som du har beställt på nätet, som du inte vill ha?

Answered: 130 Skipped: 16

Q34 Vad hade du önskat att Icebug erbjöd dig som kund. Vilka av följande alternativ hade du helst haft tillgång till då du har köpt skor av Icebug? (Flera alternativ är möjliga)

Answered: 129 Skipped: 17



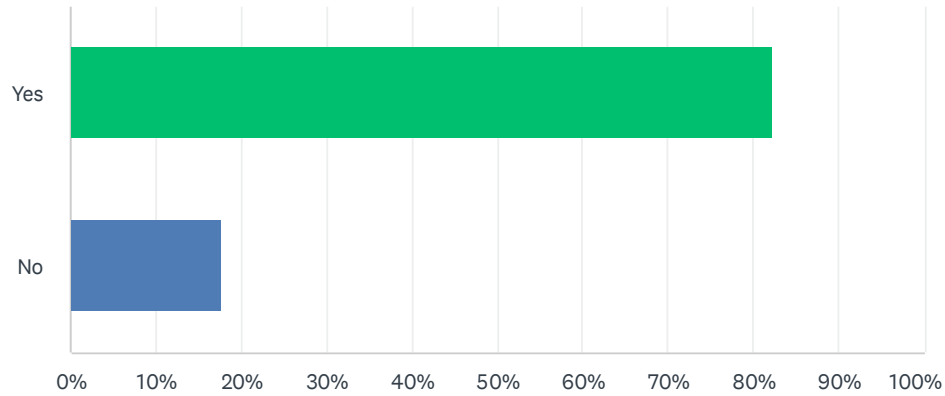
ANSWER CHOICES	RESPONSES	
Lagningsställen för reparation och service av skorna	54.26%	70
Rabatt på kommande köp vid återlämning av ett gammalt par	82.95%	107
Tillgång till exklusiva träffar och möten med Icebug och andra användare av skorna	6.98%	9
Reparationskit och reservdelar då skorna går sönder	47.29%	61
Total ansvarsfrihet, alla reparationer, tvättning, återvinning och leverans av nya skor ingår	22.48%	29
Möjlighet att kunna anpassa skorna efter dina önskningar (design och specialdelar)	33.33%	43
Annat: (Var vänlig specificera)	7.75%	10
Total Respondents: 129		

Q35 Det finns ett system idag, där du lämnar in använda kläder och skor i lådor stående hos vissa butiker (t ex på Naturkompaniet) mot en rabatt på nästa köp - har du någonsin sett detta eller använt det?

Answered: 129 Skipped: 17

Q36 Är du intresserad av att vara med? Tryck på "Ja" nedan och skriv in din mailadress så kontakter vi dig.

Answered: 124 Skipped: 22



ANSWER CHOICES	RESPONSES	
Yes	82.26%	102
No	17.74%	22
TOTAL		124

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