Augment App: Potential Implications on E-commerce

A Multi-Case Study on Swedish Online Fashion Retailers
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Master Thesis in Informatics

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Abstract

Retail is shifting from physical shopping experience to a more online experience. However, the transition is not happening without pains and both consumers and companies alike face challenges when it comes to utilizing all the benefits that the flexibility brings. One of the biggest issues that the online fashion industry is facing, is product evaluation and the resulting high returns rate. Customers are unable to fully evaluate the products due to, for example, insufficient information, faulty information and the fact that size guides are not reliable, which are incentives for the customers to send the products back. Thus, the aim of this thesis is to investigate and determine what the key challenges that the online fashion companies face related to their most common product evaluation tools and what effects those challenges have on the companies. Further, this thesis evaluates how implementing an augmented reality tool, the Augment app would affect those challenges. Finally, this study investigates how implementing the Augment app would affect the Swedish online fashion retailers’ competitiveness. To answer these questions, a qualitative multi-case study was conducted with three Swedish online fashion retailers. Conducting an embedded multi-case study allowed for meaningful and generalizable findings as it allowed for both within-case analysis as well as cross-case analysis.

The results of the study found that companies face challenges in regards to providing quality customer service, ensuring e-satisfaction as well as reducing the high percentage of customer product returns for the Swedish online retailers. Further, the study found that the Augment app could not automatically solve all of the challenges on its own. Rather, the Augment app would act as a complement to the current product evaluation tools and be a most welcome addition. Further, by implementing it, a company could build sustainable competitive advantage.
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1. Introduction

1.1 Background

Throughout the years, the usage of online shopping and e-commerce platforms has increased tremendously in the Nordics. Individuals are able to buy products through clicks on their devices due to the services provided by online retailers. This has made the shopping experience a lot easier for people who do not have the opportunity or ability to engage in on-site shopping (Lu & Smith, 2010). Nordic consumers have achieved a high level of maturity when it comes to e-commerce as they are very well informed, tech-savvy and have high levels of new technology adoption. As a result, the digital purchasing process is nowadays an integrated part of their daily life. The value of online purchases by Nordic consumers during 2016 was estimated to have been 21.9 billion euro (PostNord, 2017).

Sweden, specifically, has come a long way in its maturity as an e-commerce nation. Ninety-five percent of the people have an access to the Internet and approximately 67% of them have shopped online every month in 2016 or in other words, approximately two-thirds of the Swedes (PostNord, 2017). Sweden is also a clear leader in the Nordic region when it comes to using cell phones in the purchasing process as 35% of the Swedish population have shopped via their cell phone each month in 2016 (PostNord, 2017). That being said, the Swedish consumer spent an average of EUR 151 online each month in 2016, which ends up to the estimate of the total amount that Swedes spent on online purchases in 2016 - 8.5 billion euro. Swedish e-commerce is growing relentlessly. 15% of the Swedish consumers shopped online more than 11 times in three months during 2017 (DIBS by Nets, 2017). From 2016 to 2017, total e-commerce turnover grew by approximately 1 billion euro, which is an increase of 45% since 2013 (DIBS by Nets, 2017).

Among the factors that have contributed to the robust growth of e-commerce in Sweden over the past decade are the ambitious retailers who strive to remain competitive, a knowledgeable populace who are interested in technology and willing to use their debit and credit cards online, as well as a solid infrastructure (DIBS by Nets, 2017; PostNord, 2017). However, as much as these are advantages for the development of e-commerce,
they also bring along high expectations by the consumers and high competition in the market, which create challenges for the Swedish online retailers. According to the specialist Carsten Dalbo Pedersen from the largest delivery company in the Nordics – PostNord, consumer behaviour changes quickly and online retailers have to keep one step ahead of the game and have a presence wherever consumers are (PostNord, 2017).

1.2 Problem

Even though online shopping is considered to be successful and enjoys a strong momentum of development, it has its limitations when it comes to replacing traditional physical way of trading. Looking at traditional e-commerce platforms, there is a lack of interaction between the products and consumers. Usually, there are product specifications listed next to pictures or videos displaying how the products look like or function. However, when individuals assess certain products that often requires interaction before making a buying decision. 44% or more than four out of ten Swedes have cancelled an online purchase during 2017 (DIBS by Nets, 2017). 23% of them state that there was insufficient product information as the reason for their cancellation (Figure 1.1).

![Figure 1.1: Why did you decide to cancel your purchase? (DIBS by Nets, 2017)](image-url)
Lu and Smith (2010) argue that through traditional online shopping it would be impossible for a customer to discover different features of certain products such as the sound, appearances or the actual texture. As a result, that is a significant factor that has a negative effect on the whole online shopping experience for customers, which leads to less satisfaction regarding products and overall customer service (PostNord, 2017). Moreover, the general trend for the most popular items purchased online by Swedish residents are mostly clothing and footwear (Figure 1.2). This also brings along the challenges of presenting the texture of the product, the fit and the sizing to the consumers. This is also evident when it comes to children’s items that hold a much lower percent of the Swedish online shopping - just 10% (Figure 1.2).

![Figure 1.2: Top product categories among Nordic online shoppers (PostNord, 2017)](image)

As a result, the phenomena of *showrooming* has come forward as a type of consumer behaviour that is emerging in the Nordics, where 45% of the Swedish consumers claim that they have done that (PostNord, 2017). *Showrooming* occurs when people try out or look over a product in a physical store before purchasing it online for a lower price (Freeman, 2014; Ofek, Katona & Sarvar, 2010; Warman, 2013). The top products category is, indeed, clothing and footwear, which speaks for lack of sufficient
information online to ensure the customer that the product that they are buying is the one that would fit or suit them best (PostNord, 2017). In other words, the majority of the consumers still like to check out the look and feel of products before making a purchasing commitment (Freeman, 2014; Ofek et al., 2010; Warman, 2013).

Furthermore, as an evidence for the consumers’ uncertainty that comes with shopping clothing and footwear online is the fact that they want free returns, which means that they would not pay for the shipping cost of returning a product to the warehouse of the online retailer that they bought it from (Hjort, 2013; PostNord, 2017). According to PostNord’s report on Nordic E-commerce (2017), four out of ten consumers want free returns. This gives the consumers the opportunity to shop a lot of fashion merchandise, try it out in the comfort of their home and then return the products that they ordered in the wrong size or fit to the online store, and all that free of cost to them. This is especially evident in the consumer behavior of young consumers who are the consumer category that return the most (PostNord, 2017).

Therefore, there is a need for optimizing the shopping experience online and there is a room for improving the tools for providing sufficient information to the consumers to decrease the correlated risks of online purchases and make them confident to shop. Furthermore, the uniquely customized shopping experiences are increasingly important as consumers expect it to be faster, more personalized and smarter. At the same time, the shopping experience must be simple, convenient and flexible (PostNord, 2017).

Due to the rapid technological advancements that we are exposed to in our world, different solutions have already been implemented in some e-commerce platforms in order to solve the problems mentioned above. Augmented reality (AR) is one of them. It is a technology that integrates computer-generated objects with the real environment and allows real-time interactions (Azuma, 1997). In other words, augmented reality has the unique quality of providing a direct link between the physical reality and virtual information about that reality (Schmalstieg & Hollerer, 2016). Moreover, augmented reality adds value to retailers by being able to influence customer engagement (Pantano, 2009) as well as purchasing decisions (Pantano, 2014).
Augmented reality and virtual reality are inverse reflections of each other with what each technology seeks to accomplish and deliver for the consumer (Milgram, Takemura, Utsumi & Kishino, 1994). Virtual reality offers a digital recreation of a real life setting, while augmented reality delivers virtual elements as an overlay to the real physical world (Augment, 2015). Unlike virtual reality, augmented reality mixes real environments together with virtual objects. For that reason, it has been proven that augmented reality is more beneficial to apply for online consumers (Williams, 2016).

Furthermore, according to Lu and Smith’s (2010) research results, augmented reality e-commerce system can provide more direct information about products than virtual reality (VR) or traditional e-commerce systems. Successively, this technological solution has improved the entire shopping experience for consumers of online shopping platforms that integrate it (Lu & Smith, 2010). Therefore, the authors of this thesis have chosen to explore the AR technology rather than the VR.

Like many other authors claim, Rese, Baier, Geyer-Schulz and Schreiber (2016), believe that augmented reality is a widely discussed concept all around the world, continuously being developed, coping with the fast growing technological development. The first time augmented reality was considered to be a field of research was already back in the early 90s (Alkhamisi & Monowar, 2013). However, a lot of attention has been given to the research of augmented reality these past several years as the implementation of augmented reality (AR) under different forms in e-commerce platforms is an emerging field and it is drawing more and more attention from academia (Shen, 2013; Lu & Smith, 2010; Rese, et al., 2016; Pantano, 2009; Pantano, 2014; Huang & Liu, 2014).

Research is being done on various aspects of AR for developing the online shopping experience from the actual development of the AR plugins for e-commerce platforms to the effects that their implementation have on consumer experience in general (Shen,
However, there is no previous research on how the implementation of augmented reality in the form of the Augment app could affect the Swedish fashion online retailers and their competitiveness. In addition, the possible effects of this technological solution on the challenges that these business players are currently facing have not been determined when it comes to this important market from the Nordic region. Therefore, based on all of the above, the authors have spotted a research gap and determined the purpose of this thesis that is stated in the next subsection as well as outlined the correlated research questions listed after.

1.3 Purpose

The main purpose of this thesis is to firstly investigate the challenges that customers face for making an informed purchasing choice when shopping from Swedish online fashion retailers, in regards to the current most common product evaluation tools, as well as their effects on the companies. Secondly, it is further explored how the augmented reality tool Augment app would affect these challenges related to buying fashion merchandise online. Thirdly and lastly, it is investigated how the Augment app, as an augmented reality technological solution for product evaluation, could affect the competitive advantage of the Swedish online fashion retailers in this rapidly growing industry.

1.4 Research questions

The following research questions will provide the basis of the thesis and are going to guide the study in fulfilling the purpose:

- What are the key challenges related to using the most common product evaluation tools offered by Swedish online fashion retailers, as well as, their corresponding effects on the companies?
- How would augmented reality for product evaluation in the form of the Augment app affect these challenges?
- How would implementing the Augment app by Swedish online fashion retailers affect their competitiveness?
1.5 Definitions

**E-commerce** is the online exchange of goods, services and money within firms and between firms and their customers (Standing, 2000). The concept relates to business or financial transactions that facilitate electronic payments of items purchased from online stores and service vendors (Techopedia Inc., 2018). Therefore, it is important to state that when referring to e-commerce in this research paper, the following are not classified as e-commerce: (1) in-store purchases that were initially arranged via the Internet; (2) sales of services via the Internet; (3) business-to-business online sales; (4) online sales between private individuals (Postnord, 2017). Consecutively, the definition rather refers to the sale of products via the Internet that are delivered to the consumer’s home or a distribution point, or are collected by the consumer from a store, warehouse or a distribution point (PostNord, 2017).

**Online shopping** is an e-commerce format, in which real-time sales transactions occur as a consumer purchases an item or service from an online store (Techopedia Inc., 2018). In online shopping, there is no intermediary - just the interaction between the online buyer and store/service provider (Techopedia Inc., 2018). Following the definition of e-commerce, it is yet again important to clarify that when referring to online shopping throughout this research paper, the authors have in mind purchases of items not services.

**E-satisfaction** refers to customer’s satisfaction when it comes to their prior shopping experience in terms of e-service quality and product information (Cho, Im, Hiltz & Fjermestad, 2002; Chen-Yu, Williams & Kincade, 1999; Oliver, 1980). It regards the extent to which the product performance matches the consumers’ expectations for the online evaluation compared to the physical evaluation of the product (Anand, 2007). Furthermore, e-satisfaction is compiled of perceptions that the consumers have when it comes to the online convenience, merchandising, website design, and financial security (Anand, 2007).

**E-service quality** concerns the website’s quality when it comes to customer service, content, structure, use, information availability and search function (Zeithaml, Parasuraman & Malhotra, 2000).
Showrooming is emerging consumer behaviour of using a brick and mortar store for physically evaluating products to be later purchased through an online channel on a lower price (Freeman, 2014; Ofek et al., 2010; Warman, 2013).

Electronic word of mouth (eWom) regards all informal communications that is directed at consumers through Internet-based technology, which is related to the usage or characteristics of particular good, and services, or the correlated retailers (Litvin, Goldsmith & Pan, 2018).

Innovation involves the conversion of new knowledge into a new product, process or service and the putting of this new product, process or service into use, either via the marketplace or by other processes of delivery (Johnson, Scholes & Whittington, 2008).

Virtual reality (VR) is an artificial, computer-generated simulation or recreation of a real life environment or situation, which immerses the user by making them feel like they are experiencing the simulated reality firsthand, primarily by stimulating their vision and hearing (Augment.com, 2015). VR is typically achieved by wearing a headset like Facebook’s Oculus equipped with the technology (Figure 1.3).
Augmented reality (AR) is a technology that integrates computer-generated objects with the real environment and allows real-time interactions (Azuma, 1997). It is a human-computer interaction technology that enriches the ability to insert virtual and digital information, which is overlaid into the real physical world (Figure 1.4). More precisely, “(...) AR enhances physical reality by integrating virtual objects into a physical scene. Generated virtual objects become, in a sense, an equal part of the natural environment” (p.215, Lu & Smith, 2010).

![Figure 1.5: Augmented reality (Augment, 2015)](image)

Augment is a mobile app with AR technology and with SaaS technology that can simulate the assumption during purchasing and reflect corresponding result or effect (Shen, 2013). It is based on Android and iOS platform and utilizes AR technology to enable the user to review what would it be if their products of interest are put at home (Shen, 2013). Augment is an enterprise augmented reality platform that connects retailers and manufacturers, allowing online shoppers to experience products at home before buying (Augment, 2018a).

Competitive advantage is a consecutive process of value creating activities (Porter, 1985). A firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors (Barney, 1991).
Sustainable competitive advantage can be defined as value creation strategy not simultaneously being implemented by any current or potential competitors and who are also unable to duplicate the benefits of this strategy (Barney, 1991). A unique combination of the firm's and its suppliers' capabilities in producing differentiated components in a product would provide the firm with a sustainable competitive advantage (Kotabe & Murray, 2004).

1.6 Delimitations

The intention of this thesis is to explore the current online product evaluation tools for evaluating a product for an informed purchasing choice. However, the focus is not on evaluation of the web platforms user friendliness when it comes to UX design and the correlated effects on the overall user experience. As stated in the purpose, the research focus is narrowed down to the Augment app as an augmented reality technological solution and how it could potentially solve the challenges faced by customers and companies alike, as well as its effect on the competitive advantage of the Swedish fashion e-retailers. Therefore, no other augmented reality tools are being examined in this research. In addition, the focus is not on the challenges related to the internal business processes when it comes to the development and implementation of AR tools in Swedish fashion e-commerce platforms. However, the research focus is on the external challenges that these business players are facing to stay competitive in the industry. In addition, the research is delimited by the product categories being studied to clothing and footwear as well as children items/toys. In other words, it is important to state that the following product categories are not researched: media; home electronics; healthy/beauty; sport/leisure; groceries; car/boat/motorcycle accessories.

Moreover, the empirical research for this thesis is conducted solely with three Swedish fashion e-commerce platforms that specialize in children’s clothing and products industry and are part of the same corporate group that have specific market strategies aimed at the Swedish consumers. The companies do not currently use the Augment app but the research focus is on the possible outcomes of doing so. Therefore these characteristics may not be applicable to all companies from the same industry in the Nordics and the rest of the world but only those that possess similar characteristics.
2. Frame of Reference

2.1 Factors for product evaluation in online fashion shopping

2.1.1 E-satisfaction

E-satisfaction refers to customer’s satisfaction when it comes to their prior shopping experience in terms of e-service quality and product information (Cho et al., 2002; Chen-Yu et al., 1999; Oliver, 1980). More specifically, it regards the extent to which the product performance matches the consumers’ expectations for the online evaluation compared to the physical evaluation of the product (Anand, 2007). In general, e-service quality concerns the website’s quality when it comes to customer service, content, structure, use, information availability and search function (Zeithaml et al., 2000). Furthermore, e-satisfaction is compiled of perceptions that the consumers have when it comes to the online convenience, merchandising, website design, and financial security (Anand, 2007).

Website design has to do with offering consumers an easy-to-navigate and user-friendly site in order to facilitate, for example, the simple search (Anand, 2007). The average online shopper tends to quickly view a website for about 30 seconds before deciding whether to continue with browsing the available products or exit from the website just as quickly (Dawson & Kim, 2009). Some of the most crucial influences on this decision are the website layout and usability when it comes to, for example, the search features that if poor, tend to have a negative effect on the consumers decision (Kawaf, 2012). The way for ensuring that these are achieved is to keep the design clear and overall the websites neatly organized (Anand, 2007). As a result, this would ensure the effective online use for the consumers when it comes to figuring out how to shop in an efficient way (Anand, 2007). Prior research determines that there is a positive linkage between website satisfaction, website trust, and website loyalty in the development of an online brand relationship (Horppu, Kuivalainen, Tarkiainen & Ellonen, 2008). Moreover, it is important for consumers to have access to information regarding the availability of the online shop customer service, as well as the return policies while viewing web stores (Then & Delong, 1999).
In an online context, merchandising is correlated to the factors associated with online offerings and product information (Anand, 2007). When it comes to online shopping of fashion products, sufficient information and product viewing can contribute to the provision of a utilitarian experience (McCormick & Livett, 2012). When the product viewing is vivid and interactive, this yields significantly higher levels of consumer satisfaction (Anand, 2007). If such sufficient information is provided, this in turn has a positive effect on the perceived ease of the webstore usability and its overall perceived quality (McCormick & Livett, 2012). Therefore, positive perceptions of online merchandising represent another set of elements that could increase the e-satisfaction levels, which once again includes the product offerings and product information available online (Anand, 2007).

For understanding consumers behavior and the decision-making process in particular, it is essential to, firstly, understand the concept of perceived risk (Masoud, 2013). According to a study made by Matic and Vojvodic (2014), it was revealed that online decision-making process is mainly influenced by the perceived insecurity consumers might acquire. Further, it has been found that consumers tend to perceive risk differently depending on what way they choose to shop. One who decides to shop online is most likely to perceive higher risk than someone who choose to visit a physical store to shop clothing (Samadi & Yaghoob-Nejadi, 2009).

Further, when examining the level of trust consumers have for online shopping it is necessary to consider two different factors. The level of trust does not only regard the one between the actual e-retailer’s website and the consumer, it is also the level of trust the consumers have towards the computer systems available on the website that plays a significant role (McKnight & Chervany, 2001-2002).

2.1.2 Fit and Size

Style and size preference are two vital aspects of fashion e-commerce that are hard to understand and analyze. Keiser and Garner (2003) state that currently there are three different methods of analyzing the fit of clothing and for the creation of size guides/charts:
• basing the measurements of one “ideal” consumer and embodying this in a single fit model;
• adjusting for additional sizes by using grade rules to define proportional increases and decreases from the base pattern;
• evaluating the fit model visually and in two dimensions by comparing linear garment measurements to linear body measurements.

However, as a customer of online shopping one is not able to try and see if a certain product would fit or not. Instead consumers are dependent on the information provided in the illustrated size charts on the webstore (Loker, Ashdown & Schoenfelder, 2005). Even though they might be useful as guidelines, they are impossible to only rely on due to the various types of body shapes within each size, which a large number of consumers might have (Loker, Ashdown & Schoenfelder, 2005). Therefore, trying to understand and analyze the concept of fit and size can be difficult because the relationship between the human body and clothing is not always certain (Loker et al., 2005). Previous studies have shown that fitting problems for clothing are the reason for 50 percent of catalog returns (DesMarteau, 2000; Goldsberry, Shim & Reich, 1996). This issue would be further discussed in a later section on the challenge of high return rates that online e-commerce face.

2.1.3 Showrooming

Lu and Smith (2010) argue that through traditional online shopping it would be impossible for a customer to discover different features of certain products such as the appearances when it comes to the fit and sizing, or the actual texture. As a result, consumer behavior has adapted to this challenge and the phenomena of showrooming has come forward (Warner, 2013). This type of consumer behaviour is emerging in the Nordics, where 45% of the Swedish consumers claim that they have done that and the top category is clothing and footwear (PostNord, 2017). Showrooming is a consumer behaviour of using physical stores to try out or look over products to add real life value to online available products before purchasing them in a webstore for a lower price (Freeman, 2014; Ofek, Katona & Sarvar, 2010).
2.2 Online product evaluation tools

Online product presentation is stated to be the most significant factor to be taken into consideration during the process of online shopping (Ha, Kwon & Lennon, 2007). While shopping online one is not able to evaluate properly whether a certain clothing or item fits well or not. The incapability of not being able to touch or try on an item before purchase results in a high demand for adequate product information. It is utterly crucial for online retailers to provide the consumers with necessary product information to enable positive purchase decisions (Fiore, Jin, & Kim, 2005; Then & Delong, 1999).

2.2.1 Visual product presentation

Firstly, from both a hedonic and utilitarian perspective, it is fundamental for an online fashion retailer to illustrate good visual images of clothing and other products such as furniture on their website. Studies have shown a positive correlation between enhanced visual images and consumers satisfaction (Fiore et al., 2005; Park, Lennon & Stoel, 2005).

Secondly, useful online product evaluation tools used by e-retailers are also 360 degrees of rotation and image zooming (Lee, Kim & Fiore, 2010). These are said to not only reduce the perceived risks consumer might have but it would also increase the amount of satisfaction one would endure during shopping online (Lee et al., 2010). Furthermore, a study made on 17 online fashion shoppers revealed that out of 10 different elements, 3D and product image zooming are the two most fundamental elements necessary to be available on an online fashion retailer’s website. This is due to the 3D and product image zoomings ability to assist with imagining and visualizing products enabling consumers to make easier purchase decisions (Kawaf, 2012). Likewise, the analysis also mentions the effects of using catwalk on the online fashion website. According to Kawaf (2012) using a catwalk is not fundamental yet it contributes to a more pleasurable experience for the consumers, making them more confident in their purchase decisions. Additionally, the catwalk videos have a positive impact on the consumer due to its ability to illustrate a more realistic point of view of the items being displayed (Kawaf, 2012).
2.2.2 Product information

As online shoppers do not have the possibility to physically examine product features such as how the fabric feels or what the labels advise prior delivery, they rely on the provided online information about the merchandise in the form of a product description (Park & Stoel, 2002). In order to maintain satisfied customers, it is significant that an online store continuously provides useful data regarding product quality and information on their website (Kawaf, 2012).

Prior research has proven that consumers need detailed information about the brand and product’s style, as well as the price, colour, fibre content, garment care and fit (Golletz & Ogheden, 2010; Park & Stoel, 2002). It is particularly important to also provide size information to give the consumer the ability to evaluate the fit (Park & Stoel, 2002). Therefore, displaying product information on the fashion webstore is considered to be helpful in such way that it allows the consumers to see things in a clear way (Kawaf, 2012). By doing so, this consequently has an effect on how the consumer perceives the risk, gain better confidence and also increases their trust towards the specific online retailer (Kawaf, 2012).

2.2.3 Electronic word of mouth (eWOM)

According to Fan and Miao (2012), when customers make purchasing decisions they tend to read electronic word-of-mouth (eWOM), which can be found in different virtual channels such as blogs, forums, consumer reviews and social networks. EWOM regards all informal communications that is directed at consumers through Internet-based technology, which is related to the usage or characteristics of particular goods and services, or the correlated retailers (Litvin, Goldsmith & Pan, 2018).

Sotiriadis and Van Zyl (2013) state that a useful and trusted communication way for finding product information of a certain item or clothing is through online consumer reviews. Moreover, previous research studies have shown that customers appreciate to read through online consumer reviews before they decide on a certain online purchase since it also strengthens the eWOM credibility (Fan & Miao, 2012). Interestingly, consumers intentions of purchasing based on the information that they get from online consumer reviews has a minor effect on males than what is has on females (Bae & Lee,
2011). In addition, consumers are more likely to be influenced by negative reviews than positive reviews (Bae & Lee, 2011).

2.3 Challenges for online fashion retailers

2.3.1 Competition of physical stores

One of the major advantages of purchasing online is the opportunity for customer of being able to buy whenever they wish as they are not restricted to certain opening hours as they are by physical stores (Glenapp, 2013). Moreover, customers are able to access products from around the world without any major increases in costs (Glenapp, 2013). Nevertheless, one cannot ignore the fact that fashion web stores are currently not able to replace the service found in physical stores due to several influential factors (Monsuwé, Dellaert & Ruyter, 2014).

Product characteristics are some of the main influences on consumer’s purchasing decision when it comes to shopping in either a physical or online store (Ahn, Ry & Han, 2007). This is fundamental when it comes to products that require customers to feel, smell or try them before customers can decide on whether to buy them or not. There is another term used to explain this need called high-touch, which requires more engagement with the product than just being shown online (Dholakia, Kahn, Reves, Rindfleisch, Stewart & Taylor, 2010). Products that require certain knowledge before buying in regards to product–care, for example, are most likely to be bought from an actual physical store (Elliot & Fowell, 2000). This is the case due to the fact that physical stores give the customers an opportunity of physically trying clothes on spot, touch and feel the fabric, as well as, being able to interact with a salesperson (Monsuwé et al., 2014). Therefore, according to previous research, these are some of the advantages of shopping in a physical store that online fashion stores cannot compete with at the moment (Monsuwé et al., 2014).

Moreover, some consumers may have a high purchase risk perception, as well as hard time to adjust to the technological advancement and may, therefore, not feel confident with buying online, instead they start their search of a product online and once they have found the one suitable for them they decide to go to a physical store to finalize
their purchase (Seock & Norton, 2007). This consumer behaviour is known as webrooming (Postnord, 2017).

2.3.2 High return rates

It is essential that e-retailers get an understanding for the underlying reasons to why consumers decide to return items back and overall understanding of the different customers’ demands that are not met, which creates returns’ patterns. By doing so, e-retailers could potentially be able to implement changes that could decrease the number of products being sent back to them (Golletz & Ogheden, 2010).

According to previous research, the main specific reasons for consumers to return items include the following: (1) changed mind; (2) wrong color or size of the items; (3) items looking differently from the website; (4) multiple purchases of the same items in different size or colors that they choose to keep one of and return the rest; (5) order type (Internet, phone, email, etc); (6) damaged item or item with imperfection(s); (7) delivery issues; (8) long lead-time due to inventory shortage; (9) assembly challenge; (10) price competition (Golletz & Ogheden, 2010). Therefore, the return reasons can vary due to different factors but overall the causes for consumers to be dissatisfied with the purchase could either be product-related or non-product related (Rogers & Tibben-Lembke, 1999).

One of the most common reasons for returns within the area of e-commerce, outside of defective merchandise, are known to be in regards to the size, fit and quality (Hjort, 2013). Selecting the wrong size or color, for instance, is mainly due to the faults in the information on the website. More specifically, that could be caused by inaccurate size guides or lack of size conversion charts that provide the measurements, for example, in both inches and centimeters (Golletz & Ogheden, 2010). However, if one looks further, it is evident that consumers adopt a shopping behaviour where they tend to buy a certain product in multiple sizes and / or colors only to try on at home and evaluate the products altogether by physically comparing them, and later returning the ones they do not want to keep (Golletz & Ogheden, 2010). This, as a result, has a negative effect on the inventory and contribute to unnecessary workload for the e-retailers (Golletz & Ogheden, 2010).
According to previous research done by Lantz and Hjort (2013), offering free delivery and return on items ordered online has a contributing effect on consumers returning items back to the e-retailers. Therefore, another important aspect for why they face a high rate of returns is the convenient return policy that is available enabling consumer to return items for free while also getting free delivery (Hjort, 2013). However, free return policy allows the consumers to get more comfortable with purchasing from a e-retailer before making a purchasing choice (King & Dennis, 2003). Thus, it is vital for e-retailers to offer this kind of service in order to be able to maintain their competitiveness in the market since most e-retailers offer it too (Lantz & Hjort, 2013).

Looking at the return rates from a Nordic customers perspective, a previous study by Hjort (2013) on the well-known Swedish online fashion retailer Nelly.com, illustrates that the main reason for consumers to return clothing was due to either bad product quality or in regards to wrong size (Figure 2.1).

<table>
<thead>
<tr>
<th>Return reason</th>
<th>Sweden</th>
<th>Norway</th>
<th>Denmark</th>
<th>Finland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>33%</td>
<td>39%</td>
<td>35%</td>
<td>39%</td>
</tr>
<tr>
<td>Late delivery</td>
<td>0,2%</td>
<td>0,4%</td>
<td>0,2%</td>
<td>0,3%</td>
</tr>
<tr>
<td>Quality</td>
<td>40%</td>
<td>43%</td>
<td>39%</td>
<td>50%</td>
</tr>
<tr>
<td>Wrong delivery</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Defect</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>5%</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Not collected</td>
<td>18%</td>
<td>8%</td>
<td>9%</td>
<td>5%</td>
</tr>
</tbody>
</table>

*Figure 2.1: Nelly.com - return reasons for the Nordics customers (Hjort, 2013)*

Besides the reasons mentioned above, there is a directive known as The Distance Selling Directive (97/7/EC), which allows consumers to withdraw a purchase made online within 7 days without being charged or resulting in any consequences that would be non-beneficial for the consumer (Europe, 2014).

**2.4 Sustainable competitive advantage through innovation**

Peters and Waterman (1982) present the concept of excellence, which if persecuted continuously, provides the foundation for a unique competitive advantage. Porter (1985) defines competitive advantage as a consecutive process of value creating activities.
Moreover, those should also not be implemented in the same time by any current or potential rivals (Barney, 1991). In the constantly changing business environment, companies are required to get new prospects to sustain their competitive advantage (Dogan, 2015).

Considering the shorter product cycles, developing technological advancements, as well as, the increasing global competition, companies are driving on a road where at some point they face the challenge of a certain type of shortage (Schmitt, Barker, Raisch & Whetten, 2015). In other words, the strive for achieving innovativeness, rapid growth, competitive aggression, adaptability and proactiveness turns the managing of the business field into a quite complicated task (Dogan, 2015). There business players have to be flexible, strategic, as well as entrepreneurial in order to overcome these challenges (Dogan, 2015). Therefore, companies should strive towards obtaining a sustainable competitive advantage through resources and capabilities that include the following features: valuable, rare, imperfectly imitable and not substitutable (Barney, 1991). As a result, the capability of developing new products and innovating, overall, can be considered as some of the main competencies, which companies should posses in order to keep their competitive advantage (Kuo & Chao, 2014).

Innovation is considered a significant concern for a number of industries (Namgyook, Uisungd & Jeonghwan, 2012). Its effect on companies’ growth is dependent mostly on their features, as well as the balance between market and technology orientation strategies (Uddenberg, 2015). Generally, companies that demonstrate quite high levels of market orientation reach strong sales performance, and the ones with rather high technology orientation have higher company value (Uddenberg, 2015). Furthermore, the essentials of innovation and flexibility are directly or indirectly related to companies’ ability to both adjust to and please the constantly changing consumers needs (Prastacos, Söderquist, Spannos & Wassenhove, 2002). Therefore, in order to perform better than the competition it is vital for companies to have the capability to both understand and meet the needs of consumers, which would improve the economic efficiency, customer loyalty, and competitive differentiation (F-Jardón, 2011).
Overall, attaining competitive advantage itself is not simple, but companies should also work on sustaining it by continuously creating and acquiring new capabilities that would help them generate advantages over competitors (Kotabe & Murray, 2004). In addition, previous research shows that in the cases when companies manage to sustain their competitive advantage, they outperform their rivals in the long term (Liu, 2013).

2.5 Augmented reality
Augmented reality (AR) is a human-computer interaction technology that enriches the ability to insert virtual and digital information overlaid into the real physical world. More precisely, “...AR enhances physical reality by integrating virtual objects into a physical scene. Generated virtual objects become, in a sense, an equal part of the natural environment” (p.215, Lu & Smith, 2010).

Azuma (1997) conducted a survey describing AR as well as discussed the difficulties and challenges of constructing AR systems. Today, augmented reality is a widely discussed concept all around the world continuously being developed by companies in their strive for coping with the fast growing technological developments (Rese, Baier, Geyer-Schultz & Schreiber, 2016). With the increasing development of different technologies, AR has come to play an important role within various fields; thus, various applications and systems are being created aiming to simplify AR users’ daily life (Carmigniani, Furht, Anisetti, Ceravolo, Damiani & Ivkovic, 2011). Therefore, more and more retailers have shown interest in the development of augmented reality, which subsequently has resulted in an increasing number of retailers implementing the usage of the interactive technology of augmented reality (Rese et al., 2016). As a result, the integration of AR in ecommerce is quickly changing how consumers shop by allowing them to see what they want to buy before any purchase is made (Williams, 2018).

AR e-commerce system functions in the same way as the traditional e-commerce platforms when it comes to searching in the website and viewing pictures of products or retrieving product information. The difference is that AR tools provide the consumer with the opportunity to bring virtual products in a physical environment (Lu & Smith, 2010). According to Huang and Liu (2014), by offering consumers the opportunity to interact with digital and virtual objects online one is more likely to gain an enthusiasm
around the consumer experience. Furthermore, AR is providing value to retailers and shoppers alike in these three areas: (1) creating an engaging buying experience; (2) modifying and customizing selections; (3) visualizing and understanding products and features (Williams, 2018). Therefore, AR can not only improve the vividness of displaying products but also enhances the interactions between customers and e-commerce platforms, enabling the customers to have more comprehensive and in-depth understanding of the products with the purpose of increasing the rate of purchase (Shen, 2013). In other words, this kind of approach allows customers to imagine how a certain product would fit them before they decide on whether they would like to buy it or not (Lu & Smith, 2010). Therefore, the consumers are able to actually interact with their product of interest online and assess better whether it suits their needs. As a result, this eventually leads to a positive behavior increasing the buying intentions amongst consumers (Huang & Liu, 2014).

2.6 Augmented reality tool: *Augment app*

*Augment* is an AR 3D viewer that offers retailers and manufacturers the only AR ecommerce software development kit (SKT) solutions available for both native mobile app and web integrations. Hence, it allows companies to implement augmented reality product visualization in their existing e-commerce platforms (Augment, 2018d). The *Augment* mobile app uses SaaS technology and is based on Android and iOS platform. As illustrated in the figure below, it allows its users to place life-size 3D models in their surrounding environment with or without the use of trackers, which are defined as simple images that 3D models can be attached to in augmented reality (Augment, 2018a).

![Figure 2.2: AR Viewers (Augment, 2018a)](image-url)
By utilizing the AR technology, Augment enables its users to review products prior purchasing on their mobile or desktop devices as it stimulates users’ assumptions and reflects corresponding result or effect (Shen, 2013).

Overall, Augment specializes in creating and optimizing high-quality 3D content for augmented reality, ensuring accuracy and realism of the 3D products in question, while also providing insights for the retailers into the levels of engagement of products through integrated analytics (Augment, 2018c). The customers only need to click “Try it at home” button on the ecommerce website which is connected to Augment, then the product will open up and reflect where the mobile or flat computer’s camera is directed as illustrated in the figure below (Shen, 2013; Williams, 2018).

![Figure 2.3: Augment - Revolutionizing the Buyer’s Journey Online (Williams, 2018)](image)

Thereafter, the ecommerce customers would be able to zoom-in and -out, as well as rotate the selected item while evaluating how it fits (Shen, 2013). This kind of approach allows customers to imagine how a certain product would look in real-life, which would help them before they decide on whether they would like to buy the
product or not (Lu & Smith, 2010). Therefore, the tool can lower the risk of purchasing products with big volume, for example, and encourage the customer into buying decision (Shen, 2013). In other words, Augment removes the “guesswork” by allowing customers to try the products in augmented reality at home before buying through their smartphones or tablets (Augment, 2018b). This AR tool helps solve buyer uncertainty and suits online shoppers in their mission to make an informed and confident online purchase (Williams, 2018).
3. Methods

3.1 Research Philosophy

The research philosophy that guided this study was interpretivism and the motivation behind this choice was its compliance with the research purpose for the following two reasons. Firstly, due to the social complexity of, for example, technological innovations and sustainable competitive advantage, the problem of this study could not be measured through objective data. As a result, a qualitative study was needed (Saunders, Lewis & Thornhill, 2012). Secondly, there is no guiding framework about augmented reality in online shopping and its reference to the company’s competitive advantage. Therefore, the authors found as appropriate to develop this understanding by considering the interviewees views, rather than using objective data due to the fact that business situations are unique and complex (Saunders et al., 2012). In addition, the gathered data was not value-free, which drives the study away from the positivistic approach where social reality is considered to be completely observable (Saunders et al., 2012).

3.2 Research Approach

The researchers chose to use an abductive research approach to establish the correlation between theory and data. This allowed for a more real-life process approach by combining reality and theory that was assessed in a spiral manner (Saunders et al., 2012). Unlike deduction, which builds on evaluating or testing a specific theory, both the abduction and induction approach aim at developing an existing theory (Arlbjørn & Halldorsson, 2002). Initially, the researchers did a literature review on augmented reality tools already in 2017 that raised their interest in the topic and the possible application of the technology in Swedish online fashion retailers. As none of them have done it yet, a gap was spotted in this unique and complex business environment. Hence, the researchers selected cases with similar characteristics to study them and understand how augmented reality could affect their competitive advantage in the Swedish market in 2018. Then yet again, the researchers went back to reviewing the already existing theory to be in accordance with the purpose of the study and research questions while also gathering the empirical data, which is an approach that refers to abduction (Dubois & Gadde, 2002). In other words, this spiral process was bringing the research approach from inductive to deductive, and then the other way around, which resulted in an
abductive approach that allowed the researchers to gain better insight of developing a new phenomenon (Saunders et al., 2012; Alvesson & Sköldberg, 1994). As a result, this allowed the researchers to obtain an extensive knowledge about the chosen field of study and from there, acquire data through interviews and eventually draw meaningful conclusions in relation to the already existing theoretical findings (Dey, 2004).

3.3 Methods of data collection

3.3.1 Qualitative methods
Quantitative methods of measuring and evaluating data numerically and statistically based on limited set of standardised questions and answer categories was considered an insufficient way of collecting data for this research due to its exploratory nature (Erlenmaier, 2009; Saunders et al., 2012). Therefore, qualitative methods for data collection were chosen instead of quantitative due to the complex nature of the research questions that required in-depth understanding of the included subtopics and the argumentation behind the interviewees answers that could hardly be assessed through quantitative methods. In other words, the required results were to be detailed and overall rich in information, which qualitative methods provided sufficiently through interviews with customer service professionals from the online fashion industry in Sweden (Ritchie & Lewis, 2003).

3.3.2 Case study
The authors’ purpose with this research was to understand a real-life phenomenon in depth and within its real-life context, which is why case study was the chosen research method (Yin, 2009). Case studies can employ an embedded design, that is, multiple levels of analysis within a single study (Yin, 1984). Considering the fact that the data for the empirical findings for this research are gathered from three online fashion stores in Sweden, this paper has a multi-case design. In addition, the study focuses on both company and individual level meaning that the analysis is being done on multi-units. Therefore, the case study design for this research is an embedded multi-case study. The argumentation for the choice of this type of a case study was that it allows for scientific robustness as well as comparisons between cases in the analysis phase. In addition, a study conducted during a specific time is referred to as a cross-sectional, while a study on an phenomenon over time is longitudinal (Saunders et al., 2012). Therefore, the
authors performed a cross-sectional case study by reason of the given timeframe for this project, which was constraining.

3.3.3 Case Selection
According to Seawright and Gerring (2008), the case selection procedures could consider focus on typical, diverse, extreme, deviant, influential, most similar, and most different cases. The cross-case method of case selection for this research was “most similar” as the authors of this thesis aimed at selecting cases that would serve as representatives of the Nordic online fashion retailers population, which provided a strong basis for generalization. Therefore, the three selected cases are similar on the following variables - to be part of the online fashion industry, to operate in Sweden and to offer similar product categories. However, the cases were still different on one dimension - their competitive advantage in the Swedish market.

Replication was facilitated for this multi-case study, where the aim was literal replication or in other words, predicting similar results so that the original findings from the first case were replicated by exploring the second and third case which could consider the final findings as robust (Saunders et al., 2012). Moreover, this provided the authors with the opportunity for cross-case analysis which enriched the findings when it comes to the the embedded design of the study (Yin, 2009; Seawright & Gerring, 2008).

As time and access are often restricted when conducting fieldwork, it was necessary to choose cases that are easy to access as well as that are willing to be helpful for the research (Stake, 1995). Therefore, it is important to state that the studied cases of online fashion stores operating in Sweden were part of the same corporate group, which provided both an easy access considering the physical distance and the established professional relationship to the participants in the interviews. This was also quite interesting when it came to the cross-case analysis.

3.3.4 Primary data collection
The primary data for this research was collected through interviews with the aim of getting specific empirical evidence that was later analysed by the authors in order to answer the research questions (Saunders et al., 2012). The selected sample of participants in the interviews consisted of professionals from the customer service
department of the studied companies in order to get insights on issues that their customers face when shopping online. As these individuals are receiving customer feedback on a daily basis and assist during the whole purchasing process, they were considered to have good input for this study. The snowballing technique was used in the selection process where the importance was that the interviewees worked with different contact channels (Ritchie & Lewis, 2003).

There are three types of interviews when it comes to research: structured, semi-structured and unstructured/in-depth interviews (Saunders et al., 2012). Due to the exploratory nature of this research and its various focus points, the primary data collection method was semi-structured interviews which allowed for extensive understanding of the participants' explanations and meanings (Saunders et al., 2012). Therefore, the authors developed and structured key sets of interview questions in accordance with the research purpose and research questions, which were on the following topics: current product evaluation tools; challenges related to these tools; competitive advantage; augment and its possible effects.

The focus was on developing both open questions to encourage the interviewees to provide extensive answers and reveal attitudes, as well as probing questions to seek explanations in the cases when the replies did not reveal the reasoning behind them (Grummitt, 1980; Saunders et al., 2012). As a result, each of the key topics was addressed with the aim of gaining in-depth knowledge on them (Saunders et al., 2012). The interviewees provided their insights on the matters and the interviewers could ask additional sub-questions, if necessary, to understand the situation entirely (Saunders et al, 2012). Additionally, questions were asked regarding interviewees' positions in the companies and involvement with their customer base. The interviews were conducted in face-to-face meetings in Jönköping and were audio-recorded after obtaining permission from the interviewees. Finally, the authors transcribed the recordings without any technical problems.

In the table below, the specifications of the interviews are listed. Due to the agreement to keep the interviewees' anonymity, their names would not be listed or revealed throughout this paper. However, a permission was granted by them for listing their
position and gender in order to provide insights for their responsibilities and role when it comes to customer contacts. Throughout this paper they will be addressed according to their positions, where Customer Service Agent would be abbreviated to CSA. As previously stated, the study is on three online fashion retailers from Sweden, which identity would not be revealed due to agreement for confidentiality. However, they gave their agreement to reveal the fact that they are part of the same corporate group. Throughout this paper, they would be referred to as Company A, Company B and Company L, which are references that were randomly chosen. Due to the fact that they are part of the same corporate group, their organizational structure is built in a way that some individuals have shared responsibilities for serving in two or three of the studied companies due to their competences. As a result, in the table below across the different interviewees it is stated the corresponding companies that they serve. Hence, there were four interviewees per each of the three companies that provided insights for this research. In addition, the duration of the interviews are listed in minutes as well as the dates that they were held on.

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Position</th>
<th>Company</th>
<th>Gender</th>
<th>Duration (min)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Customer Service Agent: Escalation</td>
<td>A &amp; B</td>
<td>Female</td>
<td>68</td>
<td>2018-05-08</td>
</tr>
<tr>
<td>2</td>
<td>Customer Service Agent: Social Media</td>
<td>B &amp; L</td>
<td>Female</td>
<td>73</td>
<td>2018-05-08</td>
</tr>
<tr>
<td>3</td>
<td>Customer Service: Team Leader</td>
<td>A &amp; B &amp; L</td>
<td>Male</td>
<td>64</td>
<td>2018-05-08</td>
</tr>
<tr>
<td>4</td>
<td>Customer Service Agent 2: Live Chat, Email, Phone</td>
<td>A &amp; B &amp; L</td>
<td>Male</td>
<td>66</td>
<td>2018-05-09</td>
</tr>
<tr>
<td>5</td>
<td>Customer Service Agent 1: Live Chat, Email, Phone</td>
<td>A &amp; L</td>
<td>Male</td>
<td>62</td>
<td>2018-05-10</td>
</tr>
</tbody>
</table>

Table 1: Interviews Overview
3.3.5 Secondary data collection

The secondary data was collected through various reports on Nordic e-commerce with data from 2017 and 2018, which was necessary to provide the authors with the latest insights and trends of the studied industry in Sweden as well as the customer attitudes. Additionally, secondary data was further collected from sources such as related books and online publications on the Augment app, as well as scientific articles on the various aspects of the studied topic overall. It was considered as important by the authors to research and gather secondary data through the stated ways to construct a reliable frame of reference for the research and strengthen the research credibility (Saunders et al., 2012). Moreover, this provided the authors with comparative information for the research analysis considering that the data collected in those sources had been for a purpose other than this research (Saunders et al., 2012).

The search tools that were used for secondary data collection were Primo - the electronic search engine of Jönköping university library, as well as Google scholar, due to the convenience of fast searching and broad access to large amount of materials. Moreover, literature search was expanded by using reference lists found in the most relevant publications that were initially identified with the help of the search engines. Temporal and contextual boundaries were set for the selection of relevant literature that was in accordance to the research purpose (Saunders et al., 2012). Thereafter, the literature search was limited to peer-reviewed journal articles, topic related books and online publications as the main source of scientific information. During the initial searches, the results were not limited by a time period in which the scientific articles or books should have been published. The authors rather focused on finding the most relevant concepts that were applicable for the current competitive e-commerce industry. However, it is important to state that the search was limited to publications only in English. This resulted in that the reviewed literature was mainly from the period 1991-2018.

Due to the importance of the key search words for the generated search result, it was crucial to clearly express the information need for the research purpose (Rumsey, 2008). As a result, the key search words used during the search process were: augmented
reality; electronic commerce; online shopping; digital transformation; online consumer behavior, virtual information, real-time interaction; product evaluation tools.

3.4 Data Analysis
As the audio-recorded interviews were transcribed in written text, the gathered data from the semi-structured interviews was rich. Due to its complexity, the authors considered as most beneficial to group the data by categorising it in accordance with the key sets of information from the interview questions main topics and literature review. The source for deriving the names for the categories were combinations of terms used from the already existing literature: online product evaluation tools; challenges for online shopping; sustainable competitive advantage through innovation; possible effects of the augmented reality tool: Augment app (Strauss & Corbin, 2008). Therefore, the identification of the categories was guided by the purpose of this research as expressed through the research questions (Saunders et al., 2012). In other words, the chosen strategy for analysing the data was categorical aggregation as the data was aggregated in certain categories based on specific characteristics while being meaningful in relation to the data and to the other categories (Stake, 1995; Saunders et al., 2012).

The next step of the analytical process was to unitise the data. In other words, that was the task of attaching relevant bits or units of data to the relevant category (Saunders, et. al., 2012). No software was used for processing the gathered data but rather a manual approach was undertaken with the efforts of both authors.

Furthermore, a cross-case analysis was conducted where the multiple cases were covered and a single set of cross-case conclusions were drawn (Yin, 2009). The data was further analysed based on the set categories characteristics by identifying the relationships between the three different cases in order to find contrasts and similarities (Stake, 1995). The units of analysis were both the company, as well as the individual’s consumer behaviour when it comes to online shopping for fashion merchandise.

3.5 Ensuring credibility and generalisability
Ensuring the credibility and generalisability of the research was one of the most fundamental aspects that had to be taken into account. To minimize any potential risk of
getting wrongful answers from the participants two vital factors had to be applied in the research process - validity and reliability (Saunders et al., 2012).

Reliable results are essential to obtain when conducting a research like this. To avoid any of the participants from being biased it was important for the authors to ensure anonymity. This enabled the participants to answer the questions freely and not feel worried about answering in a way they think the organization would want them to. Another threat that Saunders et al. (2012) mention as significant to eliminating any risks for potential threats towards reliability is participant or subject error. Hence, the authors made sure to conduct the interviews at convenient hours of the day in order to be able to reassure the alertness of the participants.

“How can the study be as valid as possible?” - a question about trustworthiness that the authors had to have in mind at all times. To ensure validity of the research process the authors made sure that nothing in particular had happened in the company that could influence the outcome of the findings. In other words that no crisis or negative events within the company could influence the judgement and views of the participants (Saunders et al., 2012).

Besides what has been mentioned above, the authors also looked at the level of generalisability of the study which was a fundamental criterion for achieving trustworthiness (Grunig, 1992). When selecting representatives for the research, the authors objective was to select three companies that were all part of the online fashion industry for kids, offering practically the same kind of products yet in different price ranges and that they all operate in Sweden. Choosing three different companies with similar characteristics as such eventually resulted in the research results being generalisable (Saunders et al., 2012).

3.6 Ethics
When conducting the research, the authors were keen on taking the ethical aspect into consideration at all instances of the study due to its high importance in research science (Christians, 2005; Fine, Weis, Weseen & Wong, 2000). Therefore, that was deemed as a main priority especially during the data collection, where the authors made sure that the
interviewees were well informed about the entire process - before, during and after the interviews.

A request was sent out via email to all the participants, which contained information regarding the research topic and purpose, as well as a brief explanation on what role the participants would have in the research. Further, the email explained the procedure of the interviews describing how the interview questions would be formulated, how much time would be devoted and also other practical information. For instance, it was stated that both the studied organization and individual participants would all be anonymous and, therefore, no names would be released in order to ensure the confidentiality of the data (Saunders et al., 2012). The authors’ motivation behind this choice was the aim of building trust and making the participants feel more confident to answer the questions freely (Saunders et al., 2012). Moreover, a request for audio-recording during interview was addressed in the same email so that the participants could take that into consideration before agreeing to be part of the research. Once the authors met up with the participants, they made sure to clarify how the interview session would be held and once again, made sure that the interviewees felt confident to be part of the research and are doing it on their own will.
4. Results

4.1 Case Description - Company B

This company is an established online store for exclusive brands specialized in children’s fashion in Sweden and is one of the market leaders. However, they are selling to countries all over the world, where Sweden is the second largest market following South Korea. The product assortment consists of baby and children’s clothing, footwear, toys, strollers, car seats, maternity clothes and accessories with focus on high-quality products. Several years ago, the company opened their first flagship store in Stockholm adopting an omni-channel strategy. Its products are sold to only private customers as they do not focus on B2B sales.

4.1.1 Product evaluation tools

The online product evaluation tools are several. To start with, “there are two to five high quality pictures of the product itself showing how the product really looks in real life, so not only a front picture but also from other angles and perspectives” - CSA, Social Media. Certain brands of products also have pictures of the product being worn by a model. “I think that a model is very important to get an idea of how the product fits and what sort of body type it would fit. However, that is not available for the majority of products” - CSA 2: Live Chat, Email, Phone. Complementary to the pictures, there is a one-time zoom in option.

In addition, there is supplementing product description in a text form stating the brand, the price, name of the product, washing instructions and short product specifications when it comes to the style and materials. “Regarding the product information, it’s displayed next to the product, below the sizing drop down menu” - CSA: Social Media. The product descriptions are relatively short for the majority of the product categories such as clothing, footwear and accessories but are quite rich in information when it comes to strollers and car seats due to the technical specifications and warranty. However, the description for certain products such as toys and accessories includes only the brand, the name of the product and its price without any product specifications. “We try to be specific with the product information and to make the customer feel confident so that they know exactly what they buy. But as I said before, we don’t really have
product information for all products online but it is something that we are working on” - CSA: Social Media.

Furthermore, under each product pictures and description, there is an option for the customers to comment and provide their reviews for the specific product or use as a tool for asking additional information that is then provided by the customer service. This information is open for the public and everyone can see these comments.

When it comes to the clothing and footwear product categories, there are both a general size guide but also detailed size guides for selected brands. As supplementary information to the size guides, there are some general tips on what to think about when choosing childrens sizing. In addition, getting in contact with customer service is another way for product evaluation: “customers call us, email or live chat with us so that we can provide them with our knowledge about the sizes, for example. Sometimes it is good to refer to your own kids, so it is good to know which size goes to which body so to speak” - CSA 2: Live Chat, Email and Phone.

When it comes to videos, the CS Team Leader states: “We don’t have videos right now but one of our departments called Photo & Copy that has to do with everything about the product visual presentation, are working on it.”

4.1.2 Challenges for product evaluation online

The most common inquiry from Company B’s customers before they purchase a product on their webstore “concerning the product itself, it would definitely be the sizing” - CSA 2: Live Chat, Email, Phone. More specifically the CSA: Escalation elaborated on this by stating:

- “It is not quite easy for the customers to choose the appropriate size as it is often varying between the different brands - whether it is small in size, big in size or regular size. You know, the French brands are a little bit smaller sometimes so they can be an issue if you have a four-year-old child and you buy a dress in size 4 years, and then it comes home and it doesn’t fit being too small due to the French sizing”.
Moreover, the CSA: Social Media continues on this subject by explaining what exactly could be challenging when it comes to using a size guide for selecting a size:

- “kids are so different and sometimes according to the size guides, only the years are stated instead of the real measurements of the products. So for instance, if the size is 3-4 years, this could mean so different things from one brand to another. Also, the kids measurements could be very individual from when they just turn 3 years to when they pass 4 years. So it’s not really realistic information in the size guides, I would say, which makes it very hard for customers.”

In addition to that, the CS Team leader states the following:

- “For shoes, for sure, we should improve the size guides as in some cases we don’t have them for the certain brands and for the ones we do, we have them at a section accessible on the bottom of the website not next to the product description. That is one of the reason why they return shoes. For clothes, I would say because it is so different between what brand it is. You can, for example, buy size 74cm meaning it is for a child with height 74cm. However, from a certain brand that could be big from another brand, it could be small for your child. It is kind of hard for the customer to decide if it is the right size or not.”

Similarly to online shopping for adults clothing, the CSA: Escalation gave another example for a challenge that Company B’s customers face: “you can be size 38 and I can be size 38 but our bodies don’t look the same so choosing clothing with appropriate fitting is important.” Therefore, many product inquiries are regarding the fitting of the products for the reason that “the fit of the different garments could differ depending on how they are thought to be on the body” - CSA: Social Media.

On another point, the CSA 2: Live Chat, Email and Phone brings the touch-and-feel issue when it comes to the fabric, “as well as, especially for the Swedish market, the materials are quite important if there is any toxicity or if they are responsibly sourced and things like that.” In addition, the CS Team leader states the following: “I think it is
hard to get the information from our website about what material it is, and if it is not poison in the clothes, for example.”

In addition to all of the above, as a challenge when shopping from Company B’s web store, the CSA: Social Media brought up the cases when there is missing information in the product description to answer the customer’s inquiry about the product: “for the product information we mainly have our website, which unfortunately is not always up to date, which makes it hard, or I mean we can use the manufacturers website, as well, which usually gives the right information. But, yeah, I would say it is hard for the customer when the information that we provide online is not always up to date.”

The CSA: Escalation sums up the most common reasons for customers returning a product by saying the following: “it wasn’t what the customers thought it would be”. She elaborates on that by stating the various reasons of how the products do not match customer’s expectations upon delivery: “maybe the color did not match their expectations or the fitting was wrong; also, if the fabric was not what they thought it would be because, we have information in the product descriptions about the materials but they can’t feel the fabric.”

4.1.3 Competitive Advantage

When it comes to Company B’s competitive advantage compared to other online fashion stores for children in Sweden, CSA: Escalation states the following: “If I have to compare with our main competitor in this market, I would say that our website is much easier to navigate as it is more clear so to speak and not with so much color. I would say it is better to make it more naked, so to say, so that the product pops.” Therefore, she continued by concluding on this point that Company B’s web design is their competitive advantage. Moreover, the CSA: Social Media also indicated the user-friendliness and efficiency of the search tool as competitive advantage.

The CS: Team Leader indicates that their webstore competitive advantage is the product selection when it comes to the most popular brands in Sweden that are both Scandinavian and international, including such that focus on organic materials, which is an aspect that is very important for the Swedish customers. However, one of the interviewees is not able to point out a competitive advantage for Company B and rather
answers: “I am not entirely sure to be honest” - CSA 2: Live Chat, Email, Phone. Therefore, he could not come up with a specific point on what makes them different from the other business players in the market. He argues this by stating the following: “I think a lot of e-commerce companies including Company B stagnates in the innovation, which is a big problem not only for us as a company but for many e-commerce companies both abroad and in Sweden. So that is what we are lacking - innovation in terms of sizing and stuff like that to stay competitive” - CSA 2: Live Chat, Email, Phone.

The interviewees do not state a specific competitive advantage of Company B per se in comparison to physical stores but rather state the competitive advantage of online fashion stores in general, which they interrelate to Company B’s competitive advantage: “Obviously as for any sort of any e-commerce company, having a warehouse and such a wide range of items available in one place, that is a huge advantage over physical retail stores” – CSA 2: Live Chat, Email, Phone.

Going further with the advantage of availability, another flexibility that is stated for web stores, which the physical store do not have, is concerned with practical information: “I think that overall, online stores do have competitive advantage. Let’s say I go to our website and I find a t-shirt and I can then easily see which sizes are available but in a physical store, I would have to look for the sizes because it is not always in the same place and I don’t know if there is some t-shirts somewhere else and the size that I need” – CSA: Social Media. Therefore, the website is easier to navigate in and get information about the number of items that are available in stock quickly.

4.1.4 Augment App - reflections

After explaining what augmented reality is to the participants in the interviews, the researchers presented the concept of the Augment app and demonstrated how it works. The attitudes towards using this augmented reality tool in their webstore and its effect on the shopping experience for their customers varied when it came to the applicability on the different product categories that Company B offers.

“I absolutely think that our customers are ready for this augmented reality tool, I am” - CSA: Escalation. Similarly, the CS: Social Media believes that their customers would
be ready for a helpful technological tool like Augment by argumenting with the levels of their customers’ technological savviness: “I do think our customers are ready for such tool and our customers are a bit younger or at least use smart phones and newer technologies. So, yes they are mature enough for augmented reality” - CS Social Media. Moreover, she continues by clarifying that if Augment gets applied to their webstore that would be beneficial for customers that often have questions in regards to the fitting of certain products: “Since we get a lot of questions on how things look, what measurements they have, people really want to know and see how things would look before they order them, and Augment is a tool that can make that possible.”

However, the CS Team Leader shared his reservations towards the tool when it comes to using it for evaluating products from their children’s clothing product category: “It depends whether Augment could be a useful tool for our companies as I don’t really see how it would work for clothes especially for kids. It is hard for them to stand still for a long time. My son would never stand still and allow me to use my mobile camera on him and try clothes on.” He continued by stating that he rather sees it as applicable for their interior product category: “maybe for the furniture and decoration it would be a great tool when it comes to Company B and Company L.”

Likewise the first two interviewees and partially the CS: Team Leader, the CSA 2: Live Chat, Phone, Email stated that Augment would not only be helpful for shopping clothing from Company B but that it would be especially applicable for their interior offerings: “Yeah, Augment could be useful for the whole range of things that we sell, including furniture.” Therefore, he emphasized, similarly to the CS: Team Leader, on the opportunity of using Augment as part of their product evaluation tools by clarifying that it would enable customers to visualize how a certain furniture or product would fit in the house and would eventually have a positive impact on the provided customer service:

- “We do have inquiries regarding strollers and the specific sizes of the different strollers, for instance. This is very difficult for each customer service agent to know and it would be marvelous if the customer can have the stroller in their living room and can actually see if it fits through their door frame or even if it
fits in their car. Evaluating simple things like that are actually a problem right now."

Overall, all four interviewees stated that since no one else from their direct competitors in Sweden is using an augmented reality tool as part of their product evaluation tools, this could potentially bring Company B sustainable competitiveness: “Yes, I think Augment could be a technological advancement for gaining sustainable competitive advantage because if no one else has this for their webstore, we would automatically become the leader in the market if we have this app” - CSA: Escalation.

4.2 Case Description - Company L

Company L is one of the leading online stores for children items in the Nordic region and it was established more than a decade ago. They have the ambition to become the market leader in the Nordic region. Their operations are limited to Sweden, Norway, Finland and Denmark, where their Swedish customers form their largest market. Their only physical store is in Stockholm, where their headquarter is also based as Company L is part of the same corporate group as the presented in the previous section - Company B. Their product offerings are from baby products, including strollers, to interior for children’s rooms and outdoors play. In addition, their product range includes children fashion such as clothing, footwear and accessories. Overall, their strive is to offer anything that children may need during their childhood on affordable prices, partially though their own private label brand.

4.2.1 Product evaluation tools

For Company L the product evaluation tools offered are limited: “We have one or several pictures from different angles of the product itself and written description” - CS: Team Leader. They are being described as basic by the CSA 2: Live Chat, Email and Phone.

“The pictures are good quality and give you an overview of how the product looks but sometimes it is not that easy to see the material or how the inside of the product looks like” states the CSA: Social Media. In addition, there is a two-times zoom-in option available: “the zoom-in option obviously allows the customer to get a closer look of the item” - CSA 2: Live Chat, Email, Phone. When it comes to the descriptions of the
products, they include short information regarding the brand, name of the product, price, materials, height and recommendations on how to wash after use. Certain product categories such as clothing and shoes, are described including mini size specifications within the product description. However, today, no size guide is available on the website. According to CSA 1: Live Chat, Phone, Email consumers would need to call customer service or google the information regarding detailed sizing specifications.

Overall, the CSA: Social Media states that: “The clothing that is sold by Company L is quite cheap and have smaller product information compared to Company B but I think it is enough for that group of customers and we also have free return policy so they can always return it.” However, for some products there is a lack of description whatsoever as indicated by the CSA 2: Live Chat, Phone, Email, as well as, the CS: Team Leader.

Another available tool for product evaluation while shopping online from Company L is available on the left-hand side corner of the website, where there is a link to Prisjakt, enabling customers to compare the offered product price with other websites before making a purchasing decision, as described by the CS: Team Leader.

4.2.2 Challenges for product evaluation online
The problem with lack of size guide is highlighted as one of the main concerns for Company L’s customers. More specifically, “the difference of people’ perceptions of size that is a challenge which is hard to overcome without being specific in the product information,” as indicated by the CSA 1: Live Chat, Email, Phone.

This challenge is interrelated to the high return rates, which Company L is experiencing according the CSA 2: Live Chat, Email, Phone. Moreover, the CS: Team Leader also mentioned the same argument, as well as further elaborated on it by stating the following: “When customers order shoes from Company L they tend to buy a few pairs of the same model yet in different sizes. The ones that do not fit, they return back. This is a way to reassure that they get a pair of shoes that actually fits them.” Similarly to her colleagues, this same reason indicating high rates of returns was identified by the CSA: Social Media: “I would definitely say that the sizes for the shoes are causing most returns since usually people either order two or three sizes to find the one that fits.”
Another challenge for customers when shopping online from Company L was stated to be the vague product information or when there are inaccuracies in the product presentation as stated by the CSA 2: Live Chat, Email, Phone: “If the photos are not properly done on the website so they are sharing a different version of the item, or if the transcription is incorrect, I would say these are amongst the most common reasons for returning products.” Therefore, the CSA: Social Media pointed out the following regarding the available product descriptions on the webstore of Company L: “The text can, of course, be improved with more detailed information.”

On a different note, some of the interviewees also talked about the challenges that customers face in regards to Company L’s search tool that is used for finding different products. They pointed out that they considered it to be insufficient and not so helpful for consumers that want to navigate easily on the website: “I don’t think that company L is so good to search for products and stuff so that is kind of negative I would say as a customer” – CSA 1: Live Chat, Email, Phone. He then clarified that the search for products in this context is referred to the search options available on the website. In addition, the CSA: Social Media similarly stated that the search function could be improved: “I mean if you search for a certain brand you only want products from that certain brand and maybe also you want to search for Adidas shoes and nothing else, so that is something that could be improved, because that is not available today.”

4.2.3 Competitive advantage
As previously stated, Company L is part of a large corporate group that includes several online stores. However, even though they have similarities in their characteristics, they still differ when it comes to their competitive advantage as indicated by the CS: Team Leader: “Since we discuss three online stores, for company L, I would say that we offer products for the cheapest prices in the market and that is an advantage compared to the competition.” Moreover, according to the CSA: Social Media, this allows Company L to sell more and catch a larger market share.

With a “customer is always right” philosophy, another factor is pointed out as Company L’s competitive advantage in the Swedish market. Making sure to be available to serve the customers through the whole purchasing process, the CS: Team Leader
elaborated on this point by explaining the following: “I can say that we have a very good customer service and we also have very liberal returns policy, and we accept almost everything, as well as all the reclamations, for example. That is good because we don’t end up fighting with customers but focus on providing great service.”

As stated in the competitive advantage section for Company B, the interviewees did not state what brings the discussed webstores a competitive advantage in comparison with physical stores. They rather emphasized on the general competitive advantage of e-commerce that regards flexibility, large product availability at one place and easy to find out whether a product is in stock or not.

### 4.2.4 Augment App - reflections

As previously stated regarding the information on Company B, the interviewers explained and showed to the interviewees the concept of Augment and how it works, after which they asked for their reflections on the tool.

As Company L offers large items such as equipment for outdoors play, one of the interviewees recognised potential in Augment to be a helpful tool for customers to make their product choice when it comes to this product category: “If you are buying a jumping matt and you can see through this tool how it fits in your garden, I think that would be very useful for the customers as nowadays this could be quite challenging and it is also a lot of hustle to return such large items back to an online store” - CS Team Leader.

However, an important aspect that was brought up in answering the question of whether Company L’s customers are ready to use Augment, was the level of tech savviness amongst the age groups. Its thought that it might not be suitable for all age groups, like for instance people from the older generation might have a harder time to adopt to the technology and it might, therefore, not be useful for them: “Since some of our customers are seniors, such as grandparents who are shopping for their grandchildren, they might not be ready for this tool. However, our customers also include many young parents so, of course, they can use this. So I would say it depends on the age group of our customers” - CS Team Leader.
Furthermore, one of the other interviewees was confident that Company L’s consumers would have no problem adapting quickly to Augment as a new technology. “Yeah, like I said previously in regards to Company B, it also applies for Company L - the ecommerce companies have sort of stagnated in the innovation so whatever is already available, customers are already used to and even bored of. Therefore, I think they are ready for new technology and Augment seems very easy to use.” As smartphones are a standard and as long as Augment is compatible with them, the agent was certain that customers would “absolutely love this tool.”

Therefore, the four participants in the interviews in regards to Company L, were on the same opinion that the Augment could ensure a competitive advantage for the company in the long run: “I would say, yes, it could be a way for gaining sustainable competitive advantage for us as I don’t think any of our competitors use this tool” - CS Team Leader.

4.3 Case Description - Company A

Company A is a luxury e-commerce retailer with a global reach selling worldwide and was founded almost a decade ago in one of Europe’s greatest capitals with the aim of creating an online shopping destination that offers the world’s best brands for kids’ fashion to parents all in one place with the click of a button. They offer some of the most prestigious heritage fashion labels such as Dolce & Gabbana, Burberry and Fendi together with contemporary clothing and footwear from technically innovative brands. In addition, their product offerings include unique toys and as part of their “home” product category, they sell bedroom decoration and school accessories. The company was acquired in the Swedish corporate group that Company B and Company L are also part of today, which is why its headquarter is also based in Stockholm. However, as the company has an established global reach worldwide, Sweden is only their fourth largest market following the U.K., the U.S. and South Korea but they are investing in capturing a larger market share in Sweden right now.
4.3.1 Product evaluation tools

The product evaluation tools that Company A currently provides to its customers are pictures, product description, size conversion chart, as well as a magazine blog for life and style.

When it comes to the pictures, “they are clear and quite good quality where there are one to three pictures for the products from the clothing sections, and three to five when it comes to the shoes, for example, which gives the customers overview on how the products look from different angles” - CSA 1: Live Chat, Email, Phone. There is also the option to zoom-in relatively close so that the customer could clearly see the materials that the products are made of, which “if compared to that same option of Company B and Company L, Company A exceeds them in this feature” - CSA 2: Live Chat, Email, Phone.

In addition, on the right side of the product pictures, there are some product information including recommendations on how to style the garment, for example, as well as information regarding the materials that the items are made of. For the clothing, there are washing instructions provided. The brand, product name, price and availability of the products are also stated. The CSA 2: Live Chat, Email, Phone states the following for this product evaluation tool: “We have a copywriting team who creates the descriptions for the products so the customers know what they are purchasing but they are still very short and basic. However, they are the most creatively written product descriptions if compared to Company B and Company L’s in reference to styling the product.” As well as, the CSA 1: Live Chat, Email, Phone describe the product descriptions as “quite short but detailed”. He also stated that the majority of the products have product descriptions but there are certain cases that those are missing and it is only the price, availability, brand and product name stated next to the pictures of those products.

Just under the drop down menu for choosing the product size, the customers can press and open up the size conversion chart that is universal and provides the standard height that the different clothing sizes usually are suitable for and correspondingly, the usual length of the insole of the shoe sizes. The measurements are conveniently provided in
both cm and inches. However, “there is no size guide per brand available,” as specified by the CSA: Escalation.

Lastly, the webstore of Company A has a section called “Blog” which leads to the so called “magazine blog for life and style” that provides interviews with famous parents in regards to different products, their product and style recommendations, as well as “interesting news for the new tendensions during the season when it comes to children’s fashion” - CS: Team Leader. Therefore, the focus here is on providing further materials to the customers for using in their product evaluation process including videos from campaigns of the different brands and pictures on children models as part of the different interviews and articles.

4.3.2 Challenges for product evaluation online

The main challenge for product evaluation on Company A’s webstore was stated to be related to deciding on and choosing the correct size according to all four of the interviewees, which customer service gets high levels of inquiries about: “I mean the sizing is very important and it is probably the main contact reason in terms of products so it does need to be improved to make sure that all the information is accurate so people have a better understanding of what product they are buying” - CSA 1: Live Chat, Email, Phone.

Moreover, the CSA: Escalation builds on this point by referring to the issue with the currently available size chart:

- “I would say that the size guide could be both an issue and not since sometimes it could be accurate but sometimes it is not considering that it is just the universal measurements there. So when it is not, the customers are actually ordering the wrong sizes and then they phone, email or chat with us about the fact that the size guide was wrong in regards to the brand they bought. It is kind of a big issue.”

Here also the CSA 2: Live Chat, Email, Phone shared his experience with their size guide and the feedback he had received from customers that: “It is just that it is almost, from my experience, impossible to get the size guides completely right for each item, which is why I actually think that they will never actually be enough to satisfy the customer.” In addition, the CSA 1: Live Chat, Email, Phone also commented on this by
saying: “I mean the size guide is a universal size guide so it is not like this is the size
guide that you need, so it is not that useful.” He also related this point to the issue of
finding the correct fit when it comes to clothing and even shoes when shopping online
from Company A: “When customers find a certain product online and it looks really
nice but they don’t know how it will fit on their kids, that’s a big problem for them as
maybe it might not look good on them at all.”

Here the importance of reaching out to customer service and hearing their advices, are
pointed as something that customers heavily rely on when shopping from Company A
since they want an expert advice due to the lack of sufficient information on the fitting
and sizing on their webstore but also the products are quite expensive: “I would say that
if there was no customer service and the customers had to assess products such as
clothes or shoes only based on the information provided on Company A’s webstore, it
would be very hard to choose the correct size” - CSA 2: Live Chat, Email, Phone.

Another factor that affects on the process of product evaluation in online shopping from
Company A is that the provided pictures are not giving enough information to the
customers when it comes to the fitting and on some occasions the color does not meet
their expectations:

- “It is sometimes hard through a photo to say that these are the trousers or the
dress that we are selling. It could be that sometimes the picture gave the wrong
color to your computer that is related to the pixels of the screens. It is the same
for the TVs. As well as for your eyes, you can see one color and I can see a quite
different one so it’s kind of many issues with the colors when customers shop” -
CSA: Escalation.

These challenges effect on the return rates of Company A where according to CSA 1: Live Chat, Email, Phone they are some of the main product related reasons for the
returns: “I would definitely say that many returns are due to incorrect size, or if it
doesn’t fit, or if maybe it has not met the expectations.” However, another reason for
that was also stated by the CS: Team Leader being the fact that customers order several
sizes per product to try them out on their children at home and then return the ones that
are not suitable.
4.3.3 Competitive Advantage

In regards to Company A’s competitive advantage in Sweden, the CSA: Escalation stated that the clean web design of the webstore is quite attractive, which is important considering the high-class of product selection. She further specified an exact feature that makes them stand out of the crowd: “I think at least Company A’s website is quite user friendly when looking for clothing; customers do like the check out, it gives them a really nice overview of what they have in the basket and what is the next step in finishing the purchase. So yeah, I would say that we have a really nice check out in comparison with the competition.”

The CS: Team Leader commented in regards to their competitive advantage in this way: “For Company A, I would say that the quality of the merchandise as well as that we have decided to sell well-chosen premium brands that are not widely offered in Sweden is what differentiates us from the competitors.”

The CSA 1: Live Chat, Email, Phone is of the opinion that Company A’s quite liberal return policy as well as the fact that it provides free returns for all purchases from Sweden are altogether the company’s competitive advantage: “Since we have a very liberal returns policy where customers can return almost everything except certain products due to hygiene reasons, people feel a little bit calmer when they are placing an order with us, I’d say.”

4.3.4 Augment app - Reflections

On one hand, when it comes to the possible usefulness of Augment for Company A, the CSA 2: Live Chat, Email and Phone stated the following: “Yeah, it would be highly useful if you have sort of a dressing room using Augment where you could have mannequin where you can try on the dresses. Especially if you could put on your own size, it would be great, fantastic, absolutely.” One of the other interviewees, CSA: Escalation, was quite excited about this tool overall and stated that it would be great addition to Company A’s webstore where the products are in quite high price range, which could increase the overall product offering and service, which she related to possible gaining of sustainable competitive advantage and possible opportunity for capturing greater market share amongst the Swedish customers.
On the other hand, the CSA 1: Live Chat, Email, Phone was quite sure that Augment would not be a beneficial tool to implement for their business. The interviewee stated his concerns regarding this new technology itself. Even though he considered it as a great tool to be used, yet he had a hard time seeing how it could be implemented for Company A. In addition to that, the interviewee further explained his concerns for implementing Augment by talking about the possible increase in uncertainty amongst the customers:

- “It’s a great tool, but one has to think about the consequences too. I’m thinking about all the customers that would probably call in just to verify if the product would actually look like they see it in the Augment. It will bring more job to the customer service, more people would be doubting and for that Company A would need to expand the customer service team so that they wouldn’t get overwhelmed with questions regarding this” - CSA 1: Live Chat, Email, Phone.

When it comes to CSA 2: Live Chat, Email, Phone in regards to the possible implementation of Augment on Company A’s website he was quite positive about it:

- “I think it would certainly improve the competitiveness. I obviously don’t know about other companies budgets and if they are also able to implement it, but if they don’t, it would definitely be a competitive advantage that could definitely be sustainable. If we were the first company to implement in Sweden because people are creatures of habit, and if they have this Augment tool on our website first, that would actually create a sustainable competitive advantage for us.”
5. Analysis

In this section, the results will be analyzed using the theoretical perspectives outlined in the frame of reference. The chapter is divided into three parts: The key challenges for online shopping related to the most common product evaluation tools; Augment’s potential effects on the challenges for online shopping; Augment’s effect on competitive advantage.

5.1 Key challenges related to the current product evaluation tools

The overall perception of the challenges that customers face in the online product evaluation process considering the currently available online tools offered by the different web stores are mainly about the size and fit. The companies have difficulties in presenting the sizes in an effective way due to similar reasons stated in previous research findings by Keiser and Garner (2003) in regards to basing the measurements for size guides of one “ideal” consumer and embodying this in a single fit model. Therefore, the empirical findings show that customers tend to buy sizes that do not fit them properly and need to return back the items, which is in accordance with Hjort (2013) previous research findings. The main challenges are, therefore, providing with suitable size guides and product information that enables customers to purchase the right size from the beginning, which is currently a hard thing to do judging from the empirical findings. This is correlated to Loker et al. (2005) previous research findings that it is impossible to only rely on size guides due to the various types of body shapes within each size, which a large number of consumers might have. Nevertheless, the extent to which the three studied companies face these difficulties varied to a certain degree.

Even though the companies share the same characteristics and go under the same corporate group, they still faced different challenges. The results showed that Company B in general had good and valuable product evaluation tools on their webstore. For instance, for each product they would present a few pictures of the product itself aiming to illustrate a good view of how the actual product would look like in reality. Pictures were taken from different angles. Further for some of their products they would also have a model wearing the clothing in order to be able to illustrate how it would look on
someone. As a final touch to the well-presented products, Company B also had a one-
time zoom in option enabling customers to get a more narrow view of the specific
product, in comparison to Company L, where these product evaluation tools were not
available for their customers.

Unlike company B, company L had another approach to how they presented their
products in the webstore. Company L is an online fashion retailer aiming at offering the
same clothing for a cheaper price than the other companies. Due to that reason, not
much focus had been put on developing the product evaluation tools for their customers.
Instead, their focus is to offer customers an easy and cheap way of ordering children
products. As a way of demonstrating that, Company L has a link on their webstore
enabling customers to click forward to “Prisjakt”. Once the customers enter that page
they are able to compare the prices of a certain product with other online stores. This is
Company L’s way of illustrating that they are confident about the competitive pricing of
their offerings.

Even though Company L might be offering cheaper prices in the market than the other
companies, they are faced with a high return rate of products. The reasoning behind
varies, but the empirical data showed that one of the most significant reasons was due to
the lack of suitable product evaluation tools presented on their webstore. In other words,
this is due to what was indicated by CSA 2: Live Chat, Email, Phone that Company L’s
product presentation in regards to both the descriptive text as well as the photos are
rather subpar, compared to both Company A and Company B. In other words, this goes
hand-in-hand with previous research findings that indicate that customers return
products due to items looking differently in real-life in comparison to what is shown on
the web store (Hjort, 2013). That in turn correlates in a negative way to the levels of
customers’ e-satisfaction that, as previously explained by Anand (2007), regards the
extent to which the product performance matches the consumers expectations for the
online evaluation compared to the physical evaluation of the product.

Company A, on the other hand, is a fashion online retailer that offers exclusive brand
products with a global reach around the world. Similarly, to the other two companies,
Company A has different product evaluation tools such as product description,
international standards of size conversion charts, and pictures of their products. Unlike Company B and L, Company A also provides their customers with a blog for life and style, offering them various styling tips and guides based on the products that they sell on their webstore. As mentioned above, Company B provides their online customers with a one–time zoom in option for their products, Company L has a two-time zooming option yet Company A has a tool enabling the customers to zoom in relatively close in order to get a better overview of the products. The empirical data as presented by CSA 2: Live Chat, Email, Phone illustrate that Company A offers a better product evaluation tool within that specific category, which if correlated to Lee et al. (2010) findings for image zooming, is a great way to enhance better view of the product and would eventually reduce the perceived risks one might have before making a purchase decision.

Looking at the quality of the product descriptions provided for customers on the websites of the three studied e-retailers, the gathered empirical data illustrated that Company A has a more creative influence than what the other two companies have. More specifically, the CSA 2: Live Chat, Email, Phone stated that they are still very short and basic but they are the most creatively written product descriptions if compared to Company B and Company L’s in regards to styling of the product. As well as, the CSA 1: Live Chat, Email, Phone described the product descriptions as “quite short but detailed”. Moreover, Company A’s webstore provides their customers with standard size charts to be used with the standard heights, yet there are no specific size guides suitable for each brand as stated by CSA: Escalation.

On the other hand, the empirical data showed that Company L has no size guide at all presented, only a mini size specification that is considered to be poor by the participants in the interviews. Instead, the company believes that by providing a free return policy, customers shall feel confident enough to make purchasing decisions, since the clothes offered by Company L are cheap as well. An important aspect to be taken into consideration when discussing the lack of suitable size guides and product information is showrooming. As a result, as the mentioned above, a phenomena of showrooming has emerged meaning that customers visit a physical store before they decide to make a purchase online (PostNord, 2017). That is caused by the uncertainty when customers
shop online, and is a way for them to decrease the perceived risk and be able to try the product and feel their material so that they assure that they get what they actually want when they purchase online afterwards (Freeman, 2014; Ofek et al., 2010).

However, with the combination of poor product descriptions, lack of suitable size guides, the free return policy and the cheap prices, the most significant challenge emerges to be high return rates for Company B, Company L and Company A respectively. This is also in alliance with previous research results (DesMarteau, 2000; Goldsberry, Shim & Reich, 1996). With a lack of accurate product description, customers choose to call the customer service most of the times to verify the sizes provided on the webstore, which is indicated by all of the participants in the interviews in one or another way. That is due to the fact that today, customers shopping online from the three companies in question have difficulties to interpret the information illustrated.

The same issues are brought to Company B and Company A. Yet, Company B has more detailed and extensive descriptions presented. Additionally, they offer their customers reviews from other customers. The company allows customers that have already bought a specific product to review on their experience and also what they think of the product. Did the size fit perfectly? Was the color the same as in the pictures? These are some of the questions that potential customers may require before making a purchasing decision. By enabling customers to publicly post their reviews, potential customers will feel more confident about their purchasing decision. According to Sotiriadis and Van Zyl (2013), allowing customers to acquire product information through public reviews is stated to be a trusted way of communication, increasing the credibility of a certain product. Therefore, by providing this tool, both Company A and Company B increase their product offerings credibility.

Similarly to both Company B and Company A, the empirical findings show that Company L is also facing high return rates which is due to different reasons. The CSA 1: Live Chat, Phone, Email claims that one reason of this is due to discounting, meaning if someone buys a product today and then the company goes out with a campaign and reduce the price, then customers tend to return the products in order to be able to buy it
for the new price. Another reason for returning items is products that have been defected. But the last and perhaps most significant reason is because of the size. At times, the pictures displayed on the website do not really illustrate how the product/clothing looks in reality or the product description is not rightly transcribed. For instance, there could be two customers with the same size, yet that does not necessarily mean that they have the same body type and that a specific product would fit the same on them. Hence, the problem of high return rates is a challenge that all three companies are facing today, yet the level might vary. The empirical data illustrate that the underlying reason for this is predominantly due to wrong size and fit, which is in alignment with previous research results (Hjort, 2013; Golletz & Ogheden, 2010).

5.2 Augment app: potential effects on the challenges

Today the app Augment is not being used by any of the companies that belong to the corporate group that the research is based on. The app Augment is a technological tool that can be useful for online fashion retailers. The app Augment is an AR app that allows consumers to view or imagine how a certain product would fit them before they decide to make a purchasing decision (Lu & Smith, 2010). Through various interviews the authors tried to analyze whether it would be beneficial to implement the AR app Augment or not as a supplement to the already existing product evaluation tools. The objective of this AR app is to engage the consumers in their experience of shopping online and moreover, enabling consumers to get a better understanding of the products and be able to visualize them (Williams, 2018). By enabling such behavior, the aim is to decrease the amount of high return rates amongst the companies. None the less, customers would be ordering products that do not fit or look the same way as on the webstore, increasing the level of satisfied customers.

The attitude towards using the app Augment towards enhancing existing shopping experience for their customers was different between all the interviewees for the three companies. The empirical findings showed that the CS: Social Media for company B was certain that the Augment app would be a good tool to implement and that the customers are ready to use such a tool. It would replace the missing size guides and the insufficient product descriptions that the Companies B, L and A use today. Additionally, it was argued that one of the reasons that customers would be ready for
the app would be due to the level of maturity amongst existing customers. Since most of the current customers are used to apply smartphones and used to the rapid technological advancement one is exposed to then there should not be any problem to adopt to the technology of the app *Augment*. This correlates with the statistics shown by a released report last year stating that the level of maturity when it comes to technology and the level of tech savviness amongst Nordic consumers is high (PostNord, 2017).

On the other hand, CSA 2: Live Chat, Phone, Email had another opinion regarding the question of implementing the app *Augment*. The interviewee could not see how this could work for children’s clothing and footwear which is most significant segment of the three companies. With a reference to his own child, he could not see how a younger child would be able to stand in front of a phone for a longer period of time in order to be able to see whether a certain product would fit the child or not. Yet, the interviewee did not neglect the idea of using *Augment* completely. Further, the interviewee highlights the fundamental impact *Augment* could have on interior and other products such as strollers or car seats for children etc. Like many of the other interviewees of the study, the majority of the participants believed that the app *Augment* would be a perfect tool to be used for such interiors and other products as mentioned above. Instead of having customers constantly returning back items due to lack of vital product information on the web store, the app would be able to assist one through the whole process and increase the confidence of a potential customer purchasing decision. Both interviewees from company B, L and A emphasized the impact it would have on the high levels of return rates that the companies face today.

In general, the empirical findings showed that the interviewees could see the *Augment* app as a beneficial tool to be used by all three companies. None the less, it would increase the level of satisfied customers and less customers would be ordering products that do not fit or look the same way as on the webstore, instead customers would be able to use an integrated zoom in option, allowing one to zoom in and out, and also rotate 360 degrees, which is not possible with the existing product evaluation tools in the three companies (Shen, 2013). Hence, there was some concerns regarding the usage of it. For example, when asking CS Team Leader, whether he believed that the Company L’s customers were ready to use the app, he was hesitant since he could see how it would
simplify the whole purchasing process for the consumers, yet he believed that it would only be suitable for young parents but not for older consumers that also shop online, like grandparents. Since they have a tendency to be more reluctant to new technology, then the app might have a negative impact.

Nevertheless, the CSA 1: Live Chat, Email, Phone for Company A had another view on the usage of app for the business. The interviewee was certain that the app augment was a good technological tool to be used for e-commerce, when only looking at the technical aspect behind it. By optimizing high-quality 3D content, the Augment app is able to ensure consumers realism of the products (Augment, 2018c). However, he predicted that the implementation of the app would also have consequences on the workload for the existing customer service department for company A and B. By implementing the app, it would lead to more questions regarding the quality of the app, if what is being portrayed by the app is actually correct or not. This level of uncertainty would eventually result in a need to expand the customer service team as more questions and thoughts would rise among the consumers with more incoming calls for the customer service. On the other hand, another interviewee had an opposite attitude towards the technology. Instead CSA 2: Live Chat, Email, Phone was certain that this kind of development to their existing product evaluation tools would generate a positive outcome and improve the company’s competitiveness in the market.

5.3 Augment app: potential effects on competitive advantage

In regards to Company B, two out of the four participants, being CSA: Escalation and CSA: Social Media, stated that the current company’s competitive advantage concern the website's clear design, user friendliness, and usability in regards to the search tools. Similarly, that was also indicated for Company A by CSA: Escalation and the CSA 1: Live Chat, Email, Phone. According to the interviewees, these enable an easy-to-navigate shopping experience in comparison to their market rivals. These empirical findings could be viewed in the light of Anand’s research results (2007) that when a webstore manages to keep the design clear and overall the websites neatly organized, this would positively affect customers’ first impression about the website and the online use in regards to efficient shopping experience. Therefore, the effects of this current competitive advantage for Company B and Company A would be partially correlated to
their success in gaining the initial trust of the online customers and building their website’s satisfaction (Kawaf, 2012; Horppu et al., 2008). However, that was not indicated for Company L where, on the contrary, the inefficiency of the current search tool was stated as a problem by CSA: Social Media and CSA 1: Live Chat, Phone, Email.

Moreover, the rich and niche-unique product selection of each of the studied companies were stated as competitive advantage by the interviewees. The CS: Team Leader stated that the unique product selection of sustainable and rather rare brands of Company B for the Swedish market is their competitive advantage, whereas, the broad range of products on lower prices than the market standard was referred to Company L competitive advantage. Following that, Company A and Company L is liberal and helpful customer service, was a point that the CSA 1: Live Chat, Email, Phone and the CS: Team Leader made for their competitive advantage, which could be correlated to Company B, as well, considering the customer service corporate unity when it comes to these studied webstores. In addition, Company A’s high-class product offerings were stated by the CSA: Escalation to be also a competitive advantage since the product selection consists of brands that are not sold in Sweden by many or even, in certain cases, any other rivals. According to previous research, e-satisfaction is customers satisfaction when it comes to their prior shopping experience in terms of e-service quality and product information provided online, where e-service quality is reached through the company’s ability to provide quality customer service, content, structure, use, information availability and search function of the webstore (Cho et al., 2002; Chen-Yu et al., 1999; Oliver, 1999; Zeithaml et al., 2000; Anand, 2013). Therefore, judging from the empirical findings presented above, it is evident that Company A and B possess some of the most important factors for ensuring e-quality - their helpful customer service, website’s structure, use, search function and content in regards to their product offerings. Those are also evident for Company L except the search function.

However, none of the interviewees indicated sufficient product information or interactive product viewing as part of the current competitive advantage of either of the three studied e-retailers. These elements of an online fashion store have been regarded as crucial by previous research for yielding high levels of customer satisfaction and
overall utilitarian experience for online shopping (McCormick & Livett, 2012). According to the interviewees’ reflections on Augment, this AR technology would exactly serve as an interactive product evaluation tool that would bridge the current existing gaps for all the three company cases when it comes to missing or insufficient product description that is currently deemed as an issue, as found in the empirical results. Moreover, the implementation of Augment on their webstores was considered to be also a way of partially filling the gap related to the competitive advantage of physical stores over online such in regards to customers being able to try-out products and see them in their real-life size (Freeman, 2014; Ofek, Katona & Sarvar, 2010; Warman, 2013). That in turn would also decrease the need for showrooming and enhance the online shopping experience by also increasing the current competitiveness of online stores over physical stores, which was recognized by all of the participants in the interviews as the opportunity to select among a large amount of product offerings at the same place. Therefore, these empirical findings are in accordance with Williams (2018) statement that AR is providing value to retailers and shoppers in three areas: (1) creating an engaging buying experience; (2) modifying and customizing selections; (3) visualizing and understanding products and features.

However, this tool itself was not considered by the interviewees as sufficient enough for Company B’s customers in all product categories. More specifically, the CS: Team Leader made a point in regards to the usability of Augment when it comes to product evaluation for children’s clothing and footwear. He in the role of a parent voiced his concerns that kids would not stand still in front of a camera for their parents to be trying clothes on them through an augmented reality tool as Augment. Nevertheless, he as well as the other four interviewees judged Augment to possibly be a valuable tool that would enrich the overall shopping experience of their customers in regards to product categories such as interior, strollers, car seats and all other products that would not require from children and especially toddlers to stay still on command. However, since all three companies offer clothing and footwear from the ages 0 to 16 years, one can make assumptions that the application would increase in usability as the age of the child goes up from toddler to preschooler, grade schooler and further, within the aforementioned product categories. Moreover, as stated by CSA 2: Live Chat, Email, Phone in regards to Company A’s webstore: it would be highly useful if Augment could
provide a solution as a dressing room using *Augment* where customers could have their own mannequin to try on clothing, especially if they could choose as pre-setting to put on their own size.

The CSA 2: Live Chat, Email, Phone was a participant in this study in regards to all three companies, which was beneficial due to his overview of their differences and similarities and his ability to make comparison during the interview session between Company B, Company L and Company A. When it comes to his opinion on the current competitive advantage of these different web stores in the Swedish market, he was quite hesitant about it argumenting that the e-commerce industry in Sweden has stagnated in regards to innovation which makes it difficult for him to state what makes any of Company B, Company L or Company A to stand out of the crowd. Therefore, he addressed the issue of a need for innovation that is also regarded as crucial by previous research for obtaining a sustainable competitive advantage through resources and capabilities that include the following features: valuable, rare, imperfectly imitable and not substitutable (Barney, 1991; Prastacos et al., 2002). On this point, all of the interviewees stated in regards to all three companies that they consider *Augment* as a technological advancement in the online product evaluation tools. Their argumentation on that was since this tool has not yet been implemented by any of their market competitors, this would be a way for all three of the studied e-retailers to not only optimize their customer service in regards to product visualization but also serve them as a way of sustaining their current competitive advantages in the market. Furthermore, the benefit of leading the market through this innovation was stated by one of the interviewees in regards to the possible implementation of this tool on Company A’s webstore stating that if they have *Augment* on their website first, that would actually create a sustainable competitive advantage for them because “people are creatures of habit” - CSA 2: Live Chat, Email, Phone. This, as a result, is correlated to establishing an online brand relationship between the innovative e-retailer and its customers, which would correlatively affect in a positive way the high levels of customer loyalty to the website, and hence, the brand (Horppu et al., 2008). Following on that, it could be assumed that since *Augment* is an innovation for the Swedish market in online retailing, this would result in sustainable growth for the companies that implement this tool in regards to the balance between market and technology orientation strategies.
(Uddenberg, 2015). That is due to the fact that generally, companies that demonstrate quite high levels of market orientation reach strong sales performance, and the ones with rather high technology orientation have higher company value (Uddenberg, 2015).

However, it is important to point out that since *Augment* is a technological innovation when it comes to the product evaluation tools in online shopping, it would require high innovation adoption levels by the Swedish customers. Previous research shows that Sweden ranks quite high in tech-savviness and new technology adoption, overall, as customers tend to stay informed in regards to the ongoing innovations (Postnord, 2017). The results of the findings on this point were mixed where three of the participants - CSA: Escalation; CSA: Social Media and CSA 2: Live Chat, Email, Phone stated that the customers of all three companies are ready for *Augment* and need this technological advancement. However, the CS: Team Leader was concerned to how their customers from the higher age groups, mainly seniors that are grandparents, would manage to adapt to this change. In addition to these concerns, the CSA 1: Live Chat, Email, Phone regarded the possible increase in uncertainty by customers if Company A and Company L were to implement this. That in turn, according to him, might have negative impact to the willingness of customers to shop from them, as well as, might increase the volumes of inquiries for the customer service team. On the contrary, the CSA: Social Media, CSA: Escalation, CSA 2: Live Chat, Email, Phone considered the Swedish customers to be tech-savvy enough for using the tool in order to enrich their online shopping experience. Therefore, these empirical findings regarding *Augment* were partially contradictory with Williams (2018) who stated that this AR tool helps solve buyer uncertainty and suits online shoppers in general. However considering the results presented earlier, they are in alignment with a point following from Williams (2018) that *Augment* would assist the customers to make an informed and confident online purchase.
6. Conclusion

In this section, the conclusions of this thesis are presented. The authors answer the research questions and demonstrate how the purpose of the study has been accomplished.

The research purpose of this study was to investigate the key challenges that customers face for making an informed purchasing choice when shopping from Swedish online fashion retailers, in regards to the current most common product evaluation tools, as well as their effects on the companies. In addition, it was explored how the augmented reality tool Augment app would affect these challenges related to buying fashion merchandise online if it is being implemented on the websites of Swedish online fashion retailers as part of the product evaluation tools. Lastly, it was investigated how an augmented reality technological solution for product evaluation, as the Augment app, could affect the competitive advantage of Swedish online fashion retailers in this rapidly growing industry. Based on the authors’ research efforts illustrated in the academic work of this paper, one could state that the research purpose is fulfilled successfully where answers of the research questions have been generated and would be presented below.

- What are the key challenges related to using the most common product evaluation tools offered by Swedish online fashion retailers, as well as their corresponding effects on the companies?

Firstly, in regards to size guides /size conversion charts that embody recommendations of measurements for a single fit model, it is challenging for both customers, as well as e-retailers customer service to evaluate whether the selected product would fit the customer and which size would match customer’s needs. Secondly, the lack of sufficient, or any, product information in regards to style, fit, colour, materials and garment care is challenging for taking an informed purchasing decision for all of the merchandise listed on the websites of Swedish online fashion retailers. Thirdly, the lack of interaction with the products is another key challenge when it comes to the current available tools for visual presentation due to the inability to touch-and-feel the materials, to view the product in and out, as well as to evaluate how the color would
look like if seen directly through a human eye, without digital means. As a result, this brings the challenges of providing quality customer service, ensuring e-satisfaction as well as reducing the high percentage of customer product returns for the Swedish online retailers.

- **How would augmented reality for product evaluation in the form of the Augment app affect these challenges?**

According to this study, the Augment app would have a positive effect on battling some of the key challenges related to the current product evaluation tools due to its technology superiority over them, but it would not affect all of these challenges. By using the 3D views, Augment would allow customers to get a realistic view of the size and fit of a particular product. In addition, it would allow for interactive product evaluation that would help the customer to visualize the product in their real surroundings, as well as zoom in and rotate freely, allowing the customer to assess the details of the product. This as a result, would enhance the whole shopping experience allowing for making an informed purchasing choice that would have positive effect on reducing the high percentage of customer products returns, e-satisfaction and quality customer service for the Swedish online retailers. However, the Augment app would neither satisfy the customers’ need to touch-and-feel the fabric or materials that the product consists of, nor provide the exact same color as the product would be seen by a direct human-eye since it is still a digital tool.

- **How would implementing the Augment app by Swedish online fashion retailers affect their competitiveness?**

Based on the results of this study, it was determined that implementing the Augment app as part of the product evaluation tools by Swedish online fashion retailers, would increase the market competitiveness both in terms of rivalry online and physical stores. Firstly, Augment was evaluated as being a valuable, rare, imperfectly imitable and not substitutable when it comes to product evaluation tools for online shopping. Also, it was considered to be a technological innovation that since it is not being implemented by any of the Swedish online fashion retailers, would bring a competitive advantage to the first such retailer that adopts the solution. Therefore, it was also determined that this competitive advantage could be sustained as it would increase the e-satisfaction and
nurture the brand relationship of the online store with its customers. Secondly, due to the fact that *Augment* would increase the levels of product interaction for customers, this would bridge the current existing gaps of insufficient product information and the current inability to try-out products and see them in their real-life size, which is currently deemed to be a competitive advantage of physical stores over online such.

Conclusively, this study has confirmed that the existing product evaluation tools used today are considered to be insufficient for the customers as well as the customer service professional for assisting in making an informed purchasing choice with low risks of uncertainty. Therefore, the findings of this study have determined that *Augment* would assist e-retailers to battle the correlated challenges of online shopping but not all. However, it would increase the market competitiveness of the first Swedish online retailer that invests in the implementation of this tool for enriching the online shopping experience both in terms of rivalry online and physical stores.
7. Discussion

7.1 Results discussion
In addition to answering the questions set by this research, the authors have discovered two unexpected phenomena when analyzing the empirical findings of this study. As the study was conducted in children’s fashion, the authors of this paper found indications that there might be higher acceptance rate in the attitude towards adoption of Augment in online retailers for adult fashion, rather than children’s fashion. As indicated by a few of the research participants, in the segment of children’s fashion, parents might have difficulties to keep their children still for long enough time periods to adequately use Augment for clothing and footwear evaluation. Further, the researchers found out that there seems to be a higher demand for a solution like Augment when products are higher priced, as having to return premium or luxury items means that a possibly high amount of money will be in the companies possession before the return is approved and money returned to the customer. Similarly, for the company, it results in having products possibly listed as not in stock when they could be sold to another customer, and at the end of the season leading to high stock levels with merchandise that has to be sold on sales with highly reduced prices, leading to poor financial performance in the company and difficulties in forecasting future financial performance.

Going back to the point discussed above, when shopping in a higher price range, customers are usually more weary about spending money before they have all necessary information needed to make an informed purchasing decision. This is strengthened by the fact that Company L in this study had the lowest prices, yet both the webstore and its functionality and the product evaluation tools offered, were of a subpar standard. In contrast, both Company A and Company B, which have higher priced products, had invested far more effort in offering as much product information as possible, in order for the customers to be able to make an informed purchasing decision. Therefore, the authors have found in the research results that the implementation of Augment as a tool for product evaluation, would mainly be beneficiary for premium or luxury products that lie in the upper price ranges.
7.2 Methods discussion and Limitations

The research which this paper is based upon and the conclusions that were drawn from it adds to a field of study still quite unexplored and currently under development. With the limited timeframe under which this research had to be undertaken, being a master thesis course, the researchers of this paper have found several limitations to this paper.

Firstly, as the choice was made that the focus of this study was to be on the Swedish online fashion retailers, there is a risk that there could be some geographic bias in the data gathered. As presented in the beginning of this paper, Sweden scores remarkably high when it comes to technological savviness, access to new technologies and internet and makes it an interesting country to examine. However, due to the same reason, the researchers believe that the findings could be different when investigating a country where access to new technologies, internet and the technology adoption rate differ from Sweden.

Secondly, the researchers of this paper chose to do a qualitative study with semi-structured interviews as it was seen as the best choice in order to fulfil the research purpose. However, the study might have benefited by being a mixed methods study, including quantitative methods as well, in order to gain direct data from customers, and possibly add another dimension to the results. An additional aspect could be that, despite the customer care teams unique insights, the participants personal perception on online shopping and their overall bias, can have influenced their responses. However the research team’s choice to use the customer service team in the three companies, was strengthened by the fact that each customer service agent at the three companies has an average of one hundred customer contacts per day, allowing for unique and hard to otherwise achieve insights.

Further, the researchers made the decision to have an embedded multicase study and included three companies from the same niche industry in order to gather the data needed to conduct this research. However, as all three companies came from the same company group as well as the same industry and niche, the research could have benefitted with the inclusion of additional competing companies and online retailers focusing on adult fashion to increase the findings generalizability level to the broader
population of e-commerce companies. Similarly, the case participants, despite representing different companies and bringing valuable insights, all came from the same shared department. The study could have benefitted from bringing in other departments within the companies, such as photo and copywriting as well as including participants which possibly would bring insights from a more strategic point of view with the corporate leadership and the financial department. However, as the customer service team was deemed to have the best insights into the issues that the customers face when shopping on their companies websites, as they interact with them on a daily basis, they were chosen for the unique insights they could bring so that the researchers could fulfil the research purpose set for this study.

7.3 Implications for research

This thesis is examining the main challenges for online product evaluation in regards to the most common tools used by Swedish online fashion retailers, and their corresponding effects on the companies. Further, it is investigated how the augmented reality tool Augment could potentially affect these challenges if it is being added to the already existing product evaluation tools on the websites of online fashion retailers. Therefore, one of the contributions of this thesis is that it provides insights by professionals in online customer service on how this technological innovation would influence the shopping experience for Swedish customers as well as through their forecasts on the potential implications for online fashion retailers. At the same time, this thesis also contributes to the field of research by providing support and empirical evidence to existing studies when it comes to reasons for high return rates and online shopping experience, for example.

This research brings further insights in regards to the effects that Augment might have on the market competitiveness of the first online fashion retailer that invests in the implementation of this tool for enriching the shopping experience of the Swedish online customers that are purchasing fashion merchandise. The researchers believe this to be valuable academic contribution to the fields of both e-commerce and augmented reality, since the effects of augmented reality on fashion online shopping, especially with a focus on Sweden, have not been widely studied and where the findings can be used in future research.
7.4 Implications for practice
Through our findings, it has become apparent that size guides are not suitable for all body types, the product descriptions displayed on web stores are not always accurate. The purpose was to determine whether implementing the AR app Augment, would enrich the existing product evaluation tools used by the studied online fashion retailers or not. The augmented reality app Augment is a technological tool that is used to enhance customers shopping experience online. Augment is a tool that enables consumers to use a 3D viewer in order to be able to view how a certain clothing or interior would look before one takes a purchasing show. By using the 3D views, it allows the consumer to get a more realistic view of a particular product, to visualize, zoom in and rotate freely. By engaging the consumer in such a way its aim is to be able to smoothen and make it easier for consumers to take a purchasing choice when shopping online enabling the customers to see the product in real life size. However, managers need to keep in mind that the Augment app will not replace the need for additional product evaluation tools. It will rather enrich the customer experience, while potentially reducing one of the biggest issues, the high returns, that the industry is currently facing. Further, it could for managers willing to invest in such a tool, provide a unique competitive advantage, possibly as big as Amazon’s famous One-Click-Buy.

7.5 Future research
Since the research focus of this thesis was on three online fashion retailers specialized in the niche of children products, a recommendation for future research would be to investigate how Augment as a product evaluation tool could affect the online shopping experience for adult fashion, as there seemed to be an indication that there might be higher applicability there. Further, it might be beneficial to include direct data from customers by quantitative methods with a large enough sample to be able to be representative of the whole Swedish population. Third, future research might benefit from investigating a wider geographic area than this study, as there could be meaningful differences found. Further, as it was out of the scope of this study, future researchers could investigate what effect, be it positive or negative, using a technological solution such as Augment would have on the environment with the potential resulting decreased returns. Similarly, it would be interesting to investigate the financial impact of a
solution such as Augment on a company’s financial performance. Lastly, as this study also found, there might be differences in the applicability when comparing cheap to premium and luxury products. As it was out of the scope of this study to investigate this relationship further, future researchers could possibly be able to find meaningful differences that practitioners need to keep in mind, when contemplating whether to invest in such a solution.
Reference list


Appendix 1: Interview questions

**Introduction**
Could you please describe your official role within the company? Do you have any previous experience in the industry and if so, what kind?

**Current Digital Solutions**
Could you please describe what are the current solutions that you have on your e-commerce platform for helping a customer with the product information and for them to feel confident in placing an order on your webstore?

Which of them do you find as very helpful for the customers and which do you think could be improved?

**Challenges**
What would you say are the most common inquiries from your customers before they purchase a product on your webstore?

What is the most common reason for returning items back to your webstore?

What would you say are the most common challenges for customers when shopping online?

How do you as a company work towards these challenges?

**Competitive advantage**
What would you say is your company’s competitive advantage compared to physical stores in Sweden?

What would you say is your company’s competitive advantage compared to other online stores in Sweden?
Augmented reality & Augment

Do you know what augmented reality is?

Augment is a type of an augmented reality tool and here is how it works:
- (Presentation on how Augment works)

Do you think Augment could be a useful tool for the company?

Sustained competitive advantage is value creation strategy not simultaneously being implemented by any current or potential competitors and when these other business players are unable to duplicate the benefits of this strategy. Could Augment be a useful technological advancement to be used in order to gain a sustained competitive advantage for your company in the Swedish market?

Do you think your customers are ready for this?

Do you think that implementing a technological innovation in an online store would be a way for attracting new customers?

In what other ways do you think augmented reality could be implemented in your webstore?

Finishing question

What do you think would be next step for your company in developing the product information to enrich the customers shopping experience?